



Friends of The Australian Arid Lands Botanic Garden, Port Augusta Incorporated

sletter

*Celebration
of 30 Years*
July 2014

President's Report *by John Zwar*

Australian Painted Lady - B. Haase



**NEXT
MEETING AGM
19TH JULY**



Eucalyptus youngiana Ooldea Mallee - C. Nayda

Our next meeting on 19th July is the AGM and we will celebrate our 30th Birthday that evening with a Dinner at the AALBG as well. What a wonderful landmark to reach! We were one of the first botanic gardens in Australia to establish a friends group; indeed we were established before the Garden, and were instrumental in promotion, lobbying and fundraising for the Garden. I am sure that without our sustained pressure the Garden would never have eventuated. We have a great Guest Speaker, Professor Richard Benfield from the USA a leading world authority on Garden Tourism, to address us. A presentation not to be missed!

Friends volunteers have been busy propagating, weeding, weeding and more weeding following substantial rains in the last few months, resulting in a much greener than usual Garden. Some, led by Brian Riechelt have been constructing paths in the original Eremophila Garden, others tour guiding and producing brochures, displays and helping with plant sales, and engraving metal plant labels. The research work led by Dr Andrea Leigh, Senior Lecturer, Plant Ecology, Leader, Teaching and Learning, School of the Environment, University of Technology, Sydney and undertaken by Ellen Curtis ably assisted by Ronda Hall, was very successful and it is hoped further research, building on Ellen's findings will be undertaken. Also, Dr Kate Delaport of the University of Adelaide is hoping to be able to use some of the AALBG Research Area for trial plantings of ornamental eucalypts, developed in her breeding program, which will be a very interesting project and may need help from Friends with monitoring and maintenance.

We have had an amazing first 30 years, seeing what was a dream come to fruition. The next 30 years is likely to be even more interesting and exciting as the Garden becomes more established and widely recognized. Thanks to all who have been part of the dream and helped make it a reality, a development unique in Australia and the jewel in Port Augusta's crown! I look forward to seeing many of our Friends at the AGM and at our celebratory dinner. Best wishes to all.

10 plants YOU MUST SEE while at the AALBG

The new brochure by Chris Nayda, has been very popular with all, especially visitors embarking on self guided tours.

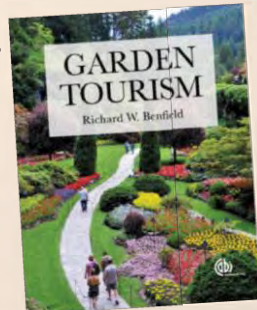


RICHARD BENFIELD GUEST SPEAKER

Our Guest Speaker for the AGM will be Professor Richard Benfield who is one of the world's leading authorities on Garden Tourism. Originally from the UK, he is Professor of Geography at the Central Connecticut State University in the USA. I met him at the International Botanical Congress in Dunedin last year and when I heard he was planning to visit Australia in July, I invited him to speak to the Friends, and also to Council's AALBG Reference Group and he kindly agreed. Richard has visited botanic gardens and other public gardens in many countries and has studied what attracts, motivates and drives visitors to come to gardens. He has studied the economic benefit to local communities where gardens are located.

His recently published book, *Garden Tourism*, is considered the ultimate guide to horticultural tourism. It is rare that we have speakers of this calibre and this promises to be a fascinating and very relevant presentation.

- John Zwar



DIARY DATES

Opening of Flinders Display, 18th July 6pm, and, 31st July 6pm "The Man Behind the Map", by Dr Gillian Dooley, both at Port Augusta Cultural Centre - Yarta Purtili. Both events are FREE.

FAALBG 30th Anniversary Dinner.

At AALBG Bluebush Cafe, 19th July. Bookings essential for 60 places only. Have you made yours?

Remember Flinders Tour.

1.30-2.30pm, with afternoon tea to follow, Sunday 27th July with Chris.

Australian Friends of Botanic Gardens National Conference Mercure Gold Coast Resort, Queensland. August 8-10. All Friends are encouraged to attend.

For further details, and registration, visit website www.friendsbotanicgardens.org or www.friendsgcrbg.org.au or phone 0449 561 674.

Arid Festival, "Life on the Edge". Saturday 13th September - 18th October; sculptures on display.

Arid Smart Spring Gardening Expo. Sunday 14th September.

Birdlife Australia Club, Port Augusta Group, Sunday Field Trips.

13th July, Mundallio Station. Meet Carlton Parade Cemetery.
17th Aug, Bernie's Block. Meet at Mambray Creek Parking Bay.

14th Sept, Orroroo/Black Rock. Meet at Wilmington Park.
4th - 6th Oct, Hiltaba Station Camp Out. Meet at Tanks, Iron Knob turn-off at 7.30am.

16th Nov, Alligator Gorge, meet at 7.30am Melrose.
14th December, AALBG, Meet at 7.30am Car Park. Christmas Lunch in Cafe.

Meet at 8.00am. For further information contact: 8642 5723 Peter, 8648 6630 Greg, 0419863834 Be

Australian Arid Lands Botanic Garden

DURING JULY WE SHALL BE CELEBRATING THE LIFE, DISCOVERIES AND CONTRIBUTIONS OF MATTHEW FLINDERS AND COLLEAGUES, WITH THE FOLLOWING ACTIVITIES.

- Remember Matthew Flinders Tour.
Only \$15 and that includes an Afternoon Tea to follow! Sunday 27th July, 2014. 1.30pm-2.30pm. Make your booking to join Chris now.
- Informative and fascinating displays in the Bluebush Cafe all through July, and, at the Port Augusta Cultural Centre-Yarta Purli, 6 Beauchamp Lane
 - Formal Opening 18th July 6pm with drinks & nibbles, continuing through until 21st August. FREE.
 - Dr Gillian Dooley from Flinders University speaking on "The Man Behind the Map", 31st July 6pm. FREE.
- FAALBG 30th Anniversary Dinner
19th July 2014 on the 200th Anniversary of the death of Matthew Flinders.

Matthew Flinders aged 27, commander of 'The Investigator' on a journey of discovery in the early 1800s to survey the Australian coast, had with him in addition to crew and servants, an astronomer unfortunately

offloaded en route due to illness, a geologist, a miner, botanist Robert Brown aged 27, landscape artist William Westall aged 19, gardener Peter Good, and botanical artist Ferdinand Bauer aged 41.

Flinders who died at only 40 years old (16th March 1774 - 19th July 1814), on the day after the publication of his Voyage to Terra Australis was one of the most accomplished navigators and chart makers of his time.

If you haven't already done so, this may be the opportune time to visit the Matthew Flinders Redcliffs Lookout, follow the path that leads up the hill to read the signage, gaze across at Mount Brown, and wander through the Brown Collection plantings. Then return to the Bluebush Cafe to enjoy a coffee and the Display and the Bauer Prints.

Bauer's finished plant drawings are distinguished by the exquisite beauty and extraordinary botanical accuracy of even the smallest and most complex parts of the plant structure. He illustrated not just the general form of the plant and its main features - flowers and leaves, but also the minutiae of seeds and stamens, pollen

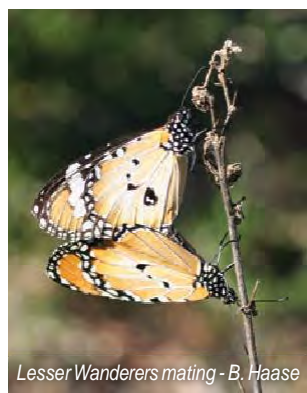
grains and root structures. He was a remarkable man of extraordinary talent.

Below, some of Bauer's astonishingly detailed and beautiful works.

Left: *Cynanchum floribundum* (Native Pear), Right: *Eremophila scoparia minutiae*, *Eremophila scoparia* (Broom Emu Bush/Silver Emu Bush) collected at Spencer Gulf, March 1802.



Butterflies and Birds



Lesser Wanderers mating - B. Haase



Lesser Wanderer Lava - B. Haase



Butterflies on Blossom - B. Haase

BUTTERFLIES IN THE ARID LANDS BOTANIC GARDEN JUNE 2014

The unusually warm weather in late autumn and early winter has combined with good rainfalls in the past months to provide an abundance of plant growth (including weeds) and flowering of many species of plants at the Australian Arid Lands Botanic Garden. This has resulted in an increase in butterflies which would normally not be seen till late winter and spring. There are masses of *Junonia villida* (Meadow Argus), and lots of *Vanessa kershawi* (Australian Painted Lady). There are also some *Danaus chrysippus* (Lesser Wanderer), *Theclinesthes serpentata* (Saltbush Blue), *Lampides boeticus* (Long-tailed Pea-blue), and the introduced *Pieris rapae* (Cabbage White) and a single *Belenois java* (Caper White). These are only the species that I have noticed whilst working in the garden and I am sure there are more around but due to work commitments I have not been butterfly hunting to find them. The butterflies are feeding on almost anything that is in flower and have been observed on *Westringia rigida*, *Lotus australis*,

Plectranthus intraterraneus, *Myoporum montanum*, several *Eremophila* species, *Senecio magnificus* and *Eucalyptus* sp. Some gum trees in flower were covered by Meadow Argus and Australian Painted Lady butterflies. There are also caterpillars from the Lesser Wanderer's on *Cynanchum floribundum* plants.

There are about 25 species of butterflies that live in the Port Augusta and the A.A.L.B.G. area, with another 22 species that may stray into the area from nearby areas or migrate into our region, on a list compiled by Roger Grund several years ago. I observed the introduced *Danaus plexippus* (Monarch) in the Garden last spring but have not seen the local, rare *Jalmenus lithochroa* (Waterhouse's Hairstreak).

An excellent book for the identification of butterflies is The Complete Field Guide to Butterflies of Australia by Michael F. Braby. It is sold in the A.A.L.B.G. shop.

I hope you find this article of interest - B. Haase.

BIRDTALK - White-browed Babbler (*Pomatostomus superciliosus*)

The White-browed Babbler is a common resident in the Australian Arid Lands Botanic Garden. It lives in noisy, active groups of up to twelve birds, rummaging under fallen debris on the ground and probing with its long scimitar-shaped beak under the bark of trees for insects, grubs and spiders.

Groups mostly consist of a dominant pair and their offspring of previous broods. All birds in the group help build the large dome-shaped stick nests and feed any chicks, but only the dominant pair breeds. Up to five eggs can be laid, but usually there are only two or three.

White-browed Babblers preen each other and often dust-bath together. They build larger nests to roost in, often enlarging and renovating existing nests, all accompanied by much chattering, growling and miaowing calls.

These active little birds can be found mostly on the west side of the Garden and around the Visitor Centre and in the dunes area. - B. Reichelt



White-browed Babbler
(*Pomatostomus superciliosus*)

My Old Mate The Mulga

Part 2 continued from our previous Newsletter.

Of the small creatures inhabiting mulga country, the ones which fascinate me the most are Mulga ants, known to some as Turkey nest ants. Over the past years I have observed these ants closely. Their nest entrances are surrounded by a circle of interlaced mulga leaves, 20-30cm in diameter and 12-15cm in height. The ants are large, dull black, inoffensive insects, most active during warm nights or on overcast days. They use a clever method of carrying mulga leaves when building the wall around their nest entrances. Instead of dragging a leaf along the ground as most ants would, the mulga ant straddles the leaf. With three legs on either side, the leaf is lifted with the mandibles, clear of the ground. The ant then moves easily, carrying the leaf to the building site.

The inner surface of the nest entrance construction is coated with soil. On this, small dark spots can be seen; when these are dampened by rain or humidity the ants gather at these spots, apparently feeding from them. On nights during dry weather I have poured water into the nest entrances and found that the ants will emerge and gather around the moistened spots. It appears that they may be part of a fungus that grows in the mass of leaves and soil surrounding the funnel-like nest entrance. Another purpose of the nest entrance walls would be to prevent flooding during heavy rain periods.

Quite a number of bird species inhabit the mulga. Among the prominent species is the crested bell-bird, or kadaitcha bird. It is notable for being ventriloquial, making it hard to locate as it "throws" its voice in the scrub - probably a defence ability. Spiny cheeked honey-eaters also provide much early morning music, and mulga parrots can be seen along with other parrot species. At night the call of a mopoke may be heard. One night while dozing in my swag on the ground, deep in the mulga, I was startled by the sound of a series of rising clucks, finishing with a burst of loud gobbling - the call of an owl nightjar.

There are some plant species associated with mulga that are worthy of mention. Mulga country can be divided into eco-units. That known as Mulga annual has a ground cover of relatively short living plant species, palatable to livestock. Mulga perennial has longer lived, not so palatable plants. In this latter eco-unit there is a predominance of woollybutt grass (*Eragrostis eriopoda*), a small tough perennial which, when dry is a favourite food of grass eating termites. The termites may graze the grass right down to its white woolly base, but will not eat that part. After rain, new shoots arise from those bases. Woollybutt tussocks may die

in their centres, forming grass rings which then break into segments that form new tussocks; behaviour similar to some species of spinifex. When the grass dies, the surface roots remain, looking like vegetative centipedes.

A small native fuschia shrub (*Eremophila gilesii*) grows mainly in Mulga perennial. About 70cm high it bears an abundance of lilac, bell shaped flowers. Below the plant a layer of furry fruits can be seen. When conditions are suitable, a profusion of a pretty pink flowered annual of the type known as Pussytails (*Ptilotus helipteroides*), may be seen in Mulga annual.

A reddish prostrate caltrop-type plant occurs between mulga groves; (*Tribulus astrocarpus*) is well named, as its fruits are an attractive red, five pointed star. Unfortunately, when the star dries it darkens in colour and breaks into segments that always present a vertical needle shaped spine, capable of piercing through the sole of a thong.

A member of the crucifer family (*Stenopetalum nutans*) may form abundant, dense communities after winter rain. It bears strange thread-like petals. At night, this species emits a powerful pungent odour, no doubt to attract particular creatures to assist with pollination. The only common name I have heard for this plant is Spunk weed.

The Mulga tree is a wattle and is very attractive when flowering, with bright yellow spike-type flowers. Apart from the dense scrub it forms, it occurs in other localities such as on hill slopes and peaks, in places of sandy desert and as part of the tree component in open woodland country.

Kangaroos are the most frequently encountered mammal in the pristine deep mulga. Sometimes a thumping sound is heard in the night when roos are moving about. Far less common are dingoes, which may make their presence known by their howling, usually in the night. Very often, nights in the mulga are spent in complete silence or with the faint whispering of a breeze passing through the tree canopies.

A feature of the various types of bush country is their special aroma, especially during wet weather. There is the smell reminiscent of coal gas from wet gidgees, while spinifex country gives off a resinous scent. Mulga has its own quite pleasant fragrance. Even the smell from the fire of different firewood species can be detected. The quality of mulga firewood varies from place to place. In one area the wood may burn rapidly with a bright flame; in another the timber may burn slowly, with much less brilliance.



Mulga trees are very susceptible to damage from fire. I have often said that you can kill a mulga with a match, and have seen cases of destruction of mulga country by bush fires, but the most dramatic deserves a special mention.

During 1964 I made a plant collecting trip into the desert area of the western region of Central Australia. Between the Kintore and Ehrenberg ranges was an extensive, healthy, untouched mulga scrub growing on a sandy plain. It was a most pleasing sight to an admirer of mulga, such as I. Very little traffic passed through that part of the country. There was no settlement at Kintore at that time.

The opportunity to visit this area came about in 1983 when I went out to make an ecological survey. I was keen to revisit the beautiful mulga scrub I had seen twenty years previously. To my dismay, I found that fire had destroyed over 90 of the trees. The plain was covered by charcoal and ugly blackened stumps.

The road to the now established Kintore settlement passed through the centre of the area. In many cases, fires begin along the edges of roads proceeding to inhabited places. Whether this had been the reason for the conflagration which destroyed this large scrub I do not know. Whatever the reason, the effect was disastrous.

Some maintain that it is good for the country to burn but in the case of mulga I am not convinced. In old mulga scrub that has not been burned, a natural equilibrium is attained. There is a range of trees, some very old, some dead and fallen, and various sizes of younger trees including seedlings. There is plenty of litter among which grasses and other herbage grows; wildlife thrives. It is a neat, peaceful ecosystem sustained by natural recycling. It does not need fire, which can destroy the system to a degree that requires many years to recover - if it does, at all. By all means burn spinifex country - it recovers quickly; but, leave the mulga alone - it looks after itself.

Contacts

President: John Zwar Phone Home: (08) 8338 6658 Work: (08) 8372 6876 Email: jzwar@bigpond.com

Treasurer: Geraldine Davis Phone: (08) 8648 6399 Mobile: 0418 447 020 Email: glgadavis@bigpond.com

Secretary/Editor: Christine Nayda Phone: (08) 8642 4684 Mobile: 0434 717 382 Email: b.nayda@bigpond.com

PO Box 2040, Port Augusta, South Australia 5700 Email: friends@aalg.gov.au

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Important Letter For You Re: Friends Gold Card

Dear Friends,

For several months now the management Committee of the Friends of the Australian Arid Lands Botanic Garden has been reviewing the "Friends Membership". The reason for the review was that we have had only one membership fee increase in the 30 year life of the Friends group, and as we all know, costs for everything have increased over time. In fact, the fees received from the current membership scheme only just cover the cost of the printing and the postage of the Quarterly Newsletter. This has placed the Friends Group in a position of not growing our funds to assist in the further development of the Garden, which is the main aim of the Friends Group.

Your Committee was unanimous in its decision to raise the membership fee but felt that we needed to have additional benefits for our members to enjoy as part of their membership, bearing in mind that the primary aim of the Friends Group membership is to raise funds for use in the Garden's development. It also aimed to reduce the work load of the Membership Officer involved with the current system.

To this end it has been decided that membership will contain only one category, in lieu of the current three,

and membership will fall due on the 1st of July each year. We will also issue a plastic membership card similar to your eftpos or credit card which will be an ongoing card with a barcode which will hold your current paid membership status. This will eliminate the need to issue new cards annually, saving on card costs and postage.

If you have renewed your membership since the 1st January 2014 you will not need to renew as of the 1st of July 2014 as we will carry your membership through until the 1st July 2015.

Not only will your new "Friends Gold Card" continue your support for the Garden but will offer you the following benefits:

- 15% discount on plants
- 10% discount in Cafe (excluding Drinks)
- Up to 20% Discount in Gift Shop (min 10%)
- Informative Quarterly Friends Newsletter
- Eligibility to attend Quarterly meetings with a specialist Guest Speaker
- Invites to special "Members Only" events at the Garden

We realise that the discount benefits of the café are not available to some of our members due to the tyranny of distance, however, the Plant and Gift Shop discounts can be obtained by placing Postal Orders which the Gift Shop Staff are only too happy to handle for you.

We will also be offering the ability to pay your membership at the Garden Gift Shop, the AALBG website and by direct Bank Transfer.

The new membership fee commencing on 1st July 2014 will be \$30.00.

We value your support of the Friends Group by way of your membership and trust that you will continue to support us by continuing your membership and by encouraging your relatives and friends to also become members, ensuring that this wonderful Garden will continue for future generations.

*Yours sincerely,
Friends Group Committee.*



Caper White - B. Haase



Long Tailed Pea Blue - B. Haase



Meadow Argus - B. Haase



Friends busy weeding the Courtyard.
The presence of Robyn Guy, a Friend from Adelaide who helped weed all day, was much appreciated.

Join or Renew Subscription

TO JOIN OR RENEW SUBSCRIPTION

Fill in this form and send with remittance to:
Friends of the Australian Arid Lands
Botanic Garden Port Augusta Inc.
PO Box 2040, Port Augusta SA 5700
www.australian-aridlands-botanic-garden.org

Enclosed is my:

Subscription \$

Donation \$

TOTAL \$

PLEASE TICK: ☐ New Membership ☐ Renewal of Membership

NAME: Dr / Mr / Mrs / Miss / Ms:

Address:

..... Date:

Email Address:

Any donation will be gratefully accepted. Donations of \$2.00 and over are tax deductible. Please make cheques payable to 'Friends of the Australian Arid Lands Botanic Garden Inc.' Receipts will be posted. A SAE would be appreciated but not obligatory.

DIRECT DEBIT BANKING DETAILS

BSB: 035-065

Account No.: 164 604

Account Name: FAALBG

Reference: 'name of person banking'

Please notify by email to
friends@aalbg.sa.gov.au

MEMBERSHIP SUBSCRIPTION

Annual: \$30.00