



Letter from the President

It is amazing how quickly things can change. Just a few short weeks ago we were wringing our hands, waiting anxiously for the water truck to arrive at the Gardens after our Winter planting day, as the bedding plants literally wilted before our eyes. And now I am listening to the breaking news that the Noosa River has just burst its banks and the surrounding townships are bracing themselves for flooding! Like you, I just hope this welcome deluge makes its way as runoff to boost our very low dams. On that note, it is worth taking a stroll through the Mangroves to Mountains plantings to see how well our regional plants have coped with the recent dry conditions. They truly are looking magnificent.



In this edition of the Friends News you will find information on our upcoming Friends' trip to the Carnival of Flowers in Toowoomba, on Saturday, 22nd September. We have chartered a bus especially for the Friends to ensure we see the best garden displays that Toowoomba has to offer. This is sure to be a day not to miss, so get your booking in straight away...we need confirmed numbers for the trip to go ahead. I look forward to seeing you on the bus!

Also in this edition, you will find two excellent and very interesting articles on two very different but fabulous trips... both with a distinct botanical flavour. Our Vice President Alan Donaldson writes about his intrepid camping holiday, all the way to the tip of our great country, while our secretary Mary Woods recounts the glories of Spring in Amsterdam.

Kate Heffernan reports that we have corporate volunteers from Sensis coming to undertake planting at the Gardens in September. Sensis are the company behind the White & Yellow Pages and it is encouraging to see corporate support for the Gardens.

A reminder that we have our upcoming Spring Planting Day on Sunday, 16th September, 8am – 10am in the Mangroves to Mountains transect. This will provide us with an opportunity continue with the fabulous work already carried out in this section of the Gardens.

Finally, as the freshness and promise of a new Spring approaches, I would like to leave you with a favourite passage of mine from Genevan philosopher Jean-Jaques Rousseau...

"I got up at sunrise and was happy, I walked and was happy; I roamed the forests and hills, I wandered in the valleys, I read. I did nothing, I worked in the garden, I picked fruit, I helped in the house and happiness followed me everywhere – happiness which could not be referred to in any definite object, but dwelt entirely within myself and which never left me a single instant."

Nick Bloor MPLA MAIH

0411 348 611

Spring Gala

Planting Day!

Sunday 16th Sept.

8am -10am

Rosser Park,
Ashmore Road

Sausage sizzle, Friends merchandise, books and local native plants sale. Meet at 'Mangroves to Mountains'

Notice of Friends'

General Meeting

Monday 5.30pm

1st October 2007

Gold Coast City Council
- Meeting Room 4 Nerang Bicentennial Centre,
Nerang Southport Road,
Nerang.

All Friends welcome!



By Kate Heffernan

It was a chilly early start for Friends volunteers on our July 29th Planting Day. We had our usual wonderful supporters and some new volunteers were welcomed. Work continues improving the Horticulture Display Gardens that have now been open to the public for over a year. The Friends took on the bedding display gardens which have been empty for some months and also made a slight revamp of the native section of the Display Gardens. Council officers arranged improvements to the soil quality in these beds which was very poor and poorly drained, and there were even chunks of concrete rubble just under the surface making a hostile growing environment.

Bedding displays are meant to create a visual impact by providing a massed display of colourful flowers and foliage. I believe the changed environment makes the use of short term, high maintenance annual flowering plants an indulgence so these gardens are meant to trial some water hardy perennial natives for bedding display potential. The Friends installed 2234 plants into four large existing garden beds in the Horticulture Display Gardens, and if all goes to plan the effect should be a lively mix of and purples, mauves and gold by around early October. Traditionally bedding displays are based on short term annuals, usually planted seasonally, but more than half of the plants in these beds are short term perennials and with just a little specialist maintenance they should give several seasons of colour, lessening the use of resources but still giving a great display!

The theme of the garden is based on streams of colour, but there are two distinctive planting styles. One style uses low clumping hardy Australian plants while the other adopts a more traditional bedding style. Drifts of *Brachyscome* culti-



vars in bright pinks, mauves and purples will contrast with *Xerochrysum* cultivars (paper daisy) and a curve of grafted *Eremophila nivea* (Silver Emu Bush) runs through the native beds and blends in to *Centaurea* 'Silver Dust' in the exotic plantings. The purple, mauves, pinks and gold in the exotic beds is provided by petunias, violas, geraniums and marigolds. There is already an instant splash of colour and it will be interesting to compare the two styles. It has been very dry and windy since the plantings went in, and it's hoped the rain this week will kick them off and give a good growth spurt.

The native plants were sourced from a couple of wonderful Northern NSW Australian Plant growers. Both nurseries specialise in new water hardy releases and their range can be found in local retail garden centres. There are many opportunities for colour without having to water constantly, and I hope the native bedding displays will give gardeners some useful ideas.

The planting day was a success due to the co-operation of the Friends with Council Officers. Patrick Whiteley, the newly appointed Senior Horticulturist and his team, including Paul Thompson and Robert Petersen, made sure the beds were prepared. The Council Nursery delivered our plant order on the day and Robert stayed and helped with the clean up as well. We were joined by a few friends from the Gold Coast Bushwalkers and Robyn Cox brought a wonderful cake to help celebrate the day. Thanks to everyone who helped on the day, co-ordinating planting days with such a dedicated crew of Friends is a pleasure and very rewarding.

The next planting day is September 16th and we will be back in the Mangroves to Mountains Transect. We'll continue on the hill with dry rainforest species and also install some new plants to





freshen up the very first area we planted four years ago. Please come and join us on the 16th, take the time to walk around the bedding displays and take in the special qualities of the local natives in the Mangroves to Mountain.

An extension to the wetlands will be the site of a special planting day arranged for corporate volunteers from Sensis (the yellow pages) on Friday September 14th. Friend's volunteers Mary Woods and Kris Tayler will support the Sensis volunteers as they plant local *Callistemon* species with an understory of Matt Rush and reeds in a low moist area along the Royal Pines fence. The added support from Corporate Friends reflects the interest and commitment of the broader community to the Gold Coast Regional Botanic Gardens.

It's time to start interpreting the gardens to some of the many regular visitors and provide a Friends guided tour. Ideally a group of Friends will come up with a roster, and I'd like to encourage anyone interested to contact me. Even if you can only spare a single day every now and then! We'll provide some basic training both on guiding and on the plantings.

My contact details are:

kate.heffernan6@bigpond.com or 0404 853 043.

We'll be in South-Western Australia for most of September so will miss the Planting Day. Have a great day!

Kate Heffernan, Planting Day Coordinator

Botanical Aspects of My Cape York Holiday

By Alan Donaldson

Recently I had the good fortune to travel from Cairns to the tip of Cape York on a four wheel drive camping safari. Following are some of the botanical highlights from my trip.

Prior to the start, I decided to take the opportunity to try and purchase a local native plant identification book and to visit the Flecker Botanic Gar-

dens. I had not seen Cairns for many years and was amazed at the tourist development there. It was interesting to see the well maintained tropical street plantings that were thriving in their true climatic range. They are essentially the plants that many gardeners in our area try to grow (without anywhere near the success). Perhaps there is a lesson there for southern gardeners!

Unable to locate the book I had been recommended, I was lucky enough to eventually find, "Plants of Tropical North Queensland – the Compact Guide" by John Beasley. (Footloose Publications) Although it did not cover the entire area up to the tip of Cape York it was an excellent guide and entirely suitable for my purposes. It was presented in the various vegetation types and with sections on exotic weeds and common ornamental trees and shrubs of the area.

Flecker Botanic Gardens was easily reached by public transport despite some major street and footpath realignment work near the entrance. The Cairns Botanic gardens actually began in 1886 as a recreational reserve when Mr. Eugene Fitzalan established a small nursery, under agreement with Council that he open his gardens to the public. In 1971 the Council named this the Flecker Botanic Gardens in honour of Dr. Hugo Flecker, founder of the North Queensland Naturalist Club and Herbarium. The gardens are currently being developed under Phase I of a Master Plan estimated at \$10 million dollars. There are funds allocated of approximately \$5.4 million dollars that includes work on adjacent street closures and realignment, additional car parking and new Visitor and Art Centres.

The most obvious impression was the lushness of the tropical plants growing in the gardens. I was fortunate enough to talk to a Friends' representa-



Archer River Crossing



tive at the visitors centre and received information on Friends activities as well as recent copies of their newsletters. The formal garden area is relatively small but very well presented despite suffering severe damage from cyclone Larry in March 2006. Fortunately one of the feature trees in this area that was not damaged was a very large *Tectona grandis* (Teak tree) beautifully set in an open lawn area.

According to the Friends Newsletter, the most interesting plant collections are the Carnivorous plants, including representatives from 5 plant families and 8 genera. The collection includes over 50 species of *Nepenthes* that extend from Australia through Indonesia to India and Madagascar. Later in the trip I was lucky enough to find the indigenous species, *Nepenthes mirabilis* growing in the wild at both Twin Falls and Fruit Bat falls near the Jardine River National Park.

The most popular plant at Friends plant sales is *Strongyloeden macrybotrus* (Philippines Jade vine) with it's striking aquamarine flowers hanging down like bunches of grapes. It seems that no matter how many they grow, they always sell out!

Across the busy road that bisects the gardens precinct is a large area of pristine wetlands and



Road to the tip of Cape York

rainforest including a saltwater creek and a freshwater lake. This area has a well constructed boardwalk and pathway linking these areas. I was very impressed with the enormous *Melaleuca leucadendra* (Weeping paper-bark) trees growing in the wetland area and the density of the vegetation.

Day One of my camping safari started from Cairns to Cooktown via the coastal roads past Port Douglas, Mossman through the Daintree National Park, Cape Tribulation, the Bloomfield



Flecker Gardens Teak Tree

track and Cedar Bay National Park. After the Daintree River ferry crossing, the roads are strictly 4 wheel drive, quite narrow and hazardous in places. They provide a great opportunity to see the famous world heritage rainforests that extend to the oceans edge in a relatively small area of the coastline. The incredible diversity of plant life in this area is almost mind boggling considering the various levels of vegetation with trees, shrubs; vines, herbs, ferns and orchids. In addition, there are large tracts of coastal open forests in the area, probably the result of burning by both Aboriginals and Europeans over many years.

Leaving the sleepy historic town of Cooktown, the next day we crossed the coastal ranges and entered into the dryer inland open forest. The predominant vegetation of smaller *Eucalypts* and *Corymbia* with limited understorey plants becomes much more interesting around creek and river crossings. At the Normanby River crossing there was a number of interesting trees and shrubs. *Eucalyptus platyphylla* (White Gum) with its magnificent white trunks was common. *Dillenia alata* (Red Beech), a striking tree with unusual red flaky bark and yellow flowers that only last one day, was flowering as were with huge *Castanospermum australe* (Black Bean). Around here I had my first sighting of *Melaleuca viridiflora* (Broad Leaved Paperbark) in flower. The form growing here has a less papery bark (perhaps due



Flecker Gardens

re-vegetation programs undertaken there over the years with mixed success. There have been problems with termites in the exotic pine and indigenous rainforest species as well as with weeds such as *Panicum maximum* (Guinea Grass) in the native re-vegetation areas. In some areas, fire is used early in the process to slow the growth of species such as *Acacia* and *Grevillea* as they tend to shade out the *Eucalypts* that are wanted as the upper canopy. Some re-vegetation areas are now been totally cleared and started again, hopefully the lessons learned will be put into effect with more success.

to frequent fires) and seems to have much broader leaves with beautiful green flowers. I did not see the red flowering form until nearly at the tip of Cape York. A spectacular cultivated form of this plant is now available at local nurseries in South East Qld. A fascinating palm, *Corypha utan* caught everyone's attention. Commonly known as the Gebang Palm or Kennedy Palm, after reaching about 25metres in 40 to 50 years, it drops all fronds, then flowers, produces masses of fruit, and dies. (Wouldn't it be nice if this happened to the Cocos Palm after their first flowering?) Also in flower were *Dodonaea polyandra* and *Grevillea pteridifolia*.

Going further north via the Old Laura homestead and Lakefield National Park, the country opened out to flat grasslands with large termite nests and open woodlands. Again, there was more interesting and diverse vegetation around creeks and lagoons. Cattle grazing and use of fire in the past was much more evident. Around here I found *Petalostigma pubescens* (Quinine Tree) growing as an understorey plant amongst *Eucalypts*. The same tree grows on the old sand dunes in the Historical Society grounds at Bundall! Another tree common to our area that is obvious in this area is *Corymbia tessellaris* (Moreton Bay Ash).

From the Musgrave roadhouse we followed the Peninsula Development road past Coen, the Mungkan Kandju National Park and on to Weipa. The rivers start flowing west around here and again are the dominant feature in the landscape. At Weipa we learned that the locals only have their water restrictions in the wet season. They say that they have so much water then that it restricts what they can do!

During a guided tour of the mine area it was interesting to see and hear about the post mining

After Weipa we headed east to the Telegraph Road via cattle country through properties such as Batavia Downs and Bramwell. Frequent fires and cattle do not make for very interesting vegetation unfortunately, and it was not until we reached Heathlands Resource Reserve via the Bamaga Road that things started to improve. Stopping at the Edward Kennedy Camp 84 monument gave us time to reflect on how difficult his 1848 expedition must have been.

It was great to find large areas of heathland plants still existing, although large areas had been cleared in the past for (now) failed cattle properties. Our next overnight camp at Twin Falls was another highlight, not only for the magnificent scenery but for the range of vegetation, including the first sighting of carnivorous plants growing on the banks of the creeks and rivers. At Fruit Bat Falls we found another area of heathland plants. Unfortunately there was very noticeable evidence of feral pig's damage along the edges of the watercourses here. Travelling North West to the Jardine River ferry we passed through large tracts of dry Eucalypt forest with extensive understorey of *Xanthorrhoea johnsonii* (Grass trees). Other areas had large groups of *Cycas media* (Cycad) and *Pandanus*.



Carnivorous plants at Fruit Bat Falls



In the large areas of *Xanthorrhoea* it becomes obvious that although these plants adapt to fire, many are destroyed at the same time. Some areas lose as much as 30% in my estimation. Although very numerous, the oldest plants only reach 2-3 metres and have single trunks. I'm not sure if this is an indication of their relatively short life span due to fire frequency and intensity, or, if it is more to do with this form of the species. To me there is no greater sight than the very old, tall multi-trunked grass trees I have seen in other parts of Australia. At the Jardine River I saw lots of the yellow flowering *Neofabricia myrtifolia* syn. *Leptospermum fabricia* and *Tristaniopsis exiliflora* (Water Gum).

Basing ourselves at Loyalty Beach near Bamaga we travelled to Thursday Island, Horn Island and eventually to the "tip", Cape York. The last 40 kilometres or so of the journey to the Cape was interesting as we passed through many vegetation types. The major interest here was to pass through different forms of rainforest including semi-deciduous and dry rainforest areas, probably a lifetime's study in itself!

Finally, reaching the very tip of Cape York was a memorable experience, however it was a long and at times hard trip, with the most interesting vegetation being quite scattered.

Alan Donaldson

References:

"Plants of Tropical North Queensland – The Compact Guide" by John Beasley – Footloose Publications

"Native Plants Queensland" by Keith A.W. Williams – Copy Right Publishing Co. Pty Ltd



The Halfround Semicircle of de Hortus Botanicus Amsterdam

Spring in Amsterdam

By Mary Woods

Our Spring in Europe this year was defined by the lengthening days, the fresh shoots in the fields that would be the bountiful crops of summer, by the flowers in parks, gardens, flower stalls and window boxes, and by the people basking in the warm sunlight in gardens and cafes.

Even at the beginning of May in Amsterdam the daylight lasted till after 9.30 - they were already enjoying daylight saving time – and while it was a bit crisp in the evenings, we joined the locals and other early visitors in strolling the streets and canals. Alfresco dining was really only for sunny lunchtimes yet; indoors the company was warm and congenial.

But it was Spring and the trees of Vondelpark were flush with new growth and the famous Flowermarket on the Singel canal was bursting at the seams with blossoms of every kind. Keukenhof was a few days away yet when we ventured across town on the tram to checkout Amsterdam's botanic gardens.

De Hortus Botanicus Amsterdam

The Hortus, as it is known locally, is one of the oldest botanic gardens in the world. More than 6000 specimens of more than 4000 plant species from all over the world grow in the garden and greenhouses of the 1.2 hectare Hortus. Within the grounds are the Palm House, Butterfly House, Mexican Greenhouse (with cacti from Mexico and USA), Three-Climate Greenhouse, as well as the Herb Garden and the Halfround (Semicircle) garden. In the distinctive Semicircle, gracing the ap-

September is Biodiversity Month!



Australia is home to between 600,000 and 700,000 species, many of which are endemic, that is they are found nowhere else in the world. These include, for example, 84% of our plant species, 83% of mammals, and 45% of birds.

Australia's biodiversity - the plants, animals, micro-organisms and their ecosystems - is threatened from the impacts of human activities. Since European settlement, more than 50 species of Australian animals and over 60 species of Australian plants are known to have become extinct.



proach to the historic *Arte Nouveau* de Vries building, the plants are grouped according to the similarities between their genetic material (DNA). The Hortus is the first botanic garden in The Netherlands to display this so-called 'molecular systematics' in a public display.

Herbs formed the basis of the plant collection of the original Hortus Medicus and remains of great interest today. The Hortus has more than 50 old or rare trees, and in the heated outdoor pond lives the giant waterlily *Victoria amazonica*, also known as the queen of waterlilies. The flower, which only blooms for two nights each summer, opening at dusk and closing at dawn, has been delighting visitors since 1859.

The Three-Climate Greenhouse was built in 1993 with financial support from the City of Amsterdam, the Friends of The Hortus and various companies. It has a subtropical section with plants from Australia, New Zealand and South Africa, a tropical section with a lifelike jungle full of palms, lianas and orchids, and, a desert section.



Echinium wildpretii [Boraginaceae]
from the Canary Islands.

History... As a result of a plague epidemic, the Amsterdam City Council founded the Hortus Medicus, a medicinal herb garden in 1638. Doctors and pharmacists collected their herbs there and were trained in the preparation of prescriptions. In the 17th and 18th centuries the Dutch East India Company delivered not only herbs and spices but also exotic ornamental species to the Hortus. Some, for example the 300 year old Eastern Cape giant cycad, are still thriving.

Specialisation... The Hortus specialises in a number of plant groups including

cycads, plants of South Africa, palms, historical container and carnivorous plants. Only pure plant species, 'as they are found in nature', are grown in the Hortus. The Hortus contributes to the conservation of threatened species like cycads by cultivating the plants themselves and exchanging seeds with other botanic gardens around the world.

Education... The Hortus considers education one of its important tasks. The lesson programs have been developed in co-operation with the Amsterdam Nature and Environmental Education Centre. Study packs are available and there is a project for primary schools called, 'Where does chocolate come from?'

Mr Flower Power... Across Europe's gardens this Spring homage was being paid to Karl Linné, the famous Swedish botanist known to us as Carolus Linnaeus who was born 300 years ago. The Hortus exhibit in May celebrated the three years Linnaeus spent in The Netherlands and his efforts to describe and catalogue the world of nature.

'For if a citizen in a free commonwealth may speak his mind, it will be at least allowed for me to state my principles among botanists!...To you my dearly beloved botanist, I submit my rules, the rules I have laid down for myself, and in accordance with which I intend to walk. If they seem to be worthy let them be used by you also; if not please propound something better!'

Friends of the Hortus... With almost 9000 members, 'Friends of The Hortus' is one of the largest Friends' Societies in The Netherlands, and possibly the world (we have a way to go yet!). The Hortus receives a yearly endowment from the Friends for use and investment in the garden as well as occasional grants for special projects, such as the Three-Climate Greenhouse.

With her rich history, the Hortus is a green oasis of peace and charm in the middle of a busy city. People of all ages come to this living museum to admire the plants and butterflies, experience the vegetation of different climates, attend cultural activities, enjoy the café, or, just read a book under the trees.

The Hortus website can be read in English by clicking on the English flag. Unfortunately, the Friends information is only in Dutch – www.dehortus.nl



friends noticeboard



2007 Planting Days

Sunday 16 Sept. - Spring Planting Day

Sunday 2 Dec. - Summer Planting Day & AGM

Planting 8am - 10am

Enquiries to Mary Woods (Secretary) 0410 576

Treasurer calling...

Annual membership fees are due on the 31st August. The address label on the envelope will tell you when you're paid up to. Please use the mailing form enclosed, or find a committee member on Planting Day, and return your payment promptly, thank you.

Peter Reilly, Treasurer

AusPlants Special Interest Group

All Friends are invited to take part in the AusPlants program for 2007. All meetings are held on the 4th Tuesday of each month, 7.30pm, at Genesearch, 14 Technology Drive, Arundel. Phone Lyn on 5537 3354.

Seminar Topics for early 2007:

September 25th - Ferns Dan & Wendy Johnston

October 23rd - AusPlants AGM; favourite plants & places

November 27th - Growing rainforest plants

December 9th - Christmas lunch

AusPlants Field Excursions for 2007:

Sept. 16th - Rosser Park Planting Day (Biodiversity month)

Sept. 22nd - Toowoomba Carnival Flowers

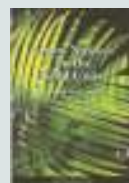
Oct 26th-28th - Girraween National Park (camping or cabins)

Nov. 25th - Clagiraba Cons. Area + gardens visit

Dec 2nd - Friends AGM & Summer Planting Day, Rosser Park.

Buy Your Plant

Books from the Friends and SAVE!!!



Grow Natives on the Gold Coast

by Graham McDonald

Rrp \$15 **Friends' price \$10**

Mangroves to Mountains Vols. 1 & 2

by Logan River SGAP

Rrp \$45 ea

Friends' price \$35 ea



Create More Butterflies

by Helen Schwenke & Frank Jordan

Friends' price \$25

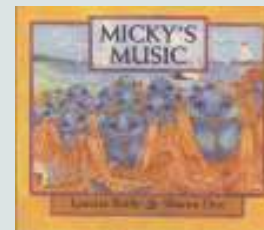


Micky's Music

(picture book about soldier crabs)

by Lynette Reilly

Friends' price \$5



See them on Planting Day...

Buy them on Planting Day!

Friends Merchandise

Buy your next hat, cap, mug or shirt from us. The Friends have a range of merchandise that tells everyone you are proud to be 'helping the Gardens grow'.



See the range of mugs (new!), bucket hats, peaked caps and green polo shirts at the next Planting Day on Sunday 16th September.

A big thank you...

to the office of John-Paul Langbroek – local MP for Surfers Paradise, for generously providing photocopying services for our newsletter!

COMMITTEE

President

Nick Bloor

Vice President

Alan Donaldson

Treasurer

Peter Reilly

Secretary

Mary Woods

Newsletter Editor/

Webmaster

Caroline Kelly

Planting Day Coordinator

Kate Heffernan

Fundraising Coordinator

Gary Lyall

Archivist

Helena Kelso

Botanica Coordinator

Lynette Reilly

AusPlants Representative

Bonni Reichelt

General Committee

Kris Tayler

Desley Acton

Barbara Clarke

Mark Reif

Patron

Gene Rosser

Botanica Patron

Cr Susie Douglas

Founder

Kate Heffernan