

THE FRIENDS OF THE WAITE ARBORETUM INC.



WAITE  
ARBORETUM

**NEWSLETTER NO. 66**

Summer 2011

Secretary  
Mrs Norma Lee  
8379 4237

Editor  
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FROM THE PRESIDENT

The last year of the first decade of the new millennium seems to have flown by and here we are post festive celebrations quickly settling into this new year.

Since the last Newsletter a successful twilight meeting with Meliesa Judge as guest speaker took place in November and then in early December the annual joint Xmas Party was again held in Urrbrae House. A report of the function appears later in this newsletter.

The last Committee meeting for the year was held on the 1<sup>st</sup> December with quite a range of items under discussion. Money to be spent on the Arboretum included \$18,200 for Elm Avenue pruning, \$2,660 for 180 new labels and \$1,056 for fungal control on our blue oaks.

The supply of water from the Waite bore and its reticulation to the dam is a subject of ongoing discussion. The dam has heavy demands mainly for watering the oval.

The subject of grass management in the North West arboretum was discussed at length. The most effective method was considered to be the mowing of excessive weedy annual grasses at an appropriate time to allow the seeding and propagation of the native grasses still present. To satisfy this requirement and to give the freedom to mow when timely, it was decided to donate funds for the Arboretum to purchase a ride-on mower and trailer for approximately \$5,400. The proposition of hiring a contractor was considered to have too many shortcomings, compared with the flexibility of a unit under staff control. The volunteers who work in this area who have propagated and planted hundreds of trees, shrubs and under storey plants, feel that the better management of this section would make it a feature more attractive for visitors to see the extent of the work. In the past the native spear grasses have been left to set seed for harvesting and using in revegetation projects in the Waite Reserve, but the metre high grass is a fire risk and the seeds are sharp and penetrating. In future the spear grass will be kept mown to encourage more low growing, visitor friendly native grasses.

The Committee wish to acknowledge and thank Jude Tyler for her involvement and help over the last nine years.

Our AGM will be at 7.30 pm Monday 18 April when guest speaker will be James Smith from Faunature speaking on "Hollow Habitats" – how tree hollows form, the fauna which use them and natural v. artificial hollows. Put the date in your diary now!

We are hoping to have a stand at the Showgrounds at the Sunday Mail Home Living Expo, 15-17 April. Volunteers prepared to help with our display will be very welcome.

Other activities being planned for the year include a talk by our Treasurer Peter Nicholls on his Lake Eyre/Cooper Creek trip and in spring a guided tour of the Wittunga Botanic Garden.

In closing I feel I cannot finish without mentioning two significant potential State Government decisions bound to affect the tree future of this State, not to mention the numerous wider impacts. The first is the forward selling of an unknown number of years of State Forest timber production, especially in the South East where the extensive areas are part of that region's fabric. This could have enormous repercussions. The second is the further slashing of staff numbers in the Botanic Gardens' Hills Gardens. This will be even more severe than various earlier reductions. Significant collections of trees and other plants will be under threat from the reduced care and attention from staff already under great pressure. The rather nebulous view of the gardens 'being managed in a more landscape way', especially at Mt Lofty doesn't instill one with confidence.

Henry Krichauff

## IN THE ARBORETUM

### FROM THE DIRECTOR

The Elm Avenue is looking magnificent at present – the healthiest it has looked for years following good winter and spring rains and mulching. With the lifting of water restrictions, summer irrigation has commenced. The Avenue has been further enhanced by dead-wooding the whole avenue, funded by the Friends of the Waite Arboretum. The next challenge will be Elm Leaf Beetle *Xanthogaleruca luteola* which was discovered in Adelaide for the first time a couple of weeks ago by arborist Guy O'Donnell who was contacted to treat a very large elm in Malvern which was being attacked. Elm Leaf Beetle (ELB) is a serious pest of elms. The larvae skeletonise the leaves and the adults chew shot-holes in them. A heavy infestation can cause an elm to defoliate and successive attacks can weaken and eventually kill the tree. ELB occurs naturally in Europe and was introduced into the USA in about 1834. It was discovered in Australia on the Mornington Peninsula, Victoria in 1989 and more recently in NSW and Tasmania. The beetle is about 6 mm long with broad yellow and black longitudinal stripes on the elytra. When the larvae are ready to pupate they descend from the canopy and hide in furrows in the bark of the basal trunk or in leaf litter and mulch. Both adults and larvae can be easily inadvertently transported by attaching themselves to clothing or footwear, so if you encounter ELB please check your apparel and try not to spread it. Treatment with a systemic insecticide is available and a strategy is being developed to protect Elm Avenue. Sightings should be reported to Biosecurity SA or call 1800 084 881. [see [www.pir.sa.gov.au/biosecuritysa/planthealth/emergency\\_plant\\_pests/elm\\_leaf\\_beetle](http://www.pir.sa.gov.au/biosecuritysa/planthealth/emergency_plant_pests/elm_leaf_beetle) for links to excellent images and information].

Two major acquisitions this year have been a newer 4WD tray top utility for the Arboretum to replace the 2WD which was unsatisfactory in winter, and a brand new, more powerful mini front-end loader to replace the worn out old one. The latter is invaluable for spreading the huge quantity of donated mulch as well as lifting logs, bags of fertilizer donated to the rose garden by Neutrog and other heavy work. In 2010, 19 companies donated 360 truck loads of mulch to the Arboretum, the most generous being Taking Care of Trees (103), Austral Tree Services (70), Trees are Us (46), Bark Up the Right Tree (29) and MJS Tree & Stump (26). Mulch improves the soil and assists with moisture retention so these donations are greatly appreciated.

Other donations which enhance the Arboretum and gardens are seats. Last year there were donations by the John and Siegele families (Arboretum) and Dunn family (Rose Garden). The bench seats are finely crafted from plantation certified teak. They can be a beautiful memorial to a loved one or just a gift. If you would like to donate a seat, please contact me on 8313 7405.

I would like to acknowledge the dedicated efforts of Arboretum groundsperson Mark Ziersch and all the enthusiastic hard work of volunteers in the Arboretum and gardens in 2010 and wish all the Friends best wishes for 2011.



Elm pruning in progress

Photograph by Steff Hodgetts

Jennifer Gardner

### STERCULIA ALEXANDRI HARVEY

The genus, *Sterculia* belongs to Family Sterculiaceae, the cacao family. Some other members of this Family with which you might be familiar are cola and kurrajong. The Chinese parasol tree and the US flannel bush are also in this Family. The *Sterculias* are colloquially referred to as tropical chestnuts. The generic name, *Sterculia*, is from *Sterculius*, the god of manure, referring to the unpleasant odour of the flowers. *Sterculia alexandri* is a very rare and endangered species in its native South Africa due to habitat loss and is endemic to the E. Cape Province where it is found in several isolated areas – in the Elandsberg, the Winterhock Mountains near Uitenhage, in Van Staaden's Mountains near Pt Elizabeth and in a few other places. *Sterculia alexandri* is protected in S. Africa. The specific epithet, *alexandri*, relates to its discoverer. According to Palgrave and Drummond (1990), this was Dr Alexander Prior who found it in 1848 but Palmer and Pitman (1972) say the discoverer was Dr Richard Chandler Alexander who collected in the Southern Cape districts between 1846 and 1848. The collector is listed as Alexander, R.C., the collection date as 1847 and the locality as Near Uitenhage. in the Kew Herbarium and so the discoverer is more likely to be Dr Alexander than Dr Prior. In any case the author of the species was Harvey. The fruit was discovered by a Pt Elizabeth botanist, Dr E.A.A. Archibald who was led to it by a child who had eaten the sweet seeds.

*Sterculia alexandri* is a small to medium sized tree about 4.5m tall but can occasionally grow to 8m. Its stem diameter is ~ 30cm, it is upright although it sprawls when it suckers. The bark is smooth, silvery-grey blotched with white and covered with small raised dots and often with lichen. The leaves occur at the tips of the branches, are alternate and digitally compound with 2-7 stiff, leathery leaflets which point upwards. The leaflets are oblong, 8-13cm x 1.9-2.5cm, have rounded or bluntly pointed tips with a small thorn-like point, are dark green above and grey-green below. The petioles are yellow.

*Sterculia alexandri* flowers in summer or winter and occasionally in between in its native country (our tree wasn't flowering on 11 Jan 2011). The flowers vary from yellow with a rich claret throat to a pale



greenish-cream with occasional red flecks. They are up to 2 cm in diameter. The flowers have no petals but the calyx has 5-7 petaloid lobes, the outsides of which are covered by long, stellate hairs. The flowers are in sparse, axillary sprays ~ 8 cm long and usually appear when the tree is bare. The first flowers are mostly male (with female organs aborted) but later flowers are bisexual. The fruits have 1-5 carpels, joined at the base but otherwise free. The carpels are covered with short, golden-brown stellate hairs. Each carpel is up to 9 x 2.5 cm, boat shaped, woody, horned or knobbly with a marked beak. The fruits split along the upper surface to release 4-8 largish, oval seeds which are sweet and nutty and popular with children and baboons.

As stated above, *Sterculia alexandri* is an extremely rare species and it is likely that the specimen in the Arboretum, # 354 (F8), is the only specimen in Australia. The bark on the branches of our specimen tends to peel rather readily and has a somewhat reticulate pattern with brownish, raised dots and the silver-grey bark is partly obscured. The pattern on the bark is rather variable, however, and resembles that in the description above on the trunk and on the healthier looking branches. Whether variation is a feature of the trees in their native habitat is a matter for conjecture. The leaf petioles are bright yellow and most of the leaves within reach have five 'fingers'.

Information for this article was drawn from the following sources:

Palgrave, K.C. in association with R.B. Drummond (1990). *The Trees of Southern Africa*. pp 594, 595-6. (Struik Publishers).

Palmer, E. and Pitman, N. (1972). *Trees of Southern Africa* Vol 2. (A.A. Balkema, Cape Town).

[www.iucnredlist.org/apps/redlist/details/30362](http://www.iucnredlist.org/apps/redlist/details/30362)

[www.enwikipedia.org/wiki/sterculia](http://www.enwikipedia.org/wiki/sterculia)

Jean Bird



*Sterculia alexandri*



Digitate leaves



Bark pattern on a healthy branch of *S. alexandri*

Photographs courtesy of Alastair Correll

*PISTACHIA* L. Anacardiaceae

Visible from the driveway, near gate 13, is a group of trees belonging to the Anacardiaceae – a family named by Robert Brown (1773-1858)<sup>1</sup>. This is an economically important family—it includes the pistachio (*Pistacia vera*), the cashew (*Anacardium occidentale*) and the mango (*Mangifera indica*) as well as several important ornamentals. The pepper tree from Peru (*Schinus molle*), (that common inhabitant of Australian homestead gardens) is one of the Anacardiaceae, planted not just for the shade of a handsome tree, but also for the fly repelling properties of its foliage, and the smoke bush, *Cotinus*, is another horticulturally significant genus with great ornamental appeal.

Members of the family are mainly tropical and sub-tropical trees and shrubs from South America, Africa and Asia with some genera native to temperate North America and Eurasia<sup>2</sup>. It is the members of the Mediterranean and Asian *Pistacia* genus that will be the focus of this article but visitors to the Arboretum should look for *Schinus polygama*, the Chilean pepper, planted close by.

*Pistacia* trees are relatively small, approximately 3-10m in height. They are dioecious, the inconspicuous male and female flowers being borne in clusters on separate trees, and pollination is assisted by the wind. At the moment (end Nov/early Dec.), large clusters of ripening fruits may be seen on the Waite specimens, particularly on *Pistacia vera* L., the edible nut. Other species of *Pistacia* produce fruit that is more resinous and so are grown for the oils and other products (see below) rather than to enjoy the nuts. It should be noted that technically, the pistachio nut is a drupe, that is, a fleshy indehiscent fruit.

Evidence found in ancient archaeological sites indicates that humans have been enjoying these nuts for many millennia and cultivating them for centuries, especially in Iran, Syria, Palestine and Turkey<sup>3</sup>. These days, production has expanded to other parts of the world; California is the second largest producer after Iran, and Australian growers are developing an industry here. The growers in the different countries have their preferred cultivars eg in Iran it is the pistachio 'Kaleh Ghochi', whilst 'Kerman' is the main Californian female pistachio tree, with 'Peters', the preferred male. A typical orchard will contain 5-8 females for every male.

Pistachios are an attractive crop due to their hardiness in drought conditions, tolerance to poor soil and water quality and resistance to pests and diseases.

Australian consumption of pistachios is 2,800 tonnes/year. Approximately 60% of demand is currently imported<sup>4</sup>.

Planted at the Waite are the edible cultivars:

(1-i) *P. vera* 'Trabonella' a Sicilian cultivar with a somewhat oily and bitter fruit.

(1-ii) *P. vera* 'Red Aleppo' a Turkish variety, which was used during the development of the Californian pistachio industry as it yields well and the shell splits easily – both important considerations for the economic success of commercial plantations.

(1-iii) *P. vera* 'Sirora' – this is a variety developed by the CSIRO at Merbein and released in 1982. It forms the backbone of the fledgling Australian pistachio industry. 'Sirora' has both excellent flavour and green colour, and a high percentage of wide splits so it is easy to open. There are major production areas along the Murray River Valley between Swan Hill in Victoria and Waikerie in SA. Further plantings are in central west Victoria and Pinnaroo, South Australia. Current production (2009 data) 1,275 tonnes in shell from a total area of 870ha.

Other species of *Pistacia* to be found in our collection are:

(2) *Pistacia atlantica* Desf. 'Mt Atlas' mastic tree – this is perhaps one of the most handsome of the Pistacias in the collection at Urrbrae. It is a native to the regions from Iran to North Africa, where it was once common. Since other trees were rare in those parts, it was the only good source of wood and hence suffered from over-harvesting. This wild pistachio is still an economically important tree in Iran,

though. The resin and the fruit oil are used medicinally, the fruit having too much turpentine (see below) to be edible.

(3) *Pistacia palaestina* – found in the Levant, especially Israel, Palestine and Syria. This is the terebinth of the Old Testament. The Hebrew word for terebinth is *elah* thus the “Valley of Elah”, where David fought Goliath (ref. *The Bible* -- 1 Sam.17: 2,19). *Pistacia palaestina* is very similar to *P. terebinthus* L. – not in the Arboretum – but also with the common name terebinth. This species is from the western Mediterranean basin and differs from *P. palaestina* in the shape of the leaflets and degree of spreading of the flower clusters. The resin from the terebinth is known as turpentine (note several pines produce a similar product). These species of *Pistacia* were the earliest source of turpentine, which has many medicinal uses. Note — the paint solvent commonly known as ‘turps’ is a mineral oil substitute for the plant product.

(4) *Pistacia lentiscus* L.- the mastic tree. This may be easily overlooked yet has the most interesting story. The Waite specimen shows the typical shrubby nature of this species, approximately 2-3 m at most. It is native to the island of Chios in the eastern Aegean, thriving best within the 21 so-called mastic villages of southern Chios. Here, it has been a part of life for millennia to collect the exudates which drip from the tree as droplets called ‘tears’, when incisions are cut into the bark. The annual harvest lasts from June to September every year. In ancient times, the mastic from this plant was worth its weight in gold – the male trees on Chios produce 160-170 tonnes every year even now. The trade in mastic allowed the islanders to prosper, but at the same time gave a reason for invaders to try to conquer Chios.

An interesting point about the common name: *mastic* comes from the Greek word to gnash teeth and forms the root of the English word to masticate (chew). Chewing mastic sweetens the breath and whitens the teeth – the Romans used mastic wood to make toothpicks and it was much sought after by sultans for their harems. It really is the original chewing gum.

The most revered physician of ancient times – approximately 400BC – was Hippocrates. His home was the island of Kos in the Dodecanese, 200km south of the Aegean island, Chios. Goods traded between these islands would have included mastic tears. Hippocrates realised that the chewing of mastic eased the symptoms of ulcers. Thus, over two thousand years before Drs Warren and Marshall were awarded the Nobel Prize for their identification of *Helicobacter pylori* as the cause of gastric ulcers, a natural antibiotic was helping to treat the problem.

Mastic still has many uses---it flavours ice cream, biscuits and the Chios ouzo called ‘mastichato’. It is used in varnishes for oil painting and is an ingredient of natural toothpaste<sup>5</sup>. Mastic ‘tears’ are available through importers of Greek foods here in Adelaide -- as part of the research for this article, a packet weighing 10g was purchased and is being enjoyed – quite a thrill to be part of an age old custom.

(4) *Pistacia chinensis* Bunge – this is the ornamental species grown for the beautiful colour of the autumnal foliage. The vibrant shades of red, orange and yellow will be reliably produced every year even without low temperatures. The Waite specimens are in a slightly different part of the Arboretum – Grid ref F8 and B8. In nature, too, they are geographically separate – this species is found from Afghanistan to China, Japan and the Philippines. Like its Mediterranean relatives though, it is drought tolerant and enhances many a streetscape. In appearance, it is very similar to the *Rhus* tree, another of the Anacardiaceae, but fortunately, *Pistacia chinensis* causes far fewer allergic reactions than the former. The peppercorn size fruit is barely noticeable. However the oil from the seeds is finding a ready market as a bio-diesel feedstock. The young shoots and leaves<sup>6</sup> are used as a vegetable in China, and the wood is used for furniture and to produce a yellow dye. It was introduced to Western horticulture in 1897<sup>7</sup>.

## References

<sup>1</sup>Mabberley's Plant Book

<sup>2</sup>Flowering Plant Families of the World. Heywood *et al.*

<sup>3</sup>Food Plants of the World. Ben-Erik van Wyk

<sup>4</sup>Australian Nut Industry Council [www.nutindustry.org.au](http://www.nutindustry.org.au)

<sup>5</sup>[www.chios.gr](http://www.chios.gr)

<sup>6</sup>The Garden Plants of China Peter Valder

<sup>7</sup>Manual of Trees and Shrubs Hillier

Diarshul Sandhu

## POT POURRI

### COMBINED CHRISTMAS PARTY

An enjoyable and successful function was held in Urrbrae House on Monday 6<sup>th</sup> December with good numbers from the three groups, namely FUH, FWCR and FWA. Brief reports were presented by Yvonne Routledge, Jennifer Gardner and Henry Krichauff. The gathering was brought to attention by the recently recommissioned old bell system. The restoration would not have happened without the wonderful efforts of Deane Kemp and Bernard Arnold with the help of Craig Brown (Property Services). Yvonne mentioned the various concerts and functions held during the year.

Jennifer thanked and praised the enthusiasm of the volunteers and their work in a variety of areas.

Henry thanked all those involved with the Arboretum, especially Mark Ziersch whose hours of work far exceed his official allocated time. He has spread more than 300 truck loads of mulch, kindly provided by arboricultural companies. The present state of the Arboretum is impressive, helped of course by the wet winter and ideal growing conditions. More labels purchased from FWA funds are ready to be placed. An international authority on elms has stated that Elm Avenue is as good a stand as can be found anywhere. Several seats have been donated. The Treenet Symposium in early September was very successful despite the inclement weather and a \$5000 donation for our help was gratefully received.

Henry noted that David Symon's long-standing involvement with the Arboretum was recognised by his unveiling of a plaque under a favourite dragon tree. This was followed by a party to celebrate his 90<sup>th</sup> birthday

Henry gave special thanks go to the Palm & Cycad Society, Heritage Rose Society, Mediterranean Garden Society and Neutrog fertilizers and mentioned the well supported functions and fund raisers during the year which included a guitar concert, the Beryl Martin painting exhibition and Meliesa Judge twilight meeting. In thanking the Committee he especially thanked Jennifer for her unstinting and untiring involvement and all she does

## PROFILES

### HENRY KRICHAUFF

Henry Krichauff is the President of the Friends of the Waite Arboretum Committee. Henry was awarded the degree of Bachelor of Agricultural Science from the University of Adelaide in 1957. He attended the University of California, Davis in 1958-1959 for a year's Post Graduate study. From 1960-1971 he actively farmed his family's land in the Southern Fleurieu Peninsula and near Kingston in the South-east. From 1971-1974 Henry worked with an Adelaide sharebroker as an Operator. In 1975 he again began actively farming his own land near Hallett in the Mid-north where he grew wheat and raised sheep. He continued farming there until 2000, when he became involved with a family property near Wistow. This

involvement continues and is concerned with natural vegetation regeneration and the commercial growing of Carob trees.

Henry is actively involved with the Friends of the Adelaide Botanic Garden as a volunteer guide, working in the Adelaide and Mount Lofty Gardens and he is also a past committee member of that group. Apart from being President of the Friends of the Waite Arboretum Committee, he is a member of Trees for Life, the National Trust and the History Society of SA and a committee member of the History of Ideas, Science and Technology Group. Various other interests include natural history, Australian history, music, travel and politics.

#### MARK TESTER

Professor Mark Tester is currently Professor of Plant Physiology in the School of Agriculture, Food & Wine, University of Adelaide, Director of the Australian Plant Phenomics Facility and a Director of Research at the Australian Centre for Plant Functional Genomics Pty Ltd.

Mark Alfred Tester was born in Tasmania on 6 March 1963. He was awarded a BSc (Hons 1<sup>st</sup> Class) from the University of Adelaide in 1984 and a PhD from the University of Cambridge in 1988. This led to a position as Junior Research Fellow, Churchill College, Cambridge. This was followed by a lectureship in the Department of Botany, University of Adelaide and then a Senior Lectureship in the Department of Plant Sciences, University of Cambridge; other senior appointments followed until 2009 when he was appointed to his current position where he leads a large academic research group.

In addition to leading the \$50m Australian Plant Phenomics Facility, over the past seven years, Professor Tester has led or collaborated in grants amounting to \$9 million awarded from eight national and international agencies. This has resulted in a substantial research group. One of the strengths of his research programme is the integration of cell biology with whole plant physiology and, more recently, with genetics. The development and use of tools for the study and manipulation of specific cell types is unique in the field of salinity tolerance and in the broader areas of plant nutrition and ion transport. Internationally, his research group forms one of the leading laboratories on salinity research.

Professor Tester has received many awards during his illustrious career and has both chaired and been a speaker at national and international scientific meetings. He has published more than 100 refereed papers in international journals, as well as numerous chapters in books, etc.

Professor Tester leads a \$53m project to establish the APPF which supports plant science nationally and is a crucial resource for the expansion of the activities of the ACPFG.

#### LETTER FROM DAVID SYMON

Below is a copy of a letter that David Symon wrote to the Friends and which I thought might interest you.

20 Lynington St  
Tusmore 5065  
SA 20/X/2010

Dear Henry & members of the Friends

To thank you & Friends for the wonderful b'day party you & Jennifer provided for me. Tho' Jennifer had invited me to come up & have morning tea with the Friends I had no idea it was to be a true surprise party with Friends, old Waite colleagues, Herbarium staff & family so I really was rather overwhelmed.



And thank you too for the plaque under the Dragon tree. The Arboretum has given me much pleasure over the years. I feel I have left some marks & my last contribution – the Dragon tree collection – is now urged to do its stuff & grow! Jennifer, with your support, has been doing a great job & with David Lawry & Treenet has made the Arboretum known Australia wide amongst tree aficionados.

I am sorry I can't continue my 'guiding' but with a bad ankle I have become unstable on rough ground. The Arboretum is looking well & tho' the mulch is good, reduces weeds & water loss it is not as attractive as mown grass. It must of course reduce the cost of mowing.

I have been trying to organise to get some Oak acorns from Cyprus – leaves densely brown – golden below & I have just seen some photos of the species – one we must try & get.

Working with trees is different from almost any kind of horticulture in the time it takes for a tree to be any-way near mature – usually longer than the research-life of the Arborist & for this reason if no other it makes our collection a valuable one.

With my best wishes & grateful thanks

David Symon

#### TWILIGHT MEETING AND WALK

On Friday 19 November we were joined by Will Kuiper and Meliesa Judge from Liquid Metal Studios. Meliesa gave a most interesting talk about their work and the processes involved in making bronze sculptures such as those in the Arboretum and 'Dance into the Light' in the Garden of Discovery. Meliesa went on to explain the story of the latter (see Newsletter 62) and explained the techniques involved in creating such a sculpture. Firstly a maquette (a 3D model ~12 cm tall) is made followed by a life model which can be made in clay, wax, plaster, etc. The original model is duplicated in wax using a silicone rubber mould. The wax copy is then processed for bronze casting which involves several processes until the final stage of finishing and patination is reached.

Meliesa's explanation of these processes was very well illustrated, with pictures showing the melting of the wax, pouring of the bronze, sand blasting to unify the surface and the coating with wax to protect outdoor sculptures.

She also showed photographs of Will's 'Owl Pole' sculpture of a tawny frogmouth situated near *Eucalyptus caleyi* #97 (I13) where young frogmouths have been seen, the 'Waterbirds' suite of sculptures sculpted in 1998 and rewaxed in 2010 when the Contemplation Pond was rebuilt, and various sculptures such as Will's 'Charlotte's Web' and others at Carrick Hill and Meliesa's life sized Mary Ward sculpture at Loreto College. Eight sculptures of Mary Ward have been cast – one for each Loreto School in Australia. As well as showing pictures of their sculptures, Meliesa explained them.

Following Meliesa's extremely interesting and informative talk, Meliesa and Jennifer led a walk to look at each of the Liquid Metal Studios sculptures in the gardens and Arboretum.

#### SUBSCRIPTIONS

As you will see from the enclosed Membership renewal form, subscriptions for 2011 are now due. It would be appreciated if members could renew promptly. New Members who have joined since 1 October 2010 are deemed to have paid their subscription for 2011 in advance. Once again we ask members to donate to the Friends when they renew. In the past, members have been very generous with donations, which have helped us continue to fund the ongoing work in the Arboretum. Fees for 2011 remain the

same at \$15 for individuals, \$20 for family membership and \$40 for institutions. **Donations are tax deductible.**

### **NEW MEMBERS**

We warmly welcome the following new members: Margaret Jackson, Mitcham; Anne Wharton, Malvern.

### **FORTHCOMING EVENTS**

**Monday 18 April : FWA AGM 7.30 p.m. James Smith from Faunature will address the topic 'Hollow Habitats'**

**Friday 15 – Sunday 17 April. Stand at Sunday Mail Home Living Expo.**