THE FRIENDS OF THE WAITE ARBORETUM



No. 9 SPRING 1996

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GENERAL MEETING 12 August 1996

Prof. Rob Morrison, Associate Professor, Visiting Scholar Environmental Studies, Flinders University, spoke on the Ecology and Use of Nest Boxes by Native Birds and Mammals at this meeting. His enthusiasm and his well-organised speech gave his listeners food for thoughtful digestion for it is a subject which can be taken up by all manner of people wherever they live and if properly carried out can save species of birdlife which may well be lost through urban development. Work on forest ecology is poorly supported in Australia and research is in its infancy. It is essential that people realise how many species are dependent upon the forest environment.

Rob came to his subject through his work on a television programme in the Mount Crawford Forest where there were plantations of young trees which were providing food but no nesting places for native fauna. Holes which are the natural nesting places for birds are only found in very old or dead trees and what hollows were to be found were often dangerously low on the trunks. An ecologist, Brian Gepp, established nesting boxes made of permapine planks and these functioned well. Having worked with children in schools, interesting them in caring for birds, Rob proceeded to get a grant from the Wildlife Conservation Fund to set up a project.

He sent information to schools describing the need and the aims of the project; patterns for nest boxes for different animals and tables of features which attract different species to a nest; breeding seasons and nesting needs for different species; how to make and install boxes; use and monitoring of boxes and collection of data found in the process.

The project was designed for a 2 year period between 1992 and 1993. 2,000 boxes were installed but only 200 reliable returns were elicited. The results were concerning in that it was obvious that there was much pressure on native birds from introduced species. 33% of boxes were unused, starlings and other non-native birds were taking over another 31% and bees, possums and rats were found in others so that native birds were not benefiting as was hoped. Red gum is used as firewood by 25% of South Australian homes for heating so that decline in trees is great and thus population decline in some species is apparent as in the case of the glossy black parrot. Decline is quick to note in short-lived species of animal whilst one such as the Bool Lagoon tortoise, whose eggs are eaten by foxes, lives so long that the decline is slow to appear.

Some primary schools have persisted in their efforts, like St Agnes which is making and selling boxes and giving out information. Rotary is supportive and Burnside Council, through its Enviroplan, is setting up a scheme. There is evidence of a demand for boxes and it is to be hoped that the right information is purveyed about the importance of managing and

monitoring the boxes. Other Councils are protecting their dead and old trees with hollows. Rob ended with the suggestion that there could be Children of the Undergrowth as well as Men of the Trees! His excellent presentation was very well received.

From notes by Tommie Siekmann

FROM THE COMMITTEE A Meeting on 6 August 1996

- There is still cause for concern about possible disposal of some of the Peter Waite bequest lands despite the Mitcham Council's opposition to the University's proposal to rezone the land for residential purposes. You are encouraged to write of your concern to the Vice-Chancellor of the University of Adelaide.
- On the same theme we would ask you to express your opposition to the reopening of the recently closed eastern section of the Heritage listed Elm Avenue. It is strange that it is an issue when the main entry to the Waite Institute is now on Waite Road. Reasons for closure have not altered. Traffic will increase in both speed and volume and make a danger for visiting school groups, parking threatens the viability of trees if their roots are compacted and above all, the integrity of the avenue is threatened. It seems to be a fact of life these days that we all have to be constantly vigilant for the safety of all that is treasured.
- The Committee has chosen eight very attractive photographs of trees and flowers of the Arboretum for the production of postcards for sale and promotion. They will be a good source of income. It seems that Friends are more and more vital to the survival of treasures such as the Arboretum.

NEW MEMBERS

A warm welcome is extended to: Mr Richard Whittle, Keswick; L. Tippens and S. Tideman, NT; Mr Hans Amstel, Adelaide; Mr John Summers, Black Forest; Mr Matthew Woolhouse, London; Mrs Lorraine Nettleton, Malvern; Ms Lisa McCann and Mr Arthur Woolhouse, Silfield Norfolk, UK.

ARBORETUM NEWS

- More trees have been planted bringing the total for this year to over sixty trees. The most recent plantings include a number of banksias around the dam including the three new cultivars developed at the Waite Institute by Prof. Margaret Sedgley viz *Banksia* cvs Waite Crimson, Waite Orange and Waite Flame.
- The Arboretum recently accepted the offer of two large specimens, thought to be very old, of the uncommon Natal plum Carissa macrocarpa. The trees were transplanted from the courtyard of the Torrens Building in Victoria Square where building work necessitated their removal. Sincere thanks are expressed to David Bagshaw, Principal Architect, Swanbury Penglase Architects who suggested that the trees be offered to the Arboretum; Jeff Browne, Project Manager, Services SA, who authorised the gift and agreed to meet all the costs of pruning the canopies and roots of the trees prior to their removal, transportation and installation in their new site; and Frank Ugody who gave freely of his expertise and time to oversee the entire process. Both trees are doing well.
- The waterplants around the edge of the dam are becoming well established and the area is beginning to attract a number of species of birds not frequently seen before eg Little Pied Cormorant, Black Cormorant and Pelican. There were also baby Masked Lapwing and numerous baby Wood Ducks and Black Ducks in the Arboretum this spring. More planting must be done on the bank batter zone of the dam to stabilise it. Indigenous plants like Juncus, Cyperus, Gahnia and other water plants and grasses are suggested.

- Work on the next catalogue is proceeding. The data base and maps are up to date, with the exception of the new palm and cycad collection.
- The Arboretum was again a site for the annual FrogCensus and two species were recorded in the watercourse: The Common froglet *Crinia signifera* and the Spotted grass frog *Limnodynastes tasmaniensis*.

Jennifer Gardner

LAUNCH OF THE SCULPTURE SITE



Photograph by Eric Algra

Rain held off on Tuesday afternoon the 1st of October long enough for The Hon. Diana Laidlaw MLC, Minister for the Arts to officially launch the first sculpture site in The Waite Arboretum.

The establishment of the site was made possible by a grant from Art for Public Places through the Department for the Arts and Cultural Development. The inaugural sculpture is a 4 m high Austen steel piece entitled 'Floating Figure 1' by artist Greg Johns. Mr Johns' work will be on loan for 12 months. After that time, the site will be used to promote works of new and emerging sculptors. Funding for a second sculpture site has been secured from The University of Adelaide Foundation.

After the opening of the installation, guests were welcomed into Urrbrae House to view innovative plans for future development of the gardens surrounding Urrbrae House. On hand were the artists responsible, who spoke openly about their individual plans and guided us through their interpretations. The opening was a great success, attended by over one hundred guests and friends.

CONGRATULATIONS

Dean Nicolle has received an award from the Queen's Trust enabling him to produce a book 'Eucalypts of South Australia' which will be concerned with identification and cultivation and commercial use of our indigenous eucalypts.

Richard Nolan of Wittunga Botanical Gardens has been awarded a Churchill Fellowship to study dry land horticulture in Israel.

We do wish both these members a very successful enterprise and look forward to a talk from Richard and a good read from Dean.

SPRING IN THE ARBORETUM

BAUHINIA VARIEGATA L. (Leguminosae)

Undoubtedly the most flamboyantly beautiful tree in the Arboretum in late spring is *Bauhinia variegata* [F8, No 343], commonly called Orchid Tree or Mountain Ebony.

Bauhinia was named by Linnaeus in 1753 after the Swiss herbalist and botanist brothers Jean Bauhin [1541-1613] and Casper Bauhin [1560-1624]. The shape of the leaves, often deeply cleft into a pair of lobes, suggests the close brotherly relationship.

There are over 150 species of *Bauhinia*, woody trees, shrubs and a few climbers, mostly found in the tropical and deciduous rainforests of China, India and south-east Asia where they may grow to 40 m in height. A few are desert shrubs like *B. carronii* found in northeast South Australia and south - west Queensland.

Bauhinia variegata, a native of India is widely cultivated and prized as an ornamental in many parts of the tropics and warm sub-tropics. It may grow over 10 m tall and is deciduous, the flowers appearing while the tree is leafless. In the Arboretum it has grown into a many stemmed shrub of about 3 m and is semi-deciduous. Adelaide's climate is well beyond its expected range and it is a success for the Arboretum that this tree, planted in 1930, has thrived and flowered so well without additional water.

The leaves of *B. variegata* are 7-10 cm wide and long and are split for one third of their length. In October fragrant flowers 10 cm across and shaped like orchids or giant pelargoniums bloom in profusion over the entire tree. The flowers, grouped in 5-7 loose terminal racemes, have four spoon-shaped petals, delicately veined and rose pink with red and yellow markings plus one lower, larger petal which has deep carmine-red markings-(hence the species name *variegata*). There are 5 prominent, curved stamens. The fruit pods are 30-60 cm long, flat and curved with 10-15 flat seeds in each pod. These seeds are dispersed by elastic fruit dehiscence: the valves of the fruit open explosively scattering the seeds far from the parent plant.

In India the bark is used for dying and tanning; the flower buds are often pickled or used fresh as a vegetable. The seeds are roasted, fried or eaten raw and have a taste similar to that of cashew nuts. Despite one of its common names the wood is of little value, but the leaves are sometimes used as fodder. There are a number of Bauhinias growing in parks and gardens in Adelaide but I would be most interested to know if there is another *B. variegata*. I have enquired widely but have not been able to locate another.

Mary Tester

ARBORETUM POSTCARDS ARE NOW AVAILABLE

Price: \$1 each or \$6 for a set of eight. Purchase at Urrbrae House.

Sets may be ordered by mail (\$8 each including postage). Make cheques payable to 'The Friends of The Waite Arboretum'. A set would make an ideal gift.

THE FOREST FLORA OF SOUTH AUSTRALIA

Friends will have read in the last newsletter about the generous gift to the Waite Arboretum from Mr Eric Chivers of four volumes of the 'Forest Flora of South Australia'. These will be on display in Urrbrae House during the exhibition of Botanical Art (11 October - 3 November).

The text of this ambitious work was by the Conservator of Forests Mr J. E. Brown and it was issued in nine parts between 1883 and 1890.

The parts were published by the Government Printer and for its time was one of the grandest botanical publications attempted in Australia.

They were 'drawn on stone' by H. W. Barrett.

According to a letter from H. W. Barrett in 1900 Miss Fiveash supplied 32 watercolours of the centre or main branch, Miss Camilla Hammond sketched the *Banksia ornata* and Mrs Smart sketched the native cherry and it was from these sketches that the drawings on stone were made.

"The remaining eleven plates and title page together with all the additional work consisting of the various woods, barks, seed-vessels, botanical sections and details of the flowers were drawn direct upon the stones from photos and natural specimens wholly and solely by me. ... And further I may state that not only did I make the drawings which consisted of 45 outlines and 400 colour stones but was held responsible by Mr Brown for their proper reproduction in natural colour."

(H. W. Barrett, 1900)

David Symon

HELP!

We would love some assistance with a few projects:

- Reporting repairs and tree trimming needed in the Arboretum ready for the imminent pruning programme.
- Recording flowering times.
- Establishment and monitoring nesting boxes which we would like to put in place after hearing Dr Morrison last month.

DIARY DATES

- 10 am 4 pm (Monday Friday , Sunday) 13 20 October "Artistry in Wood" An exhibition of wood sculpture, carving and turning.
- 10 am 4 pm (Monday Friday , Sunday) 13 October 3 November "The Richness of Botanical Art". An exhibition of botanical drawings and paintings by 13 contemporary Australian artists and silver jewellery by Michael Davidson and Pat Hagan.
- 2 4 pm Sunday 27 October. As part of the Australian Rose Festival, authority on roses, Maureen Ross, will be in the Twentieth Century Rose Garden at Urrbrae House to give advice on roses and rose growing.
- 8 pm Monday 28 October. General Meeting in Urrbrae House. The speaker will be Valmai Hankel, Manager of Rare Books and Special Collections at the State Library who will talk on "Rare Botanical Books".
- 11 am Thursday 31 October & Sunday 3 November. As part of the Australian Rose Festival, there will be special guided walks in the Arboretum "Trees of the Rose Family".

First Sunday of every month - guided walks in the Waite Arboretum. Meet in front of Urrbrae House at 11 am. The walks last one and a half hours.