

Newsletter

Mackay Regional Botanic Gardens

2013 No 5

Welcome... Birthday Celebrations have been in full swing and feature in this bumper issue. Enjoy the latest from 'The Botanic Gardens'...

Happy 10th Birthday...

Mackay Regional Botanic Gardens tenth birthday was celebrated on Friday May 24th...

Hip Hip Hooray!



We did it...

'The Bungee Jumping Caterpillars' Book was launched too.



The story was read to all...



The Book creators - Kate, Maya, Carolyn



The book signing with over 100 books sold on the night! What a wonderful celebration!

Just in case you don't know about "The Bungee Jumping Caterpillars" Book



As a special birthday present to the Botanic Gardens, Kate, Maya and Carolyn... three Friends of the Gardens with the assistance of a RADF (Regional Arts Development Fund) grant created this special, local children's book to highlight not only the North Queensland Day Moth caterpillars and moths, but also introduce readers to 'threatened in the wild' plant species that are local too, and are growing in the Botanic Gardens.

The book is now available for purchase for just **\$15.00** at The Garden's Shop in MRBG's Administration building.

Feel free to contact us by phoning 49527300 or email botanic@mackay.qld.gov.au to secure your copy. Payment can be made by credit card over the phone. We can post one to you too if you add \$5.00 for postage.

MORE BIRTHDAY CELEBRATIONS...

Over 30 children who were ten years old came and celebrated at the Botanic Gardens on Sunday 9th June...



The party included lots of special activities held outdoors including... Mural/ fence painting; "Treasures of the Gardens" Hunt; Old fashioned games... including hula hoops, badminton, skipping, elastics, croquet, quoits, hopscotch and bocce; Decorate a Pot and Plant a Seed; a Screens and Hedges Maze with Weaving, pavement chalk drawing; Bird watching and The Bungee Jumping Caterpillars Board game.



Check out the colorful fence painting, hula hoops and badminton...



Looking for 'Treasures of the Botanic Gardens'

More fun at the Botanic Gardens Birthday Party for 10 years olds...



Decorate a Pot and plant a seed



Birdwatching



Pavement Chalk Drawings



Giant Bungee Caterpillar Board Game



Weaving



Mini-master chefs decorating patty cakes



The screens and hedges maze had a few dead ends...



Lots and lots of decorated patty cakes



The morning ended with a Mini- master chef... Patty-cake decorating activity.

Everyone then celebrated with a patty-cake feast complete with sparklers and singing Happy Birthday. Each 10 year old received a certificate and a copy of "The Bungee Jumping Caterpillar Book".

What a great event...Thanks to all those who helped organize it and assisted on the day. Notice the adults in bright yellow shirts...they are our wonderful "Friends of the Gardens"



10 YEARS OLD! ... Look how we have grown! More... Then and Now images.



July 2006...

July 2006... A very see through Forest (Vine) Arbour. In the background is the Heritage Gardens Gazebo. On the right are the sails of the Coal Garden.



February 2010...

February 2010... Four years later and vines are cascading down from the Forest (Vine) Arbour providing shade for the walkers beneath.



January 2013...

January 2013... Seven years later and the Wharf logs of the Forest (Vine) Arbour are hidden by the coverage of the vine growth.

The Garden Friends have been busy attending...

Community displays... The Palm Fair, held at Farleigh State School on Sunday 19th May, saw a marvellous crowd attend and the people obviously came with money to spend... We were very fortunate to be next to the SGAP native plant sale, as many people in the community come with big plans on taking home lots of native plants that can't be purchased from the local nurseries. Having some change left over meant they could spend at our display and we had our biggest takings ever of \$286.40. We also took the opportunity to advertise our ten year old birthday party, book launch and the highlight the four 'threatened in the wild' plant species in the book.



Thanks to helpers... Kevin, Robin, Glenda, Carolyn, Jan and Maya who were kept very busy all morning from 8.00 am - 1.00pm.





If you didn't come to the Friends of the Gardens Annual General Meeting on Tuesday 18th June, you missed a wonderful presentation!

"Trials and Pitfalls... a Flora and Fauna Survey at Redcliffe Vale" was a special talk by Tina Ball, Senior Conservation Officer with Queensland Parks and Wildlife Service and Maree Cali, Senior Project Officer with Environment and Heritage Protection.

Redcliffe Vale station was acquired by Queensland Parks and Wildlife Service in August 2010 covering 30,000 hectares and located in the upper catchment of the Bowen River. Only 40 kilometres west of Eungella this property is markedly different from the rainforest capped range but does share some of its species. Redcliffe Tableland is a prominent north-south orientated sandstone plateau with an elevation between 240 and 600 m above sea level, which is up to 200 m above the surrounding terrain. Redcliffe Tableland may be the northern-most example of a substantial sandstone scarp within the Northern Brigalow Belt Bioregion.

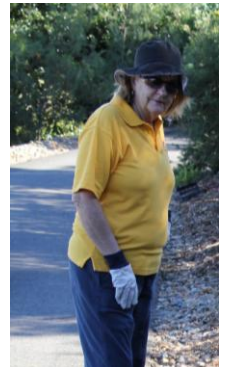
It contains a wide diversity of regional ecosystems (18) in which several ecosystems are listed as being endangered or of concern in the Vegetation Management Act 1999. It also contains rare examples of grassy woodland on sandstone that have had very little grazing by cattle. Two plant species listed as vulnerable (State and Federal legislation) had also been recorded on the tableland (*Ozothamnus eriocephalus* and *Polianthion minutiflorum*) prior to this survey. The very interesting talk was about the survey work done to provide an up to date assessment of the flora and fauna species present on the tableland.

Thanks Tina and Maree. They were delighted to receive thank you presents... copies of 'The Bungee Jumping Caterpillars' book.



We did elect a new Committee too for 2013.

The same bunch... but also a newcomer... Glenda Penny... as a committee member. She is already a regular at displays and planting bees.



Saturday 22nd June was the Friends of the Gardens Guided Walk to Cape Hillsborough's Mangrove Boardwalk...

What a fantastic day with superb weather and mangroves in full bloom!

The Garden Friends, ventured north to explore the beautiful Cape Hillsborough portion of the Central Queensland Coast Bioregion. The walk was jointly led by Irene Champion and John Atkinson. Irene discussed the unique plant communities that occur side by side in this special area and John added information regarding the use of the area by indigenous people. We were delighted by the many secrets and highlights Cape Hillsborough had to offer. The walk was followed by our usual delicious BBQ lunch.



On the Mangrove Boardwalk... Mangroves were in their glory...

The mangrove forest within this sheltered tidal basin at Cape Hillsborough boardwalk receives freshwater from the nearby hills while incoming tides (more than 5.9m high), periodically inundate the area. Different species have different tolerances to environmental factors such as soil salinity and lack of oxygen. This contributes to distinct zones or bands of different species growing more-or-less parallel to the shore or estuary channel. Not even mangroves grow where soil salinity is too high. Most of the species along the boardwalk are those that rely to some degree on freshwater input, though towards the end of the boardwalk a change from one zone to another can be seen.

Mangroves are a very dynamic plant community as has been witnessed in the relatively short time since the board-walk was constructed. Many large trees that were present at the time of construction have died – probably because of consecutive drought years resulting in too high a salt concentration – while others have succumbed to severe damage from two cyclones.



Holly Mangrove *Acanthus ilicifolius* has responded to more light and is now far more abundant than it was previously.

Mangroves are closely related to other tropical and sub-tropical woody plants and occur in a number of different families. Four of the five families that can be seen from the boardwalk are represented by a single species while the fifth family, Rhizophoraceae, is represented by several species.

Mangroves have evolved a number of adaptations that allow them to colonise and flourish in soft, salty, oxygen-deficient soils. The most obvious of these that can be seen from the boardwalk are specialised root systems with different types of above ground features (pneumatophores) and buttressing. These help support the plants and facilitate the intake of oxygen.

Examples include:

Knee roots – Orange Mangroves *Bruguiera* spp; *Bruguiera parviflora* →



Stilt or prop roots - Red Mangroves *Rhizophora* spp.

Buttressed trunks -

- Looking Grass Mangrove *Heritiera littoralis*,
 - Cannonball Mangrove *Xylocarpus granatum*
- ← Spurred Mangrove *Ceriops tagal*



(Snorkel or peg pneumatophores can be seen in other mangrove areas at Cape Hillsborough.)

Many mangroves can be identified to genus level, simply by their trunk and root features.

Another adaptation, vivipary - seeds germinating while still attached to the parent - is well developed in a number of species, especially those in the Rhizophoraceae family. The resultant propagules, like the seeds of many species, are buoyant so are readily dispersed by water. At times, hundreds of fallen propagules can be seen from the boardwalk. Some lodge in the soil below the parent while others may take root in favourable new locations after being moved by tidal flows.

Bruguiera gymnorhiza →



Thanks Irene Champion and Dale Arvidsson for this interesting information.

Plant-ed... Schools visitation to the Botanic Gardens...

Holy Spirit College Wetlands study... 159 Year 8 students utilised the Botanic Gardens on Tuesday 7th May to conduct a wetlands study. The Plant-ed program devised for them by Maya incorporated 7 study stations/ locations at which different elements of wetlands were focussed on. Thanks go to the volunteers who assisted at each location for the entire school day... Robin McWhinney assisting with information re: Wetlands importance, Carolyn Atkinson assisting with small creatures from the waters of the lagoon, Madge Barnett and Gerry Woodruff from Birdlife Mackay, Iona Flett from Pioneer Catchment and Landcare conducting water testing and Kevin Jackson assisted with water plants and water weeds. The day was a great success and everyone including the teachers was exhausted by the end of the day.



Location 1 - Cafe Deck and Lagoon Outlook deck...
Why are wetlands important to us?



Location 2 - Administration Meeting Room -
Macro- invertebrates.



Location 3 - Gymnosperm / Bird viewing deck.



Location 4 - is actually a walk between the Gymnosperm Deck and the Eulamere shelter at the Boardwalk, stopping to gain information from laminated signs along the path.



Location 5 – Eulamere Shelter - Water testing.



Location 6 – Heritage Gardens Gazebo –
Water plants and water- weeds.



Location 7 –

Walk from the Heritage Gazebo to Finch Hatton Gorge Waterway Bridge. This area of the Botanic Gardens represents the Finch Hatton Gorge Catchment of waterfalls, creeks, which is the source of water for Mackay.

Other Plant-ed sessions were prepared for...

22 four year old children from **South Mackay Kindy** on Tues 21st May... finding out about creatures in the Botanic Gardens, and the leaves they might be hiding beneath. They were also the first group of children that had 'The Bungee Jumping Caterpillars' read to them. Alas the second group of children to attend from the same centre on the Thursday had to postpone their session due to rain.

39 children from two **MacKillop Prep classes** gathered on the Cafe deck on Tuesday 28th May and utilized a creature display set up for them in the meeting room as one group activity and a walk in the Botanic gardens with Maya to see creature habitats... including... leaf litter with worms and slaters, saw fly larvae in the tea trees, green caterpillars of the Common grass yellow butterflies in the coffee bush *Breynia oblongifolia* and the ever popular harlequin bugs in the Native Hibiscus.



Surprise!!!! 22 four year olds and many parents from **Mackay Kindy** also arrived on the same day... A bit of a mix up, so Maya sort of juggled herself between the two groups and fortunately Carolyn Atkinson (Garden Friend and co creator of children's book) arrived to read 'The Bungee Jumping Caterpillars' Book, sell a few books and plants, view a really big Golden orb spider and everyone had a great day.

Another group of 22 children and as many parents from **Mackay Kindy** came the following day Wednesday 29th May and despite the showers had a terrific exploration of the plants from the story, as well as seeing all the creatures too.

The month of May finished with 20 children from **Good Start Early Learning** having a special free Friday guided walk on Friday 31st May in the Botanic Gardens from the Administration to the Play Garden...what an interesting and educational walk.

June 6th saw 75 children (3 classes) from **St Francis Prep** rotated through three different sessions including a Leaf hunt in the Tropical shade garden (with leaf rubbings) & bird bingo; a walk with Maya ... to see creatures in habitats; and activities in the Meeting room, designed around life cycles, creatures displays, posters, books, and jigsaws.

Maya visited the school on June 18th to do a **Plant-ed Elsewhere** session... 'Drawing in Nature'. The children were encouraged to do memory and observational drawings of leaves. They looked closely to see the details of leaf margins (edges), the veins and any distinguishing patterns and colours. Their sketches were then made colourful using watercolour pencils.



Fifty-five Year 2 children from **Mackay West State School** came on June 12th, despite the inclement weather, to also study plant and creature's life cycles and creature's habitats.



The rain created an opportunity for the children to have a special reading of 'The Bungee Jumping Caterpillars' and to spend more time learning from the displays in the meeting room and well as trying out some pretty tricky jigsaws , memory games and life cycle cards.

Looking at the *Omphalea celata* trees and cocoons of the Zodiac Moth.

Look at this great display →
Lots to learn about here.



And more schools visitation...

The following day another 55 year 2 children from **Mackay West** visited and because the day was a little brighter, the children saw more creatures in habitats in the botanic gardens. One butterfly flittered and fluttered about, settling on numerous hats of adults and children.



They also managed to get themselves lost in the Screens and Hedges Maze...



Plant- ed Elsewhere...

These sessions are visits Maya makes to places outside the Botanic Gardens to share information and educate the community re: the Botanic Gardens and aspects of gardening and nature.



10 Mercy College students and 4 staff participated in a composting demonstration on May 8th conducted by Maya. Creating a compost bin / heap was likened to making a compost lasagne with layers of Greens and Browns...

On May 9th, Maya's favourite 4 'threatened species in the wild' plants were discussed with real life plants and seeds at the Men's Shed Hostel. 5 people were in attendance.

Community visitation to the Botanic Gardens too...



15 members from Mackay's Low Vision group visited the Botanic Gardens on Thursday 16th and were entertained with a sneak preview of Bungee Jumping caterpillar's book... Maya introduced the four 'threatened in the wild' species of plant that are highlighted in the book. She used actual leaves of each plant for members of the group to feel and later identify by their differences... spiky, smooth, curled edges, waxy feel, soft wavy edges. The seeds were also part of the session for participants to feel. The Group later shared a morning tea in the meeting room.

← The curled over leaf margins of the *Actephila championiae* were very easy to identify by feel.

In the Gardens, Dale reports...

Myrtle Rust...



With continued minor presence of the disease being recorded in 2013, Mackay Regional Council Myrtle Rust Action Group met on May 21 to discuss a review of current policy. Recordings of the disease have been found recently on two of the extremely susceptible species the native Beach Cherry *Eugenia reinwardtiana* and the exotic Rose Apple *Syzygium jambos*. A report will be presented to Council in June outlining a recommended plan forward for Council and its affiliated groups on the planting and supply of Myrtaceous species for the region.

Focus at the Mackay Regional Botanic Gardens (MRBG) in May has been on control of exotic water weeds in the lagoons - a persistent problem due to high nutrient levels, and general weed control site wide due to the unseasonably wet and warm autumn conditions.

Formative pruning techniques have been employed on the arboretum collection, especially in the Regional Shade Tree trial garden. With the main planting bee occurring at Meadowlands on May 4, staff and volunteer planting saw over 1750 plants added to the living collection.

And there is still more...

Saturday June 15th, we all got our hands dirty at the ... **Botanic Garden Friends Planting Bee:**



Once again a small group of scouts came to join us. They were very keen to dig in the small everlasting daisy plants as it meant they could use the 'pogo stick' like digging tool to make the holes in the soil. They were finished their area in no time at all.



Ross was on hand to show Glenda the best way to find the irrigations lines before digging a hole. It saves having any unexpected fountains in the gardens.

Other Friends helped too in the Australian Regional Flora Terraces, making sure a wide variety of plants were dug in. Thanks to all those who regularly support our planting bees. Without the Garden Friends there would not be as many plants in our Botanic Gardens.



Everyone learnt something on June 14th during the... "Bush Foods" Special Free Friday Guided Walk...

Maya was joined by Margaret, Christine, Judy, Svan and Dennis to see a whole variety of plants which have in the past provided food, tools and medicine for indigenous people and are growing in the Botanic Gardens. Svan from Laos was very informative regarding what her culture does with similar species of plants too.

Some preparations surprised us, but left us all keen to eat at the end of the walk. Featured image is the seeds of the 'Peanut tree'



More about bush foods... Plants used for bush tucker were some of the things talked about when a group of 12 indigenous adult students undertaking a T.A.F.E. Child Care Practices course walked through the site with their lecturer Penny Skerman and Maya. They explored learning opportunities and excursion topic options for the children that will be in their care in the future as well as finding out a few new snippets of information regarding plants, creatures, habitats and water weeds.

Currently... School holiday activities... Mosaic Magic

Pam Finlay, a mosaic artist, and Maya Harrison have been conducting mosaic workshops during these school holidays for school aged children. During the two hour sessions, children are creating mosaics of butterflies, leaves, birds, flowers and lizards that will fit into the wall spaces of the Botanic Gardens' "Under the Banyan PlayGarden".

The finished mosaic works will not be taken home by the children, but instead be birthday presents for the Botanic Gardens. In following weeks after the school holidays, these mosaics will be fixed to the cement walls where children can revisit their creations over and over again.



Exhibitions at our Lagoons Gallery...

Walking to Bob Moses Creek Exhibition: by artist Pam Finlay till July 7th

"In July 2011 a significant cultural event was presented in Bowen. "Behind the Cane" a Queensland Music Festival Production told the story of the origins of the Australian South Sea Islander Community. The event was performed by a cast of 120 people from the Whitsunday Region of which I was part of. This performance of musical theatre brought to life the South Sea Islander story in dance and song. At the end of the production cast members walked to Bob Moses Creek. As history has it Bob Moses was an elderly man who was a wonderful fisherman from the islands. This was his favourite fishing spot. This place holds a special place in the hearts of the South Sea Islander people of Bowen.



I aim to express the affinity the South Sea Islander members of our community have with their environment. I

have been motivated to communicate this visually because of friendships I have made with family members since moving to Bowen." Pam Finlay.

"THE JOURNEY" ... An Exhibition by ART WHITSUNDAY ... 10th July - 4th August 2013



'THE JOURNEY' Exhibition' will give artists in the Art Whitsunday group the opportunity to explore their chosen medium and interpret the theme, 'THE JOURNEY', in their own individual style. Art Whitsunday has a diverse range of artists including painters, sculptors, paper-making artists, photographers, potters, print makers, woodworkers and mixed media artists and this exhibition will certainly present a rich display of 'JOURNEYS'.



"The Art Walk" Special Free Friday Guided Walk: Friday, July 12th 9.30am – 11.00am.

Join Maya and be lead down the Garden's paths to see a variety of artwork and features in the Botanic Gardens. The walk will include the current exhibition in the Lagoons Gallery titled "THE JOURNEY" by Art Whitsunday. This will be a little artistic treat, happening during the Festival of Arts, with some items that may surprise you.

Remember... There are Free Friday Guided Walks at the Mackay Regional Botanic Gardens... Every Friday 9.30am
The scenic Lagoons and glorious foliage make perfect backdrops during your informative stroll at the picturesque Botanic Gardens.

Small Explorers: "Make a 'B' Line for the Botanic Gardens": Monday July 22nd: 9.30am – 11.00am

Fun and educational opportunities for toddlers and kindergarten aged children 18 months to 5 years held monthly or by appointment.

Let the Botanic Gardens Visitors Services Officer, Maya Harrison, take you and your small children to special areas of the Botanic Gardens to explore all things starting with the letter "B". That could be Butterflies, Beetles, Banksias and Bromeliads maybe even a birthday cake? The session includes story reading and a Bingo game.

