

THE FRIENDS OF THE WAITE ARBORETUM INC.



NEWSLETTER

No. 11
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Secretary
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GENERAL MEETING on Monday 10 February 1997 at 8 pm.

Professor Hugh Possingham, our speaker, was appointed to the first Chair of Environmental Science and Management at the University of Adelaide in 1995 and came to the appointment with exceptional qualifications. As a Rhodes Scholar he went to Oxford in 1984 and completed a doctorate in biomathematics. Post doctorals at Stanford and Australian National University followed until his appointment as a lecturer and later Senior Lecturer with the Department of Applied Mathematics at the University of Adelaide.

Hugh's particular academic qualifications would hardly point directly to a career in environmental science but add parents who are keen on camping, bird watching and boy-scouting and the connection becomes clear. Hugh is President of the Nature Conservation Society, a scientifically based group whose interest is biodiversity and its protection. The subject this evening was **The Upper South-East: to Drain or Not to Drain.**

Soil, water and biodiversity are basic to the conservation of life and require our constant care. In South Australia 5% of all the species we have ever had have disappeared and many are slipping away. In the western Upper South East is an area running along the Coorong to Bool Lagoon where there are wetlands of national importance, a large number of threatened species and 14% of uncleared land. It is one of the most important areas of biodiversity in the State. There is an enormous salinity problem caused by human interference with the natural drainage system through previous drainage, irrigation and clearing.

A draft Environmental Impact Statement for the area in 1993 tells of 250,000 ha of land suffering from dry-land salinity and another 175,000 ha at risk. Of four strategies considered to manage the situation, three involved major drainage and one to revegetate with perennial species and to improve existing drains. The Government appears to have chosen the path of hard engineering which will destroy much vegetation of high conservation value, including 43 ha of Messent Conservation Park. Their solution is one of curing the symptoms as opposed to attacking the cause, which is lack of native vegetation and of existing inappropriate vegetation.

No complete biological survey exists of the area so that the impact on biodiversity is guesswork. Many animal and bird species will certainly be affected by further drainage and among endangered plant species at least one, *Thelymitra epipactoides*, will be significantly

affected by changes in the water regime. When considered against the principles of sustainability this decision makes no sense at all and especially in view of the fact that draining salt water, contaminated with nutrients, into the Coorong which is an internationally renowned wetland area could well breach international treaties. Hugh's view that retirement of some farming land, alternative crops with revegetation, wetland management and ground water drainage would seem a better proposition.

He presented his listeners with his own solution and that produced by the Government but to most of us it did not seem that there was even a choice. As is Hugh's wont, he described a dismal scenario in a most cheerful and delightful way. Surely, if anyone can win a case it is he but one fears that other influences are too strong. Let us lobby the Environmental Ministers of State and Federal Government to take a responsible decision towards the sustainable future of this precious wetland system in our State.

Barbara Crompton

FROM THE COMMITTEE - Meetings on 14 January and 11 March 1997

- We welcome Prof. Mary O'Kane, Vice-Chancellor of the University of Adelaide, as an honorary member of this group. She accepted with delight and looks forward to participating in our various activities. We wish Prof. O'Kane a very happy tenure of her new post and are confident that the University will be enhanced through her leadership, bold vision and energy. She joined the University in 1994 as Deputy Vice-Chancellor (Research) and is the first woman to be appointed to the Vice-Chancellorship in the University's 122-year history. At 41, she is one of the youngest (if not the youngest) Vice-Chancellors ever appointed in Australia. Her particular expertise is in the fields of computer engineering and artificial intelligence, specifically, automated speech recognition. She has already distinguished herself in her new position by making key changes to the University's administration. She takes a personal interest in all facets of University affairs.
- The sculpture *Floating Figure* by Greg Johns has been a delightful addition to the Arboretum for nearly a year and soon must be returned to its maker as it is destined for sale. The Committee wonders if a member would be interested in purchasing it for the Arboretum where it sits so happily or for a private garden. One of our aims in having loan pieces is to facilitate sales for artists as well as enriching the environment of the Arboretum. Guidelines for donated sculptures have now been prepared and are available from the Curator on request.
- A lecturer in tree surgery, Marcus Lodge, is demonstrating his skills on some of the Arboretum trees and serving our needs at the same time. He and his students recently removed a dead cypress that was a host plant for borers and could have infected other trees which were under stress.
- We are seeking to advertise the handsome new set of 8 postcards of trees in the arboretum. Sales have been slow so far. You may have noticed that one has been included in the receipt for your subscription this year. We remind those few who have not yet renewed their 1997 subscription that they too may have this bonus! You will also receive a red sticker to tell you that sadly this will be your last newsletter, unless your membership is renewed.
- The Project Manager of the Urrbrae Wetlands recently completed west of the High School has asked us to advertise that a group of supporting Friends is being set up and not only would they like members but also a person who would like to be a focal point for the group. We can only guess at their requirements but it may call for someone of magnetic qualities to bring in others or someone who likes to work hard with people. If this appeals to you contact Dr Allin Hodson on 018.855.254. A Friends of the Arboretum visit to the Urrbrae Wetlands is planned for later this year.

- The Committee thanks, very warmly, the number of generous people who added a donation to subscriptions. Subscriptions have raised \$1,116 and donations \$171 so far this year. This is a most creditable figure.

ANNUAL GENERAL MEETING

The next meeting will be our A.G.M. and all positions will be declared vacant. The present Committee is as follows but please nominate yourself or others. Some of us would be happy to move over.

President: Tony Whitehill; **Vice President:** Cate Paull; **Secretary:** Anna Cox; **Treasurer:** Jennifer Gardner (until January, 1997) and now Mary Tester; **Editor:** Barbara Crompton; **Committee:** Isabella Rawnsley; Tommie Siekmann and Robyn Barker (since 1996).

NEW MEMBERS

Welcome to: Mrs Thelma Fuss, Kingswood; Mrs Ruth Gregor & family, Hallet Cove; Ms Norma Lee, Linden Park; Mrs Margaret Lesnikowski, Beaumont; Mr Bruce Lovett, Netherby; Mr Andrew Michelmore, Kensington Gardens, Ms Jeannie Moffatt, Belair; Mrs Lorraine Nettleton, Malvern; Prof. Mary O'Kane, University of Adelaide; Mr James Plummer, Belair; Mr Ray Reynolds, Mitcham; Society for Growing Australian Plants; Mr P. Stretton, Marion; Dr Mark Tester, Cambridge, U.K.; Hans-Robert van Amstel, Adelaide.

ARBORETUM NEWS

The Arboretum is the focal point for a newly established collaborative cluster called **TREENET** (Tree and Roadway environs Experimental and Educational Network). The aim of the group is to improve the street scapes of South Australia through a coordinated assessment of existing and potential client needs, species, production methods, establishment practices and information sharing.

The group includes representatives from The University of Adelaide (Waite Arboretum), State Government (Dept of Transport), Local Government (City of Mitcham), the nursery and landscaping industries, Landscape Architecture and Urban Planning profession, a soil scientist, Urrbrae Agricultural High School and Torrens Valley Institute of TAFE School of Horticulture. Other organisations such as the MFP have also expressed interest in our activities.

A number of projects are being planned. One of these is to conduct street tree trials on several sites including a reference collection in the Arboretum and satellite sites elsewhere on the Waite Campus, at Urrbrae High, and in Happy Valley, Mitcham, Salisbury, Teatree Gully and other council areas. A second project is to produce for sale a very fine selection of *Pyrus calleryana* developed at the Waite Arboretum by Dr David Symon. A third project will be soil monitoring. It is planned to involve students of Urrbrae High and TAFE in all of the projects so that they will be valuable educational programs as well as fulfilling the final goal of enriching the roadsides of South Australia by widening the palette of suitable species of trees on offer.

TREENET is the initiative of David Lawry, Director of Lawrys Landscapes & Nurseries and member of the Friends. The idea was triggered by a paper I presented in 1995 to a Conference of the Royal Australian Institute of Parks and Recreation entitled *Future species selection for urban street trees: some suggestions from the Waite Arboretum* and also by the 'Visions for the Future' workshop on the Arboretum (held December 1996 and reported in the last Newsletter).

Jennifer Gardner

IN THE ARBORETUM

FLINDERSIA MACULOSA - (Lindl.) F.Muell., Rutaceae (Flindersiaceae) Leopard Wood

The British botanist John Lindley (1799 - 1896) originally named this tree *Elaeodendrum maculosa* but later Ferdinand von Mueller (1825 - 1896) realised that this was in fact a member of the genus *Flindersia*. There are 16 species of *Flindersia* world-wide, 14 of these are found in Australia, 11 are endemic. All except two are large rain-forest trees - one of these two is *Flindersia maculosa*. So different is this tree superficially from its rain-forest cousins that Lindley can be forgiven for not recognising it and von Mueller, one of Australia's greatest botanists of the 19th century, can be applauded.

Robert Brown named *Flindersia* after Matthew Flinders (1774-1814), leader of the *Investigator* voyage of 1801-1803 on which Brown was botanist, collecting many new Australian plants. Ferdinand Bauer was the botanical artist on this voyage and his beautiful painting of *Flindersia australis* is well known.

Flindersia maculosa is far less famous. It is found only on the red loam plains in the drier areas of N.S.W. west of Cobar and north to central Queensland. As propagation is very difficult it is seldom seen in cultivation. The Arboretum tree, planted in 1955 and found at F8 #357A, is one of the treasures of the Waite Arboretum.

F. maculosa is a small, graceful tree, 5 to 10 metres tall with pendulous evergreen foliage. The bark falls in small scales leaving the trunk distinctively patched with shades of brown, yellow and grey spots - hence the common name Leopard Wood. 'Maculata' also means a spot or blotch. Adding to its interest is its strange juvenile habit of growth. When young it is a low, bushy, tangled mass of twisted, prickly branches. After a few years it sorts itself out to become a slender, single-stemmed, beautifully shaped tree.

The genus has been variously placed in the Rutaceae and Meliaceae families but some botanists now put it in a new family, Flindersiaceae.

The leaves are opposite, shiny dark green above and paler, duller beneath. They are simple, narrow, 2 - 5 cm long and 6 - 10 cm wide. There are copious translucent oil glands in the leaves which have characteristic odours when bruised. Clusters of small white flowers appear in November and December. These are followed by five-valved capsules, 4 cm long and covered with small sharp projections. Early settlers used the resin to treat diarrhoea, a medication probably learned from the aborigines.

Mary Tester

FORTHCOMING EVENTS AND DIARY DATES

8 pm Monday 14 April AGM in Urrbrae House. **Des Freeman** from the **Rare Fruits Society of SA** will speak. There will be **tastings**.

8 pm 14 July General Meeting in Urrbrae House. This will be a joint meeting with the Garden History Society. Speaker: noted botanist and conservationist **Darrell Kraehenbuehl**.

6 pm 10 November. This meeting will take the form of a special walk by **David Symon**.

Guided walks on the first Sunday of every month. Meet at Urrbrae House at 11am.

An invitation is extended to the Friends to come on a guided walk in the **Waite Conservation Reserve** 10.30 am - 1.30 pm **Sunday 13 April**. Meet at the dam at the top of Hartley Grove, Urrbrae. The climb is steep. Wear sturdy shoes. Bring drinking water and your lunch. For further information contact **Jennifer Gardner 8303.7405**.