

THE FRIENDS OF THE WAITE ARBORETUM INC.



WAITE
ARBORETUM

NEWSLETTER NO. 59

Autumn 2009

Secretary
Mrs Rosemary Sawley
8379 7102

Editor
Mrs Jean Bird
8276 1439

FOURTEENTH ANNUAL GENERAL MEETING

Monday 6 April 2009

The President opened the 14th AGM by welcoming about 80 Friends and Guests. He then called upon the Secretary to read the minutes of the 13th AGM which were duly accepted. He then presented his annual report, which follows.

PRESIDENT'S ANNUAL REPORT

This report covers the 14th year of the Friends of the Waite Arboretum Inc.

A major feature of the previous 12 months has been the continuing dry conditions and a major heat wave during January and February. Along with Adelaide's water restrictions, these have caused many trees in the Arboretum to be heavily stressed. The Director, Dr Jennifer Gardner, has put in many hours seeking finance for a drip irrigation scheme for the 80 year old elm tree avenue.

We are grateful for the support given to the Director and the Committee, by the Director of Community Engagement, Martyn Evans and our main interface with the University, Joe Bennink. The Committee is also very conscious of the outstanding effort and time put in by Mark Ziersch in the Arboretum. Like our Director, Mark puts in many hours over and above normal duties.

Water restrictions have made the establishment of new plantings more difficult and we are badly in need of a new vehicle for carting water and other materials. Among the 67 new plantings, we

were provided 2 old Cycads from Transport SA and 3 rare species of *Dracaena* by Dr David Symon.

We are working toward a greater cooperation between our group, the Friends of the Conservation Reserve and the Friends of Urrbrae House, with the exchange of minutes, programs and newsletters. We all have the common goal of enhancing Peter Waite's wonderful gift to the University and the people of South Australia. I am very conscious of the overlap in our roles. For example, many of our volunteers contribute their time to improving the adjacent gardens which are an integral part of Urrbrae House. Jude Tyler was recently a recipient of the Premier's Certificate of Appreciation for her outstanding service as a volunteer.

Aside from the combined Christmas function, our group had a visit to Ian Robert's property in Blyth, a talk by the Director of Carrick Hill, a musical event, a poetry reading, exposure at the ABC Gardening Expo in March and helped to host one day of the TreeNet symposium in September.

The use of funds will be detailed by Treasurer Peter and there have been individual donations made for establishment of seats within the Arboretum.

It is my pleasant duty to place on record sincere thanks to many people. First of all, our many sponsors who have enabled much work to go on that we could not have funded alone. This long list will be attached separately with this report and included in the next newsletter.

Of course we are all here to support Jennifer and her devoted work as Director, but we have been grateful for the efforts of the Committee, especially Vice President Beth who has maintained close contact with Jennifer and given leadership in my absence and Rosemary's excellent work as Secretary (she is about to enter her tenth year on the Committee). Peter's diligent work as Treasurer is evident in his report tonight and Jean continues to provide her top editing skills to the Newsletter each quarter.

At the last AGM we welcomed Cicely Bungey as a life member and continue to enjoy her support and counsel. Heather Beckmann and Cathryn Hart are not standing for re-election but we thank them for their contribution so far. We are pleased to welcome back Norma Lee to the Committee where she has agreed to take on the membership records and provide back-up to the Treasurer.

Lastly, it is time to thank you all for your support, especially if you have been able to make donations over and above membership. All those volunteers and guides who give up their time are also gratefully acknowledged.

I move the adoption of this report.

Bryan Milligan
President

We gratefully acknowledge support for the Arboretum and Gardens from the following:

Active Tree Services; Adelaide Tree & Stump; Adelaide Tree surgery/ Tree Aware; Adelaide Urban Tree Services; ArborSmart; ArborTech Tree Service; Austral Tree Services; Heath's Chipping Service; Sturt Stump Cutters; Taking Care of Trees; Trees Are Us; Urban Tree

Surgery; City of Mitcham; City of West Torrens; Rainforest Flora Nursery; Palm & Cycad Society (SA); Heritage Rose Society; Herb Society; Mediterranean Garden Society (SA); Ross Roses; Neutrog; Urrbrae TAFE; United Water.

TREASURER'S REPORT FOR 2008

The Treasurer presented a rather brief report since he had previously sent a full report, including the Financial Statement for 2008, to all Members with the notice of the AGM. This evening he concentrated on our various fund raising activities for 2008 and pointed out that despite the net amount grossed from the Basketry SA Exhibition, we gained relatively little for the amount of effort and money (to the Adelaide Fringe) it required. Activities such as the poetry reading by David and Judy Symon and the recital by the Arbor Wind Quintet, were less expensive (in terms of money and effort) to stage and so our profit was proportionally greater. The Treasurer also noted that Bevan Craig, who has audited the FWA accounts for some time is no longer able to do so. Bevan has our heartfelt thanks for the time and effort which he has so generously donated to the Friends.

The Treasurer has subsequently announced that Mr Brian Measday (Hon. Treasurer of the TreeNet Fund) has agreed to be auditor for 2009.

2009 / 2010 COMMITTEE MEMBERS

Bryan Milligan (President), Beth Johnstone OAM (Vice President), Rosemary Sawley (Secretary), Peter Nicholls (Treasurer), Jean Bird (Editor), Jennifer Gardner (*ex officio*), Colin Jenner, Henry Krichauff, Norma Lee, Jeanette Lord, Jude Tyler, Lynda Yates.

GUEST SPEAKER

At the conclusion of the AGM. the President introduced the guest speaker, Professor John Argue, who spoke on the topic '**WATER SUPPLY IN ADELAIDE**: understanding the *crisis*'.
[a personal perspective]

Professor Argue was a staff member of the SA Institute of Technology, later University of SA. for 34 years. before retiring in 1999. He is currently Adjunct Professor of Water Engineering in the University. In that capacity he has continued his interest in water resources issues, either solely or as Editor of two manuals of practice on stormwater management for Australia-wide use. He has been concerned about the confusion and misinformation evident in the community relating to Adelaide and its water future: the aim of his talk is to provide understanding on some of the most important matters involved in this important issue.

Prof. Argue began by pointing out that he had given this talk many times but that this version is the most up to date. First of all he asked 'What is our water *crisis*? What are its elements?' and

went on to define *crisis* and to give examples of other crises. The elements of the current water crisis are (1) over-allocation of Murray-Darling water resources (2) the third 10-year drought in 100 years (3) concern about climate change predictions. Our *crisis* is thus a combination of poor management of the Murray-Darling basin water resources plus a 'wake-up' call from Nature.

If we had had the sustainable rivers audit in place in the 1970s, we would have been able to estimate the impact on the health of the river systems of allocating water licences and so we would have had the debate then about whether the health of the river systems should be sacrificed for economic development. Had this occurred we might not have made the same mistakes.

Information from the CSIRO Sustainable Yield (Murray Darling Basin) Project provides (1) 11 years of stream flow record + present allocations and the 2030 climate change prediction + predicted development (2) Murray Mouth 'failure' - 1% of the time in Charles Sturt's day (once per century), now 40% of the time (i.e. every 2-3 years) (3) Severe drought inflows to the Lower Lakes (annual inflow < 1,500 GL/annum) occur every 10-11 years (4) most of the impact of climate change will be borne by the environment rather than by water users.

The total average surface water available is 23,417 GL/annum and the current average surface water allocated is 11,327GL.

Adelaide citizens want enough water to maintain a 'green and pleasant land', water of high quality, no treated waste water in the mains supply; the SA Government wants all of the above *without imposing water restrictions*, to make a profit of \$200-300 million per annum from water management and to encourage population growth to 2.0 million by 2050.

Prof. Argue showed graphs of Adelaide's water use before restrictions and the contributions of the River Murray and the Adelaide Hills catchment in an average year. Gardens and open space used 67 GL, domestic use was 57 GL and industry 36 GL. The River Murray contributed 64 GL and the Adelaide Hills 96 GL. Thus, lawns gardens etc used approx. as much water as was pumped from the River Murray. Furthermore, 85% of the water pumped from the Murray was of unacceptable quality for drinking.

The forecast, taking into account climate change, for Adelaide's water availability is 64 GL from the River Murray and 67 GL from the Adelaide Hills. Thus, there is a predicted 'shortfall' of 29 GL (18% of pre-restriction use) and the proportion of River Murray water failing the WHO salinity criteria is likely to rise to ~ 90%. Adelaide is thus facing difficulties with both water **supply** and water **quality**. Various initiatives such as revision of water allocations, Commonwealth 'buy-back' of water, water trading, funding to improve irrigation efficiency, reduction of allocation in below average inflow years suggest that Adelaide will not face a serious water **quantity** problem after, say, 2020, except in years of extreme drought but the proportion of unacceptable River Murray is likely to rise to ~90% in summer. Therefore water other than River Murray water is desirable, especially as Murray-sourced water produces 100,000 tonnes per annum of greenhouse gases in pumping it to Adelaide. Nevertheless, Adelaide needs to have Murray water 'in reserve' for years of drought.

Possible solutions to Adelaide's water dilemma are (1) Same as at present but with increased dependence on the River Murray – unacceptable (2) Present system with tank water, replacing as much Murray water as possible (3) Present system with rainwater tanks + desalination replacing a high percentage of the River Murray contribution.

Option (2), if used across Adelaide could make up the shortfall from the Adelaide Hills catchment which is expected to arise from climate change but cannot completely replace the River Murray component (25-30% v. 40%) and, in any case, it will take 60+ years before this option is fully effective across Adelaide. There are four sources of water for desalination – Seawater, River Murray water, Groundwater, Wastewater. All of these (except groundwater) use high energy and produce very high levels of greenhouse gas. Operating costs range from moderate (River Murray) to very high (groundwater and wastewater), the environmental impacts are moderate for seawater but low for the others. However, wastewater would have beneficial effects in that the sludge could be processed for fertilizers and the impact on coastal seagrasses would be removed. Of these, only seawater is of unlimited availability.

Professor Argue concluded that rainwater tanks, fully plumbed for domestic and industrial use could eventually provide the city with a valuable component of good quality water and that desalination is a good solution to the 'shortfall' of good quality water. He also said that the seawater option for desalination has been taken without a comprehensive investigation of the other options.

Professor Argue's topical, interesting and extremely informative talk elicited many questions, so many, in fact, that the President called for further questions to be put to the speaker during supper.

Jean Bird

IN THE ARBORETUM

FROM THE DIRECTOR

Autumn 2009

Elm Avenue irrigation

Installation of inline drip irrigation in Elm Avenue was completed in late January and the entire avenue has been mulched over the drippers to retain the moisture and promote healthy root development. This has enabled the avenue to survive without further loss. United Water is continuing to deliver tank loads of water recovered from maintenance work. This water has been directed to the most stressed elms, trees still recovering from the 2006 fire and the rarest trees e.g. the Cape Tulip *Sterculia alexandri*.

The experimental value of Waite Arboretum

The prolonged drought is providing an opportunity to evaluate the best performing trees and point the way for future species selection under climate change. This is where the Waite Arboretum collection is proving its great value. With the exception of the heritage listed Elm Avenue and new plantings, the trees in the Arboretum have not received supplementary watering for 50 years. Good performers include Small-leaved Rock Fig *Ficus brachypoda* and Leopard Tree *Flindersia maculosa* from central Australia; Cigar Cassia *Cassia brewsteri*,

Drooping Myall *Acacia pendula* and a number of Dry Rainforest species such as Australian Teak *Flindersia australis*, Port Jackson Fig *Ficus rubiginosa*, Tulipwood *Harpulia pendula* and *Brachychiton* species. From the Mediterranean, Montpellier Maple *Acer monspessulanum*, Carob *Ceratonia siliqua*, Cork Oak *Quercus suber*, Kermes Oak *Q. coccifera* and Tabor Oak *Q. ithaburensis*, are performing very well. Oaks from California - Blue Oak *Q. douglasii*, Oregon White Oak *Q. garryana* and Coast Live Oak *Q. agrifolia* are looking good as is the Californian Buckeye *Aesculus californica*. South African species thriving in the drought include: False Karee *Rhus leptodictya*, Tree Fuchsia *Schotia brachypetala*, White Ironwood *Vepris lanceolata*, Kaffir Plum *Harpephyllum caffrum* and Cape ebony *Euclea pseudebenus*. Chilean species *Beilschmiedia berteroana* looks lush and green despite half the tree having been totally destroyed in the 2006 fire. In collaboration with Urrbrae TAFE, seeds have been collected from Arboretum trees of promise that are not commercially available and are being propagated for street tree trials. Many of the drought tolerant species are large, attractive, shady trees suitable only for streets, school yards and parks but some like the Montpellier Maple and Cigar Cassia would be ideal specimens for home gardens to replace the Silver Birches and other unsuitable species which have succumbed under water restrictions. So why not visit the Arboretum before you choose your next tree to plant?

New plantings

The 2009 planting has begun with four species of *Angophora*: Sydney Red Gum *A. costata*, *A. leiocarpa*, *A. paludosa* and natural hybrid *A. inopina* x *floribunda* all provided by Tristan Andrews, Curator, Botanic Gardens of Adelaide and grown from wild collected seed. These add to the already very successful *Angophora* species in the Arboretum: Dwarf Apple *A. hispida*, Narrow-leaved Apple-myrtle *A. floribunda*, Broad-leaved Apple-myrtle *A. subvelutina* and *A. costata*. Eventually I hope to have all 14 species of this attractive genus represented.

Sponsorship in kind

Many arboricultural companies have continued to give generous sponsorship in kind this year. Deadwooding and chipping has been done by Adelaide Urban Tree Service. In the last three months a total of 84 truck loads of mulch have been delivered by: Taking Care of Trees, Trees Are Us, Active Tree Services, Adelaide Tree Surgery, Urban Tree Surgery, Heath's Chipping Service, Adelaide Urban Tree Service, Steve Slaughter Tree Services, Arborsmart, Austral Tree Services, ArborTech Tree Services and Sturt Stump Cutters. In addition, the City of Mitcham and City of West Torrens have delivered 6 loads. Warm thanks are given to all these supporters.

Jennifer Gardner



Montpelier Maple *Acer monspessulanum* Photograph courtesy Jennifer Gardner

***BEILSCHMIEDIA BERTEROANA* (GAY) KOSTER**

The genus *Beilschmiedia* belongs to Family Lauraceae. Family Lauraceae, the laurel family, contains 55 genera and more than 2000 species. Some of its more well known members are bay laurel (from which the terms 'Poet Laureate', 'Nobel Laureate' are derived from the habit of crowning victors with a crown of laurel leaves), avocado, spicebush and the parasitic *Cassytha*. The genus *Beilschmiedia* contains more than 100 species comprising trees and shrubs. Most species are tropical but a few are native to temperate regions. The genus has a widespread distribution with members occurring in Asia, Africa, Australia, New Zealand, Central America, the Caribbean and South America as far south as Chile. *Beilschmiedia bancroftii* (yellow walnut, wanga) is an Australian species and its seeds were used as a food source by the Australian Aboriginal people.

Beilschmiedia berteriana, common name Southern bellato (Belloto del sur in Spanish), is native to Chile and occurs 35 – 37° latitude S. It can grow in altitudes up to 1800m above sea level and has an acceptable frost tolerance.

Beilschmiedia berteriana is an evergreen tree which can reach 30m in height with a trunk diameter of 1m. The flowers are small yellow-greenish and the fruits are greenish and round. The trunk is straight and the grey fissured bark is useful for tanning leather. The wood is beautiful and hard and *B. berteriana* is used as an ornamental tree in Chile. It has been acclimatized to Spain but is rarely seen there. In Chile, the flowers are used by introduced European bees to make delicious honey.

Our *Beilshmiedia berteriana* # 309 (G9), was planted in 1928. It was severely affected by the 20 November 2006 fire but survived, perhaps due to the hand watering it received after the fire.

It is now a strange looking half a tree with all of the canopy on the northern side and none on the southern side. The leaves are bright green with pointed tips. Mature leaves measure ~ 6.5 x 2.5 cm.

The material for this article was sourced from:

http://en.wikipedia.org/wiki/Beilschmiedia_berteroana

<http://www.mundoandino.com/Chile/Beilschmiedia-berteroana>

Jean Bird

POT POURRI

VOLUNTEER'S AWARD

One of our Committee Members, Jude Tyler, has recently been recognised as an outstanding volunteer by receipt of a Premier's Certificate of Appreciation. In the citation from the Minister for Volunteers, Jude's dedication to the Waite Arboretum and the gardens of the Urrbrae House Historic Precinct and her involvement in many projects including the Sensory Garden, were recognised.

A morning tea for Volunteers and the FWA Committee, held in Jude's honour on Tuesday 31 March, was also attended by two representatives of the University of Adelaide, the Director of Community Engagement, Martyn Evans and Joe Bennink. Martyn Evans congratulated Jude on behalf of the University and thanked her and all of the University Volunteers for their continuing efforts.

We all join Martyn in congratulating Jude on her fine achievement. Well done, Jude.



Jude in the Sensory Garden with the Premier's Certificate of Appreciation

NEW MEMBERS

We warmly welcome the following new members:

Mr A. Walters, Warradale; Mr R. Bolton/Taking Care of Trees, Marden; Ms J. Goldsmith, Mylor; Ms J. Hannon, Myrtle Bank; Mr K. O'Neill, Semaphore Park; Mr E. Winter, Forest Hill, Vic.; Mr P. & Mrs M. Warnecke, Netherby; Ms Cathy Hawes, Highgate.

SPONSOR PROFILE

Over the past two years Newsletter readers have seen profiles of members of their Committee. In the next couple of years you will be reading about the journeys some of our supporters and sponsors have taken in their lives.

Stefan Gfrerer, as a young tourist from Austria, met Lisa, at Airlie Beach some fifteen years ago. Lisa, whose vocational background was in marketing and graphic design, was working at Day Dream Island as a customer activities manager. Stefan was already a qualified rock climber, ski instructor and paraglider and he also had nursing qualifications from Austria. This dynamic duo decided to marry and Lisa was introduced to Stefan's family in Salzburg where his father was the burgermeister, and where they married before returning to Australia and settling down in Adelaide.

While holding a number of jobs, as is the experience of many new immigrants to Australia, Stefan decided that being an Arborist would provide him with outdoor challenges similar to those he experienced as a young man in Austria. He is now a trained Arborist with nine years experience and is continuing his Arboricultural studies towards the level 5 qualifications. While this was happening they started a family and now have three daughters, Sophia (12 years) Noah (11 years) and Polly (6 years), whom some of you may have met at last year's Christmas Party.

Stefan and Lisa now run Adelaide Urban Tree Services from their home in Nairne, which allows them to service both their Adelaide clientele and their country clientele. They have a strong commitment to customer service and a good business ethic of understanding the need to have qualified staff. Their three full time employees are progressing through their own arboricultural studies and aim to be level 3 arborists soon. They have one part time employee who is a volunteer with the Metropolitan Fire Service and finally their newest employee, who is already a strong tree-climber, is being trained by Stefan in the idiosyncrasies of trees, their architecture, structural strengths and weaknesses.

Stefan and Lisa have always been enchanted with The Waite Arboretum and believe it is a jewel in the Adelaide urban treescape. This has led to their strong commitment to supporting the work of the Waite Arboretum and to the donation of a half-days' arboricultural work in the Arboretum when the timetabling of jobs permits, as well as being generous suppliers of woodchips.

We, the Friends and the Director of the Waite Arboretum, are delighted and pleased about the help we receive from our sponsors and supporters.

Peter Nicholls
Hon. Treasurer

NB If you received a red spot with your copy of this Newsletter, it is to remind you that you have forgotten to renew your membership. Annual membership rates for 2009 are \$15 for individual membership, \$20 for family membership and \$40 for institutions. Donations are most gratefully received and are **tax deductible**. Please renew your membership now so that you don't miss out on future Newsletters.

Help. We would like to update the style of the Newsletter. I do not have Graphic Design skills and would appreciate help from any of you who has. If you can help, will you please contact either me (8276 1439) or Jennifer (8303 7405). Thanks.

Jean Bird
Editor

FORTHCOMING EVENTS

Special guided walks in the Arboretum during History Week: 11a.m. Sunday 24 May, Wednesday 27 May and Sunday 31 May.

Sunday 28 June: Poetry reading by Dr D. & Mrs J. Symon.

Thursday & Friday September 3 & 4: 10th TREENET Symposium.

Sunday 20 September: Arbor Wind Quintet.

Sunday 18 October: Visit to Dean Nicolle's property.

Monday 7 December: Christmas Drinks.