

THE FRIENDS OF THE WAITE ARBORETUM INC.



NEWSLETTER

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GENERAL MEETING

Held on Monday, 14 February, 2000

Dean Nicolle, in his second address to this group, told us of his recent journey into Central Australia to seek and collect seeds of desert eucalypts. His speech, illustrated by slides, described many species of eucalypt, most of which are hardly known and infinitely more beautiful than coastal fringe dwellers could imagine. The slides were many and wonderful but the most memorable was the sight of Dean, beneath a big vehicle which was bogged, (unusual in the desert?), attempting to release the tyres from the sand with a very small spoon, for lack of a spade. Another bizarre sight was a telephone box standing alone on the isolated Canning Stock Route.

It was delightful to hear Dean again after several years spent gaining much experience and knowledge in his chosen field. His arboretum has prospered and another Friends' visit, to meet the trees he described, would be a pleasure. A few years should elapse to allow the seeds which he has collected on this trip to grow. The following is an edited version of his talk:

"Eucalypts are the dominant plant in Australian landscapes. They are an important component of shrubland, woodland and forest vegetation types and are only completely absent on the true Nullarbor plain and in most rainforest vegetation. All except about ten eucalypt species are endemic to Australia. River red gum *Eucalyptus camaldulensis* is the most well known and perhaps Australia's most wide spread species.

The eucalypts are divided into three genera: *Angophora* (apples), *Corymbia* (bloodwoods) and *Eucalyptus* (gums, mallees, etc.). *Angophora* occurs only in states

with a reasonable rainfall but *Corymbia* and *Eucalyptus* occur frequently in arid lands. Bloodwoods are distinguished by woody or papery urn-shaped fruits and usually tessellated bark. The common red flowering gum, *C. ficifolia* is best known but *C. eremaea*, range bloodwood, occurs on the ranges of the north west of SA and in WA and NT. *C. terminalis*, plains bloodwood, occurs on plains in the far NW of the State and in NSW, QLD and NT. Other interesting bloodwoods are *C. sphaerica* in central NT and *C. chippendalii* on the crests and sides of red sandhills. Ghost gums differ from other bloodwoods having papery fruit; their bark is usually powdery white. *C. candida* (desert ghost gum) grows to a large size in the arid Gibson Desert and *C. grandifolia* is a rare eucalypt that is deciduous in the dry season.

Each desert area differs in the diversity and occurrence of eucalypts. The greatest diversity of eucalypt species is to be found in the Great Victoria Desert, endowing that area with a park-like aspect. The most attractive species are *E. gongylocarpa*, desert gum, and the mallees: *E. glomerosa*, *E. concinna* and *E. youngiana* with its conspicuous large fruits and yellow or red flowers. The coolabahs inhabit the most arid, inland areas as well as floodplains, which include the Lake Eyre basin, where *E. coolabah* occurs. Some of the harshest terrains are home to such trees as *E. brachyandra*, which grows in rock crevices in the Kimberleys and northwest NT. *E. gregoriensis* and *E. leucophloia*, snappy gum, sub-species of *E. melanophloia*, silver ironbark, occurs near Mt Isa and may be a useful ornamental tree for arid areas."

Barbara Crompton

ALL IN A DAY'S WORK

On Friday, March 3, an exhibition of artworks by **Gilbert Dashorst**, was opened by Dr Brian Morley, Director of Botanic Gardens of Adelaide and State Herbarium. The display of work, in Urrbrae House, closed on Sunday March 19.

Gilbert Dashorst, was born of Dutch parents in Adelaide in 1956. After graduating from the North Adelaide School of Arts, he worked as a freelance illustrator and travelled through Europe. He returned to Adelaide in 1983 and was engaged as an artist at the State Herbarium of South Australia.

In 1988, he spent five months in Europe under the sponsorship of the "Winston Churchill Memorial Trust". He spent some time in England and then studied botanical illustration at the Leiden Herbarium.

His skills are evident when one peruses the drawings in the book "Plants of the Adelaide Plains and Hills" by Gilbert Dashorst and John Jessop. Each page of illustrations is a work of art in its own right. The book was for sale at the exhibition together with 117 original works in pencil, ink, pastel, charcoal, watercolour, gouache and oil.

Some works were botanical and zoological illustrations. In addition there were many landscapes and portraits. Many of the landscapes were from the Netherlands, the country from which Gilbert has his origins. Many people particularly admired the ink drawing "Boat, Dry-docked" which was skilfully drawn with exquisite attention to detail. The artist also showed skill and sensitivity when producing portraits of ordinary people at work. The faces were interesting and the backgrounds not over-cluttered.

The title of this exhibition, "All in a Day's Work", was indeed appropriate and many of us experienced pleasure spending time looking and marvelling at Gilbert's wide variety of skills and interests.

You will be pleased to hear that the Exhibition attracted over 900 visitors and raised nearly \$2,000 for the Arboretum.

B. Possingham

ASSOCIATION OF FRIENDS OF BOTANIC GARDENS (VICTORIA) INC

The Friends of the Waite Arboretum have recently become an Associate member of the above group. We are now permitted, as individuals, to attend annual conferences of the association. The Conference this year is in Albury, (actually in NSW) between April 7 and 9. Unfortunately it is a trifle late for any of us to attend this year. Despite this, however, it is certainly worthwhile joining as indicated by the following material from Mary Tester, who attended the Warrnambool conference in April 1999.

THE BOTANIC GARDENS OF VICTORIA

The number plates on the cars in the state of Victoria tell us that it is "The Garden State". This is truly so when we realise that that state has 19 botanic gardens!

When Ferdinand von Mueller became the first Director of Melbourne's Botanic Gardens, with great foresight he established most of these other gardens in many country towns when, following the discovery of gold, land was being set aside. From the mid-nineteenth century, he gave a great deal of advice and practical help by sending many seeds and plants to each. Today these gardens have fine collections of trees, many of botanical and historical significance and found nowhere else in the state.

Over the years some of these gardens had become run down. In 1985 as part of Victoria's 150th celebrations, 15 were rejuvenated, with the help of sponsorship from several German - Australian companies, to commemorate von Mueller's contribution to horticulture in Victoria.

The Association of Friends of the Victorian Botanic Gardens, realising what treasures they had outside their capital city, decided several years ago to hold their annual conference in country towns that had botanic gardens. This was an excellent idea and each conference since has been most successful.

The following is a summary of my report on the April 1999 conference hosted by the Friends of the Warrnambool Botanic Gardens and printed in the August - Sept 1999 edition of the Friends of the Adelaide Botanic Gardens "Gazette".

We heard a number of interesting talks and visited several Gardens and a wildlife park. The Patron, the ex-Governor of Victoria, the Hon Richard McGarvie, officially opened the conference at the Flagstaff Hill Marine Museum. He stressed the importance of botanic gardens for their peace, the space they provided the community and, particularly the fact that entrance was free. He sincerely hoped they would remain so.

Nine speakers over the two days covered a wide range of informative topics and during the conference dinner, guest speaker, John Sherwood was most entertaining as he told the story of the Mahogany Ship – a truly "ripping yarn"!

Local visits were arranged to the:

- Warrnambool Gardens, established on a 20 acre site in 1858.
- Koroit Gardens, a small area developed by William Guilfoyle in 1876.
- Port Fairy Gardens, developed in 1859, but since suffering two devastating floods and land being taken for a caravan park.
- Tower Hill Game Reserve around the extinct volcano of Tower Hill. The financial difficulties faced by small towns remote from Melbourne have been somewhat overcome by school children and volunteers planting 250,000 trees since 1981.

Mary Tester

IN THE ARBORETUM

Clerodendrum tomentosum R. Br.

Lolly bush Family **Verbenaceae** (Tree no. 265, Grid H9)

If you want a botanical thrill, go and see the very aptly named Lolly bush. My first encounter was on a tour in February, when we suddenly came upon this tall shrub covered in "lollies". The "lollies" were each a green leathery calyx containing a single bright red globular fruit. These were in clusters of 8-12 in a terminal corymb and quite startling in appearance thus giving support to the common name lolly bush.

My next encounter was 6 weeks later, when the fruit had matured. The green leathery calyx had turned dark red and the red fruit had turned black, even more supporting the common name.

The red calyx is 5-lobed with blunt points and about 2 cm across, while the black fruit is about 0.7 to 1.0 cm in diameter and divided into 4 segments. These clusters of fruits are eye-catching and quite striking in appearance and seem to persist for a couple of months.

Why haven't we seen this before?

I was rather surprised to find it is a native of tropical Australia occurring in NSW, Qld, NT and WA. There are several species one of which is recorded to SA but this is doubtful.

It is described in Floras of NSW, Qld and Central Australia and also several Australian gardening books. All of these describe clusters of white tubular flowers with protruding red stamens as being a feature of the genus but which I have not seen. Little attention is given to the colourful fruit stage that follows. The leaves are broad velvety, opposite and from 5-12 cm giving the bush a well-covered appearance.

Aboriginals used the plant medicinally, making an infusion from leaves and inner bark and rubbing on the body or drinking to treat coughs, colds, headaches, fever, stomach or body pains. The wood is used for fire sticks and hollow stems are used for pipes.

The cluster of white flowers gives the bush a delicate elegance but the lolly gaudiness of the fruits is something quite unsurpassed.

It is definitely worth a visit.

Roger Bungey

YUCCA

Yucca is a genus of about 40 species and is native to North America. They are now generally put in the family *Agavaceae*. There is often confusion with *Agave* (Century Plants) also American, and *Aloe* from South Africa, all of which vary from stemless rosettes to sparsely branched trees. All have tufts of armed leaves that may be succulent (*Agave*, *Aloe*) or fibrous (*Agave*, *Yucca*). In general, the flowers of *Agave* are erect and green - yellow, those of *Aloe* are tubular pendulous yellow, orange or red, and those of *Yucca* are pendulous globes of ivory white.

Yucca has a special symbiotic relationship with the Yucca moth which both pollinates the flowers and then lays an egg for its caterpillar to eat at least some of the young seeds. Seed is only occasionally set in South Australia. All species have handsome pyramidal inflorescences.

The larger species may be 10 metres high and the Joshua tree is a well photographed example. Considering how handsome some species are, it is surprising that more are not grown but the stiff pungent leaves and the simple lack of availability no doubt deter popularity.

Y. aloifolia (and variegated forms) and *Y. gloriosa* may be found occasionally in Adelaide gardens. There is a large old *Y. elephantipes* in the centre of the Adelaide Botanic Gardens. This species, which is less pungent than most, has had some publicity recently on the ABC gardening program as a useful patio plant.

A small collection of the larger species was started in the Arboretum. These were planted near the late nursery school (Grid E14) but it was a poor choice of site as the seasonally wet 'Bay of Biscay' soil is ill-drained and most species did not thrive. A few survive. There is a formidable clump of *Y. faxoniana* planted in 1957 and now 4 m tall that has never flowered. It reminds me of an army tank. Very similar are two *Y. carnerosana* (1980) which likewise have never flowered. *Y. elephantipes* has formed a large branched plant and flowers regularly but needs more water. It is flowering now.

The most striking plants in this area are two *Y. australis* (1960) with erect unbranched stems over 8 m high, but they have not flowered. The old leaves remain on the trunks for many years and form a pungent skirt.

In the southern Arboretum are two similar *Y. filifera* (1978). One of these has flowered twice with a large pendant inflorescence and the second flowered this year for the first time. One of these now has a branch coming from the base of the plant.

Y. aloifolia grew well and then fell apart. It was really too small for the Arboretum. Other species represented in the Arboretum are *Y. decipens*, a multi-trunked specimen 3 m tall and *Y. gloriosa* which has five striking inflorescences in bud at present.

David Symon

A NOVEL METHOD OF PROPAGATING OWENIA ACIDULA

Owning a property in a 250 mm rainfall area forces one to grow plants from naturally dry areas. While reading a book, "Native Trees of South Australia" by C.D. Boomsma, I came across *Owenia acidula*. There was a comment about attempts to germinate the seed not being successful over a period of 50 years. I also had no success with seed obtained from Nindethana Seed Services. In the meantime I found a 35 year old specimen of *Owenia acidula* in the Waite Arboretum.

In 1998 I was idly flicking through "Census of Australian Vascular Plants" by R.J. Hnatiuk and noticed that *Owenia acidula* and *Melia azedarach* were in the same family of Meliaceae. An idea flashed across my mind - why not try and graft the *Owenia* onto the *Melia*?

I contacted Dr Jennifer Gardner to obtain some material from the *Owenia* growing in the Waite Arboretum. In the winter of 1998 I tried six top wedge grafts, but success was not forthcoming. In February 1999 I obtained some more material and tried the graft again putting a 'zip-lock' plastic bag over the scion to minimise dehydration and leaving the plants in total shade under a porch.

About 4 weeks later, four of the six grafts were still looking promising with the scions putting on some new growth. They were slowly hardened off and in the cooler weather placed out in full sun where they survived the winter well.

In June 1999 my partner and I visited the NE of the State and discovered a healthy stand of the *Owenia acidula*. I collected some material and I tried another seventeen grafts. This proved successful with almost all of the scions showing signs of growth after about three weeks, but eventually only three survived.

At the end of September we again visited the NE of SA where I was able to collect some more material from the same location. I concentrated on obtaining material from female plants since the specimen in the Waite Arboretum is a male. I used the criterion of fruit or seeds under the trees as an indication of a female tree. Almost every

population we encountered was male with the exception of the one from which I collected material on our previous visit.

With the new material I still used the top wedge graft but wrapped the scion in a plastic film similar to Parafilm and left the grafts in the shade house. Only four scions burst through the film. I transplanted them into bigger pots adding a slow release fertiliser.

At the end of November the temperature rose to the mid thirties. The four grafts that had been transplanted put on a remarkable amount of growth in the space of three days. Two of these were planted out in the Waite Arboretum adjacent to the established plant (# 230E, Grid H11), but only one has survived.

The long-term compatibility has not been tested and only time will tell if this method of propagating *Owenia acidula* is foolproof. In the short term it looks promising. It would be interesting to try this method of propagation on other species of *Owenia*, which may be difficult to propagate.

Werner Kutsche

[Editor's note: An article on the Arboretum specimen of *Owenia acidula* appeared in the Friends Newsletter No. 8 (Winter 1996).]

FROM THE COMMITTEE

The committee met on Wednesday, February 2 at 9.30 am.

1. Netherby Kindergarten: The site of the kindergarten has been cleared and contractor's rubbish is soon to go.
2. The committee agreed that it would be appropriate to join the Association of Friends of Botanic Gardens (Victoria) as an associate member.
3. The committee approved the allocation of \$4 000 for the provision of signs on the perimeter of the Arboretum. Jennifer tabled a suggested text for comment.

Anna Cox

NOTES FROM THE CURATOR

The very dry summer has taken its toll on a number of trees, many deciduous species shed their leaves early. Despite supplementary watering of the Elm Avenue, the first of this magnificent, heritage listed avenue of 70 trees has died. Members of Woodgroup SA are going to make a special seat for the Arboretum from the timber of this specimen.

On 6 February, the Palm and Cycad Society of SA Inc. held a working bee in the Arboretum. 27 specimens, raised by the members were planted. Their generosity and enthusiasm in establishing the Palm & Cycad Walk is greatly appreciated. A very fine collection of unusual species is being assembled. The successful establishment of the new plantings is due to the dedication of volunteers Torben Davidson and George Collett in watering the collection over the summer months. Our next newsletter will feature an article on cycads - a fascinating and ancient group of plants.

On Sunday, 4 June there will be a tree planting ceremony to celebrate the return to the Arboretum of the site formerly occupied by the Netherby Kindergarten. Several dignitaries will plant trees including our President, our Patron, the Vice-Chancellor of the University of Adelaide, the Director of the National Trust of SA and the Member for Waite. Volunteers are needed on the day to assist with the tree planting (the holes will already be dug). If you would like to help, please contact me on 8303 7405.

Jennifer Gardner

FORTHCOMING EVENTS AND DIARY DATES

Annual General Meeting — Friday, 7th April, 7.00pm.

Note venue – Charles Hawker Conference Centre, Waite Campus.
Enter from Waite Rd Gate 1 or 3, Urrbrae.

The meeting will be followed at 8.00pm by Heidi Gildemeister speaking on
“Gardening the Mediterranean Way: Why Waste Water”

Mediterranean Garden Society.

A meeting will be held in Urrbrae House on Thursday, 6th April at 3.00pm, to discuss the formation of an SA branch.

A Tree Planting Ceremony.

This ceremony will be held on Sunday, 4th June, at 10am, to celebrate the return of the Arboretum space previously occupied by the Netherby Kindergarten.

Plant Sales in the Park.

This co-operative initiative by the nursery industry will be held at Fullarton Park, corner of Fullarton Rd and Fisher St, on Sunday, 30th April from 9.00 am until 4.00pm. As well as plant sales there will be advice on new and associated products. Entry is free, enquires, Ph 8389 1393.

REMINDER

Have you overlooked something?

A red spot on this newsletter is a reminder that your subscription to the Friends is now overdue. This will be the last newsletter you will receive unless we receive your renewal. Your support of the Friends is much appreciated.

NEW MEMBERS

A warm welcome is given to the following new members:

John Joyes, Campbelltown;
Reg Priest, Clarence Park;
Margaret Rohde, Rosslyn Park;
Margaret Rohrsheim, Lower Mitcham;
Rosemary Sawley, Glen Osmond;
Natalie Stow, Beaumont.

THOUGHTS ON TREES

Ancient Indian Proverb

“Treat the Earth well: it was not given to you by your parents, it was loaned to you by your children. We do not inherit the Earth from our Ancestors, we borrow it from our Children.”

Chinese Proverb

“One generation plants the trees; another gets the shade.”

Ed. note:- The idea for “Thoughts” came from long-time committee member Robyn Barker. She provided me with some examples, but her contributions will not last forever. Therefore would members like to contribute apt quotations, either directly involving trees or nature and our environment?

If you do have some offerings you can either ring me or give them to Jennifer; she will certainly pass them on.