

# THE FRIENDS OF THE WAITE ARBORETUM INC.



WAITE  
ARBORETUM

## NEWSLETTER NO. 44

Winter 2005

Secretary  
Mrs Rosemary Sawley  
8379 7102

Editor  
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### TENTH ANNUAL GENERAL MEETING

Monday 18 April 2005

#### PRESIDENT'S REPORT

Once again I am very pleased to report on a full and varied year. I am only sorry that our much valued director of the Waite Arboretum, Jennifer Gardner, is unable to be with us tonight as she is having a very well earned and deserved holiday overseas.

As members of the Friends of the Waite Arboretum will have read in our quarterly newsletters, last September we celebrated the tenth anniversary of the formation of the FWA. We did this by inviting Professor David Christophel of the University of Denver as our guest speaker to our quarterly general meeting. He preceded his talk on "I Dream of Trees" by planting one of three seedlings of *Angophora hispida* which had been raised from seeds gathered from a specimen in Victor Harbor which has a particularly good form as a street tree. David Lawry of TREENET and Jennifer Gardner planted the other two.

Other meetings were those when Peter Cooper spoke on "Water Proofing Adelaide" with strategies for survival and a visit to Andrew Crompton's property "Possum Park" at Mt Barker (formerly a 14 acre dairy farm and now covered with native vegetation). We shared a memorable evening "Roses and Bubbles" with the Friends of Urrbrae House. The garden volunteers were proud to show off their regular efforts in caring for the rose garden before we all returned to the House to hear Sophie Thomson give a delightful talk on roses and companion plants. The labelling of all the roses is in its final stage and we are much indebted to all those involved.

In collaboration with Mirna Heruc, Manager of the University's Art and Heritage Collections, Jennifer organised a "Sculpture Twilight Walk" in the Arboretum in November, which was very well supported. The artists were strategically located by their works to give a short talk on their development.

Our traditional Christmas Party with the Friends of the Reserve and the Friends of Urrbrae House was enjoyed by all. At this function a reprint of Gladys Hogg's book "Peter Waite 1834 - 1924" was launched.

In February we appreciated a most informative: "walk & talk" with Dr Kate Delaporte on "Gumnuts Galore – in pursuit of the ultimate eucalypt" as you would have read in your latest newsletter.

Last September the TREENET Symposium was held in a very spacious marquee on the former tennis court site. The brick steps had been reworked and a hedge of Gallipoli rosemary planted in front of the sloping rose bed. With the help of Friends of Urrbrae House volunteers, we catered for morning and afternoon teas as a fund raising venture. The venue for this year's TREENET symposium will be the National Wine Centre.

Shading SA is a TREENET research project. Volunteers have been measuring the UVB-blocking properties of six selected species of trees between October 2004 and March 2005.

Many other projects have been happening in the Arboretum. The removal of dead or poor trees continues, as does the mulching. The dam repairs have been completed with the path around the top but sadly there is to be no public access because of the possibility of liability issues. As least the water is of use in watering the University oval. The watering system for the Elm Avenue has been delayed pending a review of water use throughout the whole campus. However, mulching of the elms is proceeding and this is deemed to be just as important as supplementary watering.

All the seats in the Arboretum have been refurbished by the University and are to be checked each year at no cost to the Arboretum. The Friends funded new plaques for all the seats. The Palm and Cycad Society members have continued their support by donating and planting new specimens.

New style labels for trees are being used in the Arboretum and are funded by the FWA. These labels are easy to read, long lasting and etched rather than engraved. The labels are being attached using long loops of stainless steel cable over lateral branches and secured with nickel plated ferrules. This will be much more secure and better arboricultural practice. The first batch of 90 is being attached with a second batch to be ordered later this year.

Doug Gardner is updating the Arboretum map and it will be added to our website as will the two new self-guided walking trails developed by Arboretum guide Jean Bird. The complete listing of Arboretum specimens is now available on the Arboretum website <http://www.waite.adelaide.edu.au/arboretum/> in the form of a searchable and sortable Excel spreadsheet.

The current salt damp treatment of the House is well underway and should be completed by the end of May. In November the House will be closed until mid 2006, with the dismantling of the main external stairway. This is a considerable financial commitment by the University but very necessary to preserve the structure of the House.

Beryl Martin will be holding one of her popular art exhibitions in the House from the 9<sup>th</sup> to the 25<sup>th</sup> September. I shall be grateful if supporters of all our Friends groups will help by volunteering to assist in staffing the exhibition at that time.

We were saddened by the news of the death of the husband of Committee member Pamela Brinsley last year and then to receive her resignation. We have also received the resignation of our Newsletter editor, Barbara Possingham. We extend our grateful thanks for her wonderful support in this capacity since the end of 1998. We are delighted that long term member of the Friends, Jean Bird, has volunteered to be our new editor and we welcome her most warmly.

I am indebted to all the committee members who cheerfully contribute to our FWA committee and in plans for our various functions. As always I pay tribute to the dedicated volunteers who achieve so much through their combined generous efforts.

I have pleasure in moving the adoption of this annual report.

Cicely Bungey AM  
President FWA

### TREASURER'S REPORT

I present the audited accounts of the Friends of the Waite Arboretum for 2004.

The major receipts for the year are:	\$
Subscriptions (\$1500) and donations (\$900)	= 2,400
Fund-Raisers:	
TREENET Catering (\$1100) and 'Roses & Bubbles' (\$700)	= 1,800
Bank Interest	= 1,600

We gave over \$20,000 to the Arboretum (and in 2005 we have already given \$4,800 for pruning). So we started 2004 with \$45,000 in the bank and finished the year with \$31,000.

Although this means that the interest earned in future will not be the equivalent of a fund-raiser, it is pleasing to see that the money which we have been accumulating is being put to very good use. It also means we look forward to your continued support for our fund-raisers.

I should like to thank Peter Nicholls who continues to act as our financial adviser and also thank Bevan Craig who has been a very helpful auditor.

Motion: That the Financial Statement for the year ended 31/12/2004 and the auditor's report dated 9/3/2005 be adopted.

Norma Lee  
Hon. Treasurer

**Statement of Receipts & Payments  
From 1.1.2004 to 31.12.2004**

<b>Receipts</b>		\$
Subs		1,528.00
Donations		924.35
Tours		267.00
Publication Sales		81.75
Sales on Commission	682.00	
LESS Payments	<u>504.40</u>	177.60
Produce		41.00
T-shirts		156.00
TREENET Catering	1,395.00	
LESS Share to Friends of Urrbrae House	<u>270.00</u>	1,125.00
"Roses and Bubbles"		
Our Share from Friends of Urrbrae House	740.90	
LESS gift	<u>20.00</u>	720.90
2003 Christmas Party		
	68.97	
LESS Costs	<u>22.00</u>	46.97
Bank Interest		
		<u>1,579.66</u>
<b>Total Receipts</b>		<b><u>6,648.23</u></b>
<b>LESS Payments</b>		
Stationery	8.75	
10 <sup>th</sup> Anniversary Catering	<u>69.77</u>	
<b>Total Payments</b>		<b><u>78.52</u></b>
<b>Surplus for 2004</b>		<b><u>6,569.71</u></b>
<b>PLUS Balance at 1.1.04</b>		<b><u>44,908.21</u></b>
<b><u>AVAILABLE FOR DISTRIBUTION</u></b>		<b><u>\$ 51,477.92</u></b>
<b><u>DISTRIBUTIONS</u></b>		
Arboriculture	9,000.00	
Interpretive Signs	9,000.00	
Plaques for Seats	1,000.00	
Conservation of 'Urrbrae Gem'	920.00	
Plants for garden	<u>100.00</u>	
<u>Total Distributions</u>	<u>20,020.00</u>	
<b><u>BALANCE AT 31/12/04</u></b>		<b><u>\$ 31,457.92</u></b>
<b>Represented by:</b>		
<b>Balance at:</b>		
Macquarie Bank	4,101.58	
Commonwealth Bank	1,027.86	
Elders Rural Bank	26,304.53	
Petty Cash	<u>23.95</u>	
<b><u>TOTAL:</u></b>		<b><u>\$31,457.92</u></b>

### 2005/2006 COMMITTEE MEMBERS

Cicely Bungey AM (President), Rosemary Sawley (Secretary), Norma Lee (Treasurer), Jean Bird (Editor), Bryan Milligan (Vice-president), Peter Nicholls (Vice-president), Colin Jenner, Daniel Carrocci, Jennifer Gardner (ex officio), Judy Tyler, Lynda Yates, Roger Bungey.

At the conclusion of the business proceedings, Sarah Cockerell from TREENET gave a most interesting talk entitled "AVENUES OF HONOUR", a summary of which follows. Her talk was illustrated by photographs of remnants of and still existing "Avenues of Honour", including the most well-preserved example in Adelaide, namely that in Alexandra Avenue, Rose Park.

The project, which was launched at the 5<sup>th</sup> National Street Tree Symposium, began as a survey of Australia's memorial avenues and now aims to assess and restore as many war memorial tree plantings as possible. Many of the avenues planted have now been identified but data need to be collected which combine arboriculture with local and military history. Each avenue tells its own story about the community which established it and these stories will disappear without this project's help. The ultimate aim is to preserve the past and create new monuments for the future. With modern improvements in arboriculture, these avenues can be managed far more effectively. There is a wonderful opportunity to restore fading avenues and to replant where they have been lost. New avenues can be established for those servicemen not previously commemorated or those lost in more recent conflicts. In such a way, our urban environments can be improved and the memory of the fallen preserved.

So far TREENET staff have surveyed avenues nationwide and have visited sites in the ACT, NSW, VIC and WA. More than 100 councils as well as RSL branches, community groups and some private individuals have been contacted. Since the launch of the project, a hedge of Gallipoli rosemary has been planted at the Waite Institute. A radio broadcast by David Lawry on 891 Adelaide asking for public assistance elicited many responses; the number of avenues known to exist in South Australia has increased from 19 to more than 50. More than 200 avenues have been identified throughout Australia, although more data about them are still to be collected.

More community awareness is necessary if TREENET is to meet its objectives by the Centenary of Anzac Day. These include increased community awareness and pride in all our serving men and women, especially those who died in the conflicts of our first century as a Nation, an honour roll naming those who supplied information or supported the project, a national database of avenues with all information freely available on the web, all service personnel killed in war commemorated with a tree, all avenues restored to good health, maintained and protected and 103,000 trees planted in prominent locations providing enduring cultural, aesthetic and environmental benefits.

More information on the project can be obtained from [www.avenuesofhonour.org](http://www.avenuesofhonour.org) or [www.treenet.org](http://www.treenet.org).

### NEW MEMBERS

A warm welcome is extended to the following new members:

Andrew Birve, Torrens Park

David Barwick, Fullarton

Mr K. & Mrs A. Lewis, Netherby

Dr Bob Riessen, Blackwood

## FORTHCOMING EVENTS AND DIARY DATES

### GENERAL MEETINGS **8 p. m. Urrbrae House**

**Monday 15 August – Graham Brookman** will speak on his “Food Forest”. This talk will be followed up with an excursion to his permaculture property near Gawler in spring.

**EXHIBITION** An exhibition of watercolours by Beryl Martin, entitled “A Brush with Nature”, will be held from 9-25 September, 11 a. m.-4 p. m., Wednesday-Sunday.

**Sunday, 13 November** (jointly with Carrick Hill) “Linked by essences – Roses and Lavender Day”

**CHRISTMAS PARTY 6-8 p. m. Monday 5 December** in the gardens

## IN THE ARBORETUM

### *PYRUS AMYGDALIFORMIS*

*Pyrus amygdaliformis* (almond leafed pear), Family Rosaceae, a deciduous tree which grows to 10m, can tolerate a variety of soil types and pH. It grows well in alkaline clay soils and hence thrives in the Arboretum. The tree prefers full sun and does not fruit well in shady conditions. Established plants are drought tolerant. *Pyrus amygdaliformis* occurs naturally from S. Europe to W. Asia in dry, rocky, open habitats.

The Arboretum *P. amygdaliformis*, tree #473A (Grid G11), exhibits an interesting flowering pattern in that, in alternate years, either the western or eastern side of the tree flowers. Dr Bryan Coombe, then a plant physiologist at the Waite, observed this in 1996 when the western half of the tree flowered; the tree flowered on the eastern side in 1997 and this alternating pattern of flowering has been observed each year since.

Dr Coombe has suggested that tree #473A is an interesting example of the phenomenon of alternating cropping which is often experienced by fruit growers who have a bumper crop one year followed by practically no fruit the following year. Apples and mandarins seem to be particularly susceptible to this type of cropping and I have observed this phenomenon of “on” and “off” fruiting in a mandarin tree in a garden in St Peters.

The mechanism controlling the flowering pattern of tree #473A might be similar to that which Dr Gordon Edwards has shown to occur in apples. The terminal meristem of an apple tends to initiate flowers if it had been vegetative in the previous year but, if it had flowered and fruited the year before, it tends to remain vegetative. Each spur independently displays the on-off cycle, so a regularly cropping tree has about half of its spurs in one mode and the other in the opposite mode. If most of the spurs are in the “on” mode in any year, the tree will crop heavily and *vice versa* if they are in the “off” mode. This may occur in single trees, or on one block, or a district or a whole country – New Zealand's apple production was violently “saw-toothed” during the 1950s. Growers try to break or avoid this cycle by thinning flowers in the “on” year.

The “on-off” cycles are initiated by phenomena such as extremely cold snaps, insect attacks, etc, which kill the flowers. Tree #473A was planted in 1973 and 1974 was a drought year so it is possible that this caused the death of the flowers on one side of the tree. However, a perhaps more plausible explanation is that the “on” crop half of the tree somehow influences the meristems of the other half so that they remain

vegetative. If this is the case, the mechanism is unknown and the reasons for the alternating western and eastern flowering pattern remain a mystery.

Tree #473A is normally in full flower in early-mid September and is due to flower on the eastern side in 2005, having been in full flower on the western side in September 2004, with very heavy flowering having been noted on 14 and 24 September 2004. A visit to the Arboretum in September to see this fascinating tree should prove rewarding.

I thank Dr Bryan Coombe who provided much of the information for this note.

Jean Bird

#### **PALM AND CYCAD SOCIETY OF SOUTH AUSTRALIA HEINZ FROEHLINGSDORF PALM AND CYCAD WALK, WAITE ARBORETUM**

Palms are wonderful plants. They are beautiful and ornamental and include species with the largest leaves and largest seeds in the plant world. They range in size from dwarfs of a few centimetres to giants of over 50 metres and with girths as thin as a reed to massive barrels metres in circumference. Common enthusiasm for palms has led to the formation of Palm Societies world wide and the South Australian society was formed in the early 1990s.

South Australia has no native palms or cycads so it is a special challenge to propagate and identify those species which will flourish in our harsh climate. The vast majority of palms (there are 3000 species world wide) are tropical plants and cannot survive outdoors in SA. There are, however, many (possibly hundreds) from temperate arid or mountainous regions which have adapted to their native areas and are hardy enough to survive, and indeed flourish, in our environment.

With the aim of identifying and proving those species which will do well here, the plantings at Waite Arboretum started about 1993. Through the vision and energy of Heinz Froelingsdorf (Secretary of PACSOSA) and Dr Jennifer Gardner (Director of Waite Arboretum) the Palm Walk was commenced and continues to be a focus of activity for our Society. We are appreciative of all those who have provided plants, installed, nurtured and named them over the years. More than 200 plants are now in place and are approaching maturity.

Groupings of plants have been made on the basis of leaf type. There are four main palm leaf types: pinnate (like a feather), palmate (like a fan), bipinnate (fishtail) and entire (simple and undivided). The last two of these are rarer and more tropical and are not represented although we are trying to establish hardy specimens (like *Caryota*).

Geographic origin is also a basis for grouping. Madagascar has recently gained attention for the richness of its palm flora and, because of its latitude, has many climatic regimes similar to ours and a number of palms from Madagascar is included in our plantings. Notably, the spectacular *Bismarkia nobilis* which is a monotypic species and appears to be doing well. *Ravenea*, a genus of 10 species is represented by *R. rivularis* (Majestic Palm).

The *Dypsis* genus, on the other hand, has more than 140 species identified so far, nearly all endemic to Madagascar and many of these are planted and doing well.

*Chamaedorea*, which is a genus with more than 100 species, from Central and South America has many members which have been established and are doing well in

shaded areas. Several, like the bamboo palms *C. microspadix* and *C. seifrizii*, are sun and wind hardy and are doing well in exposed positions.

*Brahea* is a hardy genus and two species, *B. edulis* and *B. armata* are exceedingly tough and are growing well near the commencement of the walk. There are 16 species in the *Brahea* genus and no doubt some of these will also do well if we can obtain specimens.

The *Livistona* genus also has many species, most of which are Australian natives. We have several, including *L. australis*, *L. decipiens* and *L. mariae* but there is obvious scope to involve some of the others.

*Sabal* genus has 15 species. These are hardy palms from Southern USA, Mexico and Central and South America. *Sabal minor* has a subterranean trunk, blue green leaves and masses of shiny black fruit. No doubt many of the *Sabal* species will do well here.

*Phoenix* genus has long been conspicuous in the South Australian landscape because of wide spread planting of *P. canariensis* (Canary Island Date Palm) and while it is indisputably a beautiful and very durable tree, the 16 other *Phoenix* species are equally worthy and several of these are in place at Urrbrae e.g. *P. theophrastii*, *P. reclinata*, *P. dactylifera* (California date palm), *P. pusilla* and *P. roebelenii*. *Phoenix rapicola* is every bit as attractive as the others and deserves a wider planting as it is less intrusive in the garden setting.

*Washingtonia* species (*robusta*, *filifera* and hybrids), cotton palms all, *Syagrus romanzoffianum* (called green palm or Cocos palm), with date palms make up the bulk of SA palm plantings. They are included in the Palm Walk with an aim of creating a canopy which, we hope, will eventually accommodate an understorey for less hardy palms so that gaps in the landscape can be filled.

There are 32 other *Syagrus* species and other South American genera e.g. *Trithrinax* (five species), *Butia* (eight species), and *Parajubaea* (two species) serve to illustrate that there is plenty of scope for future planting.

Two other factors are important. 1. Many of the world's palms are rare or endangered. Some are extinct in the wild. We are mindful of the need to conserve species and try to include plants from this group. 2. Some species have male and female flowers on separate plants (dioecious) e.g. *Bismarkia nobilis*. So to provide examples of both male and female flowers and enable future reproduction, several individuals need to be planted in groups. Grouping (including very close grouping) enhances the general appearance of the palm. Several bangalows (*Archontophoenix cunninghamiana*) planted in the same hole provides a very attractive feature. A similar effect is gained from the clumping palms e.g. European fan palm (*Chamaerops*) and Senegal date palm (*Phoenix reclinata*).

The Palm and Cycad Society of South Australia meets at the Arboretum two or three times a year for business meetings and working bees. The Palm Walk is the major focus of our year's activities and we acknowledge the support of the Waite Arboretum staff and Friends and hope that this link will continue for many years to come.

Max Bawden  
President PACSOSA 2005



## OTHER NEWS

The President and Committee members would like to draw to the attention of all Friends that **donations** to the Arboretum are **tax deductible**.

Following a guided tour of the Arboretum for their Garden Club, **Barrow and Bench Mitre 10 at Glenunga** generously donated 300 m of stainless steel cable for attaching labels to the trees.

At 10.30 a. m. on Thursday, 26 May 2005, historian Denise Schumann gave a most interesting talk detailing the work of the women who pioneered science at the Waite Institute from the 1920s-1940s. Among these was Constance M. Eardley who was the first taxonomic botanist appointed to the Waite and who was Curator of the Arboretum. Miss Eardley held part time positions at the Waite and in the Botany Department of the University of Adelaide until she was appointed as a full time lecturer in Botany. Denise's talk preceded the launch, in the Garden of Discovery, by the Hon. Diana Laidlaw, of the book entitled "Girls with Grit" which resulted from many years of research into the Women in Science at the Waite from the '20s-'40s.

### Woodwork Group - Urrbrae House

A new volunteer group is being formed at Urrbrae House to work on care and conservation of the woodwork. Full training will be given to anyone who is interested in joining the group and we envisage a commitment of a few hours every fortnight.

Anyone interested in joining the group should contact Yvonne Routledge on 8303 7425

## IN MEMORIUM

### FERENC (FRANK) UGODY 1925 - 2005

Frank Ugody was a Foundation member and staunch supporter of the Friends of the Waite Arboretum. He campaigned vigorously for the return to the Arboretum of the former site of the Netherby Kindergarten.

Frank was one of Adelaide's most well known arborists and landscapers and was known to many eastern suburbs residents both in person and in print. He often contributed to radio horticultural programs and contributed many articles to popular and professional publications.

He had a wealth of experience in horticulture and, especially, arboriculture in his native Hungary and built on this in his adopted South Australia. He was so generous that we were all able to profit from his extensive knowledge. Frank had great personal charm and a cheerful and friendly personality which made him popular with all. He will be very much missed.

Frank was always most generous with his time and his advice and anyone who has ever been on one of his walks in the Arboretum will not be likely to forget it. His many achievements will be recorded elsewhere but we should just like to say that we have lost one of the best of Friends and that our sympathy goes to his widow, Lois, with whom he had a long and happy partnership and to their family.

Anna Cox and Jennifer Gardner

## COMMITTEE MEMBER PROFILE

**PETER NICHOLLS**

I was born in Glasgow and was the first child of my parents, both of whom were trained in biology. I spent my first four years on a small island in the Firth of Clyde where my father was stationed at the Scottish Fisheries Research Laboratory. As war approached in late 1938, my parents decided to move to Perth Western Australia, where my grandfather was Professor of Zoology. This meant that my mother was separated from her Canadian roots and family.

At the end of WW2 my grandfather retired and our family moved initially to Sydney and then to Tasmania where my father was seconded to work on the Tasmanian Trout Fishery. I spent these years at Geelong Grammar School and loved choral singing which I have continued for most of my life. During my tertiary studies at the University of Tasmania, I became fascinated with plant physiology, which was undergoing the plant hormone revolution with the discovery of the gibberellins and similar physiologically active agents. This led to a lifelong interest in the gibberellins, which now number more than 110 compounds based around the one chemical structure. This group of chemicals is important in stem elongation of rosette plants such as grasses, cereals, brassicas and some weeds e.g. Salvation Jane and artichoke thistles. During my honours studies in Tasmania, I married Meg.

Also, I became interested in the work at the Waite Agricultural Research Institute. One of the key elements of its attractiveness was the apparent rural atmosphere whilst being in a suburban setting and the presence of trees. These had strong resonances to the early site for the Science Faculty in Hobart.

Pioneering studies on the control of malting in barley by gibberellins were a strong component of physiological work at the Waite Institute and very sensitive assay techniques for the presence of gibberellins in plant tissues were developed from this work, some of which formed part of my PhD studies at the Waite Institute.

After obtaining my doctorate, I spent several years of study in California and Michigan USA, before returning to Adelaide in late 1966 to become a Research Fellow. Funding difficulties in the late eighties meant that I looked for another career and I followed a second interest and became involved in the Financial Services Industry. More study led to my being accredited as a Certified Financial Planner and I learnt a new meaning to the word "research". Instead of plants, people were now a subject for research and the solving of some of their problems became the focus for my energies. This was my focus until I retired from the Financial Services Industry early in the new century, when I returned to my former path and joined the Friends of the Waite Arboretum – combining my interests in trees, people and finances.

Through out all these years I have been an active in a number of sports and outdoor pursuits; hockey, flying light aircraft, tennis, camping with our family of four daughters on vacations, orienteering, trailer sailing and now, in retirement, walking and camping with our easily manageable tent trailer.

Peter Nicholls