

THE FRIENDS OF THE WAITE ARBORETUM



NEWSLETTER

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WINTER 1995

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GENERAL MEETING 10 April 1995

Dr. David Christophel, a Senior Lecturer in Botany at the University of Adelaide, described for us his aim in research: to discover what kind of flora southern Australia had in the Eocene. Starting with the rich fossil deposits (as well preserved as any in the world) of Anglesea, Maslin Bay and Golden Grove, he has since broadened his studies to include the examination of existing rainforest, especially at Noah Creek, north of the Daintree River. Noah Creek is a natural arboretum; 1,700 trees of 106 different species can be found in half a hectare.

Many of the genera found in the southern deposits, plants long extinct in the south, can still be found in northern rainforests, testimony to great change in climate. Dr. Christophel instanced *Gymnostroma*, once common here but now found only in small numbers in northern rainforest [and soon to be planted in the Conservatory in the Adelaide Botanic Garden].

Dr. Christophel's aim now is to find techniques by which plants may be identified by the leaves alone. His slides illustrated the practical difficulty of collecting fruit and flowers from rainforest giants; a key using leaves alone would be a most useful tool.

His search has been accompanied by the development of techniques such as UV photography, revealing features hidden in normal light and X-rays for the slower, traditional mounting of leaves. He showed slides showed the amazing developments in microscopy enabling, for example, identification of an ancient Australian relation of *Diospyros* by the characteristic shape of the stomata of the genus.

The audience of about 40 people were the first participants in an auction held by the FWA. Dr. Christophel kindly donated a mounted leaf of a 20 million year old relation of *Syzygium* which raised \$30 for the Arboretum.

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Collect Your Own Fossils

After this fascinating talk, the audience responded enthusiastically to an invitation to visit the fossil site at Golden Grove in spring. This will be open to all Friends at a small charge.

Anna Cox

FROM THE COMMITTEE - A Meeting on 15 June 1995.

- The Committee congratulates one of our number, Dean Nicolle, who at the age of 20 has just published his first scientific paper on his discovery of a new species *Eucalyptus paludicola*, discovered by him at Cox's Scrub on the southern Fleurieu Peninsula. Members were much interested in the address which Dean gave to us in February and we delight with him in this scientific achievement.
- Investigations are proceeding towards the possibility of producing postcards of aspects of the Arboretum as a fund raiser.
- We discussed the possibility of inviting Friends to form sub-committees for organising some events. We would appreciate ideas.
- The South Australian Woodgroup is preparing an exhibition and talks on Australian and Tasmanian timbers for the October Meeting.

- We were delighted to receive a letter from Prof. Woolhouse. An extract follows.
"I have been enormously impressed by the progress of the Friends of the Waite Arboretum and I wish you all the very best with your efforts in the future. There is much to do and there is certainly plenty of room for all of you to be involved. I give you my very best wishes for positive and continuing progress into the future".

On behalf of all the Friends, the Committee extends to Prof. Woolhouse its warm wishes for a continuing and complete recovery from his recent illness.

SOME STATISTICS

Finance: Closing balance on 26.6.95 was \$9,938. Income since 8.3.95 was derived from subscriptions (\$236), tours (\$207), card sales (\$21) and plant sales (\$9), and donations (\$40). \$160 was spent on the purchase of palms for the new palm and cycad collection.

Members: As of 26.6.95 there are 110 memberships (75 Individual, 30 Family, 5 Institutional / Corporate) representing more than 140 Friends.

NEW MEMBERS

A warm welcome is extended to the following new Foundation Members of the Friends who have joined since April: Mrs A. Abbie, Burnside; The Loof family, Red Hill, ACT; Ms A. Ness, Urrbrae; Mr R. Nolan, Mile End; The Reid Family, Woodville Gardens; Mrs M. Saddler, Myrtle Bank; South Australian Woodgroup Inc.; Ms J. Susman, Toorak Gardens and Ms E. Viskic, Forest Range.

ARBORETUM NEWS

The redevelopment of the area around the dam is proceeding and Friends are invited to inspect the work in progress and give encouragement to the seven young trainees participating in the LEAP Scheme who are doing an excellent job. The Palm and Cycad Society working bee in April was very successful and a further 40 palms and cycads were added to the collection. Preparations are in hand for this year's general planting. Another 2.1 hectares have been added to the Arboretum to enable the extension of the eucalypt collection. I have just returned from a holiday in Western Australia where I took the opportunity to collect seeds, for the Arboretum.

Jennifer Gardner

GUIDES' NEWS

One of the guides reports that she escorted more than 30 Japanese Horticultural students through the Arboretum recently and despite language incapability on both sides much enjoyment was had by all. The language of trees is certainly universal. Other groups to have taken guided tours this year include the Williamstown Garden Club, Trees for Life (Elizabeth and Gawler Group), Riley Motor Club, Wings Away, South Australian Bonsai Society, and students of The Victorian College of Agriculture and Horticulture Burnley, Gepps Cross Senior School and Mt Barker College of TAFE.

WINTER IN THE ARBORETUM

Eremocitrus glauca Swingle [Rutaceae]

Eremocitrus glauca [J11 - No.163] is a small drought-resistant tree [*eremos* - of the desert]. It is an endemic Australian genus consisting of a single species and grows only in small areas on opposite sides of the Flinders Range in South Australia and in the south and west of Queensland and north-western N.S.W.

E. glauca grows to about 2.5m from many erect stems which come as suckers from a long-lived underground rhizome. From the twiggy branches grow a sparse number of small narrow leaves and numerous strong thorns, especially on the younger branches. All surfaces are waxy bluish green [glaucous]. The small sweetly scented flowers are bisexual with five white to greenish petals. They flower from September to December and are followed by small lemon coloured berries which are edible with a sharp citrus taste. Early explorers often noted that this fruit, though small, was eaten and even prized.

The family *Rutaceae* consists of 150 genera many of which have oil glands which produce a pleasant odour when crushed e.g. *Boronia*, *Correa* and all the citrus. In *Eremocitrus*, there are large prominent oil glands on the petals of the flowers and on the fruit.

Walter Tennyson Swingle [1871-1952] from the Department of Agriculture, Washington D.C. was an authority on citrus. He described *Eremocitrus** in 1914. He suggested then that its ability to grow in dry soils and exposed to hot dry winds would make it valuable as breeding stock for existing commercial citrus fruit. He also suggested that if the tree were cultivated, fertilized and irrigated the fruit would be larger and better flavoured. Ever since then some interest has been shown in this but with no commercial results.

Reference: * Swingle, W.T. - *Eremocitrus*, A new genus of hardy drought resistant citrus fruit from Australia. Journal of Agricultural Research 1 1(2): 85-100.

Mary Tester

WHAT WORD IS THAT?

endemic - plants which grow only in a specific area. They may be restricted to a small region - for example *Angophora* grow only in [are endemic to] Australia.

indigenous - plants which are native to an area but grow naturally in other areas as well - for example *Ficus benjamina* is indigenous to Queensland but also grows naturally in India and south east Asia.

exotic - plants which have been introduced to an area from another region and are not native to this place - for example - *Jacaranda mimosifolia* grow widely in Adelaide but are native to South America. An exotic plant that has become adapted to an environment and grows there successfully without artificial help is termed naturalised - for example, olive *Olea europea* in South Australia.

Mary Tester

DIARY DATES

Our next meeting is on **Monday 10 July at 8 pm** at Urrbrae House. Professor Margaret Sedgley who has recently been appointed Australia's first female Chair of Horticulture will speak on "Developing Australian natives". A flier is enclosed. Please post it on your local community noticeboard or pass it on to a friend.

Plants for sale will include *Dracaena draco*, Dragon's Blood and *Juglans neotropica*.

The final meeting for the year will be on **Monday 9 October at 8 pm** when two members of the South Australian Woodgroup will speak on Australian timbers in conjunction with an exhibition of wood carvings.

An exhibition of tapestry weaving using botanical motifs from the Arboretum and wall papers in Urrbrae House is planned to open in Urrbrae House on **Sunday 12 November**. More details of this exciting exhibition will be given in the next newsletter. All Friends of The Waite Arboretum will be invited to the opening.