



Friends of Maroochy Regional Bushland Botanic Gardens Inc.

NEWSLETTER

Dec 2022 Volume 26 Issue 4

From the President

Lynn Vlismas

Reflecting upon what has been happening at the Gardens since I have joined the Friends, just over 8 years ago when the Whipbird Children's area had just been designed but was still to be constructed, it is obvious that we have all been on quite a journey to get the Gardens developed to where it is now.

It is worth taking the time to look back, not only as we did last year at this time when we celebrated the 20th year anniversary of the opening of the Botanic Garden, but also in moving on from that period. The Friends have been instrumental in achieving so much over the intervening years - in our one day a week at the Gardens!

Part of what we have achieved is in looking for more ways to bring more people into the Gardens for many more experiences. By planning a number of events we bring more visitors into the Gardens. Events such as Bushland Vibes with music; bush food cooking and tastings; weaving workshops and plant sales; art and craft exhibitions. Natives Naturally events with wildlife organisations speaking about pollinators such as bees, birds and bats. Other community groups talking about garden design using local native plants and the associated plant sales to create those gardens. Native bee home building talks; workshops with USC graduate Friends Bursary recipients; botanical art drawing classes and exhibitions with former Queensland botanist Nita Lester; art exhibitions with many artworks also having been created by the Friends; and more recently workshops such as the popular Forest Bathing programme and a photographic exhibition showcasing our gorgeous native plants at the Gardens.

And year on year the number of visitors to the Gardens keeps expanding.

This shows what a versatile bunch we are – we not only propagate, plant and garden, maintain timberwork, blaze new bush trails, do path work and edging, provide guided walks and visitor information, and submit grant applications for new projects, but in recent years we have been fortunate to be involved with the design and construction of two projects which expand the range of experiences available for visitors; one in the Children's Whipbird Village – the rope Suspension Bridge, and more recently the Richmond Birdwing Butterfly and Vine Trail. This last project having been designed in response to a brief that Council developed and the Friends then undertook

Friends of MRBBG Inc.

Our Mission:

'To support the establishment and development of a unique world-class Bushland Botanic Gardens for the Sunshine Coast'.

Our Vision for the Gardens:

'To experience the harmony between people and the living environment'.

Our Vision for the Friends:

'To establish a vibrant and responsive Friends organization known for enthusiasm, participation and initiative'.

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to design, fund and construct. Currently under development, the Richmond Birdwing Butterfly project designed to have a wide appeal to people of all age groups when completed, has had a significant element added – the colourful, light projecting sculptural objects atop the first grouping of timber posts signifying the adult butterfly to egg laying stage of the butterfly lifecycle. This was part of the design to entice visitors in to explore further along the trail and on into the Butterfly Garden when it is completed mid next year.

At this point in time, I would like to say that the Friends as a whole should feel justifiably proud of the diversity of all that we continue to achieve, and feel a sense of satisfaction from seeing how happy it makes our visitors when they look around at what we have achieved collaboratively – both the Friends and the Council.

We are indeed fortunate that the Gardens has been designated as not only a Regional Botanic Garden focussing particularly on plants of the immediate region, but in also being a Bushland Botanic Garden which can encompass and exemplify the interrelationship between the natural environment and its flora, fauna and fungi. We are also fortunate that we have the ability to draw on the knowledge of the indigenous Kabi Kabi people with their deeply integrated and time-tested plant, wildlife and land use practices and the stories they tell. All of the opportunities to build upon these positive features still lie ahead of us as we work to develop the objectives of the new Masterplan over the next 9 years.

Thank you one and all for yet another memorable and momentous year.

Best wishes for your safe travels and for an enjoyable time with your family and friends over the Christmas and New Year break. See you around the Gardens in 2023!

Richmond Birdwing Butterflies

Wendy Johnson

We have been fortunate to have seen several birdwing butterflies at home. I was surprised to see some are noticeably larger than others. Once hatched, a butterfly stays the same size forever and it seems that the size of the larva determines the size of the butterfly – a ‘very hungry caterpillar’ gives the largest butterfly. While finding this fact I came across an article by our Community Bushcare Officer, Michael Mills, about our birdwing butterfly caterpillars.



Early instar

The Richmond birdwing butterfly (*Ornithoptera richmondia*) is pretty well known these days, most are aware of the very large and colourful male at least, but the caterpillar and pupa are less often in the spotlight; but, no less interesting. At hatching, these spiky little devils start out at about 2mm in length, that's approximately the width of your standard phone charger cable! They don't stay that way for long, reaching up to 70mm in six weeks before pupating. These caterpillars are voracious, with a large 10+ year old vine only able to sustain a couple caterpillars at a time. The caterpillar sheds skin to grow during this time, each time changing form and appearance slightly. These forms are referred to as “instars” and the Richmond birdwing caterpillar will go through 4 – 6 instars.



Late instar

The host plant *Pararistolochia praevenosa* contains aristolic acid, making the caterpillars toxic to vertebrate predators, they are still predated on by other invertebrates, including other larvae! In situations where there is not enough foliage of the host plant, the caterpillars may cannibalise one another. Due to this cannibalistic nature, when pupating the caterpillar will often try to leave the host vine to pupate, so as not to be found by another caterpillar in a vulnerable state. For this reason, if planting the vine, it is best to try select an area where there is foliage from other plants available.



Pupa

The pupa attaches with a silk “cremaster” at the tail end. Due to the size and weight of the caterpillar/pupa at this stage in the life cycle, some additional support is required and they attach a silk girdle around the midsection to help hold them up on the underside of the selected leaf. Richmond birdwings typically have 2 pupation cycles per year, pupas in the summer months can develop to butterfly within 28 days, those pupating during cooler months and over winter can take up to 250 days to develop.

Reference: Article and images by Michael Mills, Community Conservation Officer, Sunshine Coast Council

Tales of the Tall Gums

John McCabe

History

What began as virgin bush became rich pickings for the tough timber getters from the 1860's until the 1940's in the area we lovingly care for today. This timber originally supplied many local sawmills with material that fueled the building of the rapid growth of a burgeoning Brisbane and many surrounding areas of southern Queensland.



View from William Cunning Juniors property taken from the rear of his house. Tanawha.

ca. 1930 (Sunshine Coast Heritage Library Collection)



Frank Cunning cutting sleepers near Wilsons Rd Tanawha

ca. 1935 (Sunshine Coast heritage library Collection)

The Sunshine Coast Council announced in February 2014 the purchase of an additional 60ha block on the western side of the Gardens, at a cost of \$890 000 being funded by the environmental levy. Mayor Mark Jamieson and Cr Jenny McKay said the purchase demonstrated the Council's commitment to the long term protection of our natural environment. The western block is called the Tall Gums Environment Reserve and borders on the existing Botanic Gardens and the Tanawha Tall Gums Nature Refuge, expanding the collective conservation area to 170ha. The reserve forms part of a regional corridor, stretching from the coast to the range, which is vitally important for wildlife movement. It was envisaged that this block would not be developed but would provide sustainable passive recreation by means of walking trails.



The track starts here. Joe, Kerry & Bob blaze a trail.

However it was not until 2018 a small group within the Friends initiated discussions and then made

representations to the SCC advocating for an extension of the bush trail network. Initial scouting began in the Nature Refuge, but the constraint from stricter State Government approvals meant we were steered to begin trail construction first in the western block, with the ultimate goal of connecting both blocks either side of the Botanic Gardens to create a perimeter track approximately 8kms in length. The circular track will provide a wider choice for bushwalkers by linking to a network of shorter trail options, utilising our already established tracks and so catering for all levels of walkers.

Construction

The track is constructed to a Class 5 standard (the most basic) and meanders through four remnant ecosystems and a range of landforms, including areas of tall open eucalypt forest on moderate to steep slopes and ridges, as well as wet eucalypt forest and rainforest around the lower slopes, ephemeral gullies and creek lines. This track showcases the diversity of vegetation and interesting terrain found within this area, including three creek crossings of the Upper Mountain Creek. This is where the gullies join to feed water to form Mountain Creek and begins its journey via south of Buderim Mountain joining the Mooloolah River and ultimately the ocean.

This new track is nearly 3kms long and links the Creek Walk Track to the Upland Bushwalk Track. We believe the variations in the largely untouched vegetation and stunning scenery will make this walk popular with those with moderate fitness levels. It will provide both fresh air and health benefits to visitors whilst exploring the extensive range of flora and fauna found in the gardens.

The recent koala survey conducted at night with heat seeking drones found 10 of the 14 koalas identified were located in this western track region proving this is valuable koala habitat indeed to be protected at all costs.



Friends explore the Western Tall Gums.
The watercourse is Mountain Creek.

Maroochy Regional Bushland Botanic Gardens, Tanawha. 15/09/2021

After a successful application for three years of SCC Trail Grant funding in late 2019 we began with commissioning a Flora and Fauna survey, purchasing materials and tools to prepare us for our task. Unfortunately our goal to begin construction in early 2020 was shattered by the COVID-19 pandemic so little was achieved in that first year.

It took until July 2021 to actually turn a sod by using a contractor with a narrow excavating machine to create an 800 metre section of track through the undulating ground. The remaining 2.2kms had to be carved through variable terrain elements by a small dedicated team of volunteers using hand tools. The creek crossings have proved to be our greatest challenge with no actual bridge construction permitted. With the wild wet weather of 2021 our ingenuity and resilience is being tested. Several of our 30kgs creek steeping stones disappeared only to be later discovered burrowed under large tracts of sand.



John, Bob & Alan – Let the track construction begin.

The expectation is that the trail construction will be largely finished by the end of 2022. Once the walking trail signage is completed by the council we can welcome our first visitors treading the trail in early 2023.

Future

This month we were advised that once again we had been successful in a further three years of Sunshine Coast Council Recreational Trail Grant Funding. This will allow the volunteers to complete the WTG trail and move into the outer edges of ETG linking the three garden allotments together. Previous scouting of this area reveal we have again uncovered more natural diversity containing areas of staghorns, a dam surrounded by reeds, rainforest, steep cliffs and interesting gullies all waiting to be explored.



So exciting challenges ahead for the volunteers with the final stages of creating a legacy for future generations whom we believe will discover the natural beauty and delights of the Tanawha region all located only a short drive from their burgeoning Sunshine Coast doorstep.

As always there is an opportunity for more Friends volunteers to participate and join in this exciting venture which will deliver a great sense of achievement and satisfaction by helping us to complete this fulfilling project.

Two Christmas functions coming for the Friends

Council's Christmas Lunch for the Volunteers on Tuesday 13th December at 12noon at the Arts & Ecology Centre. Please sign in on Rob King's list sheet and don't forget to mention if you have dietary requirements.

The Friends Christmas Party on Saturday 17th December at the Maroochy RSL, 105 Memorial Avenue, Maroochydore from 5.30pm on. The meal will be Buffet Style and Friends with dietary requirements please let Deb know, as she has the sign on list sheet. The cost is \$40 per head, this does not cover drinks.

We will be on the first floor in Room M1 with a bar and relaxing area outside the room. The Maroochy RSL has a Courtesy Bus which runs hourly: Buderim - Area 1, phone 5443 2211 to book your pickup time.

Deb's email : potterinpurple@hotmail.com

Botanic Gardens Bushcare – a brief history

Neil Rankin

There are over 40 active Bushcare groups on the Sunshine Coast, all different in the work they do and the kind of environment they work in. Our group, which has been going for 7 years now works in the Botanic Gardens, beyond the park-like public areas, and in the Nature Reserve to the east. In the early days we were

mainly “weed hunters”, wildlife spotters and lantana removers. Our wildlife cameras, unfortunately no longer in use, were able to record dogs visiting the Upland Bush Walk and eventually this led to Council visiting neighbours and resolving the issue. We did also capture on film two koalas, a fox, a goat and many turkeys and bandicoots. This work has led, mainly through Tony Ireland's efforts to the keen interest in koalas in our Gardens and adjacent areas.

The adjacent Nature Reserve has some large areas of lantana and we spent many hot and sweaty days pulling, breaking and piling up the weed as we worked away from the eastern edge of the Gardens towards the Bruce highway. More recently we have managed to get help from Mark Russell, previously with Sunshine Coast Council, to have a look at the cleared areas and give us some advice. As a result we have now slowed our clearing work and are making our efforts count by careful revegetation work which involves planting, weeding, watering and generally caring for the developing plants. Over the years we have now put in over 2000 trees, shrubs and grasses. There are trees taller than us growing well now and an understory of grasses, and shrubs coming on. Very satisfying to see these changes.



In the Nature Reserve, checking on our plants. Lots of lantana in the background.

Also in the Nature Reserve we have improved an east facing dry slope that was graded as “poor” quality, being weedy, dry and with little natural revegetation happening. Thanks to our efforts the weeding, planting and watering have begun a transformation which has led to the Council recently upgrading the status of the vegetation to “good”. We planted as many legumes as we could find, *Indigofera*, *Pultanea*, and *Hoveas* among others to improve the soil, a few “koala” tree species and lots of lower and mid story species.

In the Gardens we have tackled invasive fishbone fern in the gully below the Sculpture Garden and on the edge of the Golf Course, corky passion vine, slash pines and camphor laurel in the area between the entrance Bridge and the front gate, and various patches of lantana and

corky in other places. There is a ridge beyond the top of the Sculpture Garden where we have already spent three days removing large Guavas, widespread *Ochna*, corky passion vine and lantana. We will be returning regularly to this site, and also to the bush on either side of the track up to the dump/store area.



Lantana clearing in “bloodwood Gully”

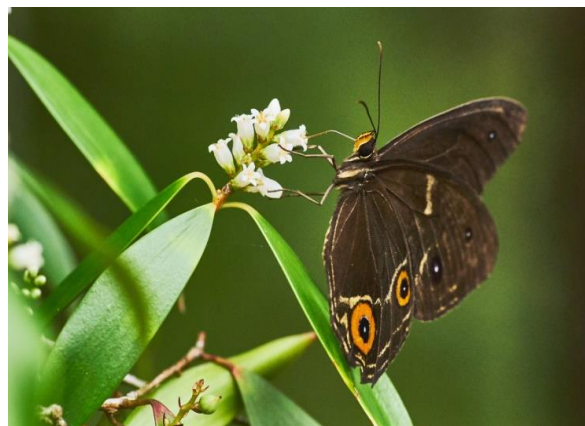
Through all this we have had a succession of Council Supervisors whose efforts are much appreciated, and we have evolved gradually from being simply weed “bashers” to become more aware of the whole set of skills that are needed to assist natural regeneration of our bush. We have great chats, some longer smokos, and an increasing membership, on some occasions have more than a dozen Volunteers on our Working Bees. It is a great activity to be involved in, great people to work with and we are definitely seeing results now from our efforts over the last 7 years.

Tree Heath and the Glory of Common Names.

Malcolm Cox

While the young and unstoppable Robert Brown was busy ascribing scientific names to so many of our native plants (see separate article/s in previous newsletters), he surely couldn't have imagined all the ‘other’ names that one of them, the tree heath *Trochocarpa laurina*, would earn over the next two centuries.

Start with the most familiar, **tree heath** - a seeming oxymoron. It is a practical combination of two notable features: The tallest recorded specimen grew to over 13 metres, while ‘heath’ is a term used for low shrubs, particularly in the Ericaceae. (*Erica arborea* is also known as tree heath, which is a more literal translation.)



Tree heath flowers, and friend. Image: G Miller

Other names include **wheel fruit**, derived from ‘trochos’ (wheel) + ‘carpa’ (fruit), and **laurel heath** after the epithet ‘laurina’ (laurel-like); quite accurately descriptive, yes, but perhaps a bit clinical.

How about **sand berry** and **turkey bush**? Well, at least pied currawongs and Lewins’ honeyeaters like the fruit, so why not turkeys too? It's also a popular butterfly food plant.

Last but not least ... **waddy wood and axebreaker**! Reference to timber hardness usually describe what you can do with it, like malletwood and brake-block pine, so this one sounds great for waddies and other tools, ... but axebreaker stands out as a warning of what it can do to you.



Trochocarpa laurina

Image: G Miller

At the Botanic Gardens, you can see a heath tree beside the road above the Tallowood Shelter or in front of the Ephemeral Wetlands Shelter (pictured).

If you want to come up with your own favourite common name/s for this slow-growing shrub/small tree, consider growing one. Your patience will be rewarded, because it's one of many natives that haven't become popular ornamentals - yet! And you can call it **'that-beautiful-small-tree-with-small-white-flowers-and-shiny-leaves-that-has-fruit-that-birds-eat-and-look-like-a-wheel-inside-plus-attractive-wood-that-is-VERY-hard'**.

Reference:

<https://bie.ala.org.au/species/https://id.biodiversity.org.au/node/apni/2912248#overview>

What's Happening on Site

Ray Dale – MRBBG Site Volunteer Co-Ordinator

Rainfall over the past few months has been exactly what we needed in the gardens. While our compatriots to the south struggled with floods it seems we were spared and received an even spread over time. The benefit of all this was that it became perfect weather for not only planting but all those maintenance tasks we had in front of us.

Volunteer numbers were boosted by an additional 4 gardeners spread over 3 days and the Council has further committed to additional gardeners although this may not happen until early 2023. The processing and direction of volunteers is something that the Council in conjunction with the Friends often discuss in order to replenish vacated positions.



Looking For Moses

As we enter the 2022 hiatus it is timely to reflect on what those dedicated volunteers get up to. For the gardeners this not only means weed removal but includes all tasks such as fertilizing, replanting, propagation, pruning and mulching. Our gardeners are primarily the backstay of what we do and without them the Gardens would not be the benchmark it is.

Maintaining the infrastructure is everything that makes that walk through the Gardens pleasant. No matter whether it is the path you walk on or the table you sit at our maintenance volunteers' work hard to ensure it is to the best standard.

Then there are the volunteers that work behind the scenes. The committee members taking care of funding and direction, the guides and information volunteers as our face to the public, the volunteers who create the website and work on various exhibitions that seem so popular.



Planning our next strategy

Last but not least there are the trail builders working quietly out in the bush establishing the Western Tall Gums and preparing the planning on the next extension to the trail network the Eastern Tall Gums.



Every worker needs a few supervisors

It seems there is a task for everyone within the Friends and we are no different to many organizations of today that require volunteers to not only be physically involved but to be part of the social interaction through websites and committee positions.

In early 2023 we hope with the assistance of the Council to be in a position to open the Western Tall Gums Trail. The trail is almost complete and now awaits some minor decisions on signage and wayfinding. Wayfinding comprises of all new maps and possible colour coding trails making the task more difficult than some might think.

The Eastern Tall Gums will through 2023 be the subject of track direction, fauna and flora audits and discussions with both local and state government departments in order to prepare it for trail building.

In early 2023 Council should have some news on the Birdwing Butterfly Garden as they expect to release some costing breakdowns for review. This would allow the Friends to advance the work already done and open up the area which has been barricaded off now for an extended period.

We would like to thank all those Friends and the Sunshine Coast Council staff for their efforts through

2022 and look forward to returning in 2023 to do it all over again.

Friends' Events

Open Management Meetings

2nd Thu, 1pm @ Friends Shed

Dec 08

Jan 12

Feb 09

Bushcare

2nd Sat, 7am (subject to weather)

Dec 10

Jan 14

Feb 12

Fauna Watch Survey

2nd Wed, 8am

Dec 07

Jan 11

Feb 08

Welcome to our new Friends: Peta Boyce, Annamaria Budai-Markolt, Andrew Hines, Joy Thorne

Information

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Secretary

Bob Ducrou

07 5456 2743

Membership:

A form is available on our Website, or use this link to download - [Membership Application Form](#)

An invitation

**to be part of the Maroochy Bushland
Botanic Garden**

Management Committee

The Friends are wanting to expand to add a broader range of skills and experience to the management committee. We would love to hear from people who have interest and/or experience in promoting the Friends and/or the Garden, especially using social media; planning and running events; developing ideas for how to attract visitors to the Garden; and assist with other fund-raising activities.

We all want to see the Bushland Botanic Garden continue to prosper and be a relevant part of the Sunshine Coast community and this will be better achieved through a more diverse and varied management committee.

If you would like to be part of preserving something special for future generations, please make contact with one of us.

**If you are interested in finding out how you
can contribute, please contact:**

Lynn Vlismas President

Bob Ducrou Secretary

Ray Dale Volunteer Coordinator