

## NEWSLETTER

Summer 2015

NUMBER 82

# FRIENDS OF THE WAITE ARBORETUM INC.

[www.waite.adelaide.edu.au/waite-historic/arboretum](http://www.waite.adelaide.edu.au/waite-historic/arboretum)

### FORTHCOMING EVENTS

#### FRIENDS OF THE WAITE ARBORETUM EVENTS

##### Free Guided Arboretum walks

The first Sunday of every month  
at 11.00 am.

Walks meet in front of Urrbrae  
House

##### Official Launch of Arboretum App. Thursday February 26, 6.00-7.00pm

##### AGM Monday April 13, 7.30pm

Guest Speaker : Dr Pamela Smith,  
Cultural Heritage Consultant.

##### Excursion Wednesday May 6.

Visit to our Patron, Sophie  
Thomson's Mt Barker property.

##### Spring Excursion to the historic house and grounds of Anlaby.

Details in the Winter Newsletter.

Enquiries and bookings please  
contact Beth Johnstone on  
8357 1679 or  
[bgrich@ozemail.com.au](mailto:bgrich@ozemail.com.au)

**Patron:** Sophie Thomson

**President:** Henry Krichauff, **Vice-President:** Marilyn Gilbertson OAM

**Secretary:** Norma Lee, **Treasurer:** Dr Peter Nicholls

**Editor:** Eileen Harvey, **email:** [eileengarden@y7mail.com](mailto:eileengarden@y7mail.com)

**Committee:** Beth Johnstone OAM, Robert Boardman, Andrew Walters,  
Ron Allen, Dr Wayne Harvey, Terry Langham, Dr Jennifer Gardner (ex officio)

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**Photography:** Eileen Harvey



*Clerodendrum tomentosum*, Lolly Bush

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FRIENDS OF



WAITE  
ARBORETUM

## FROM THE PRESIDENT

Only two days into the New Year and we experienced severe bushfires deemed to be the worst since the disastrous Ash Wednesday tragedies of 32 years ago in 1983. The extent was nowhere near as widespread and fortunately there was no loss of life, but there still were horrendous losses of peoples' homes and awful property damage and many injuries. What wonderful work and devotion to duty is shown by our CFS. At time of writing we have received no rain of note since the last day in July, which now makes it over five months. With the land so parched it is not surprising how intense and quick moving bushfires can be.

It is possibly of note that the long rainless spring has seen the new growth and health of trees in general looking quite impressive. The wet winter together with the big rain last February would have helped a good build up of subsoil moisture. Complementing this has been the prolific flowering of many tree species throughout the state generally and especially a good number in the Arboretum.

With regard to the Arboretum, Eileen Harvey and Ron Allen have been working through the extensive collection locating and reattaching missing labels. Jennifer is busy compiling the Arb App, which will eventually feature most if not all of the collection.

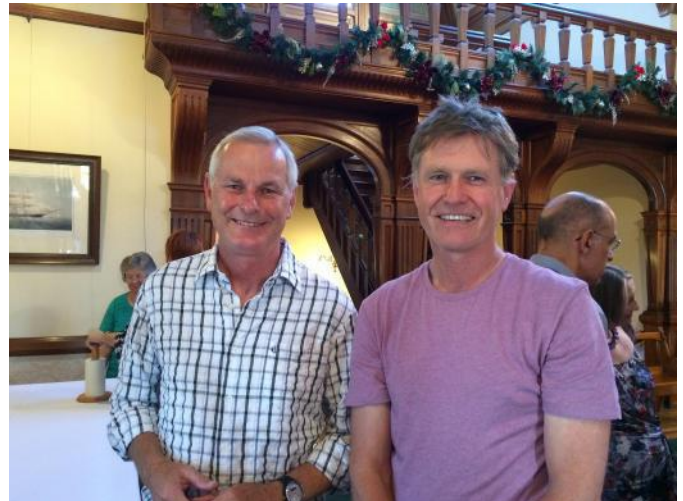


A matter which has concerned the Committee for some time, is the fountain in the Rose Garden. It now transpires that the old Cudmore Fountain, relocated from in front of Claremont House is not repairable. The preferred option would

be to conserve what is left and place it in the University's museum collection as an artefact and replace it with another fountain or low water requiring feature. The Rose Society has indicated their support financially "for fountain repair" as has the FWA Committee who've set aside \$5000 towards a fountain project.

Since the last Newsletter another popular and successful Classical Guitar concert featuring Jacob Cordover and Rupert Boyd was held with good attendance on 21<sup>st</sup> November. The event raised over \$600. The ambience of the venue is always much appreciated by the musicians and the audience.

Apart from being the editor for our new Wiki-website which, amongst other features will display past Newsletters, Terry Langham has been busy designing, sculpting and constructing the Waite Arboretum Bee Hotel. This impressive structure, primarily for native bees was "officially opened" in early December by resident bee authority and our 2013 AGM guest speaker, Dr Katja Hogendoorn.



Joe Bennink, Peter Bird at the Christmas Party.  
Photo Jennifer Gardner.

The annual Christmas party on 1<sup>st</sup> December wound up the year for the three Friends' groups in style and concluded with everyone joining in singing carols.

We have the AGM scheduled for Monday 13<sup>th</sup> April with Guest Speaker Dr Pamela Smith, Cultural Heritage Consultant, Flinders Uni. Her talk will be along the lines of the cultural history and heritage of the natural and man made landscape of the Adelaide Hills Face Zone. This promises to be of particular interest to those concerned with the foothills area in general, with the Waite Campus being part of that region.

On Wednesday 6<sup>th</sup> May we are planning an excursion to Sophie Thomson's Mt Barker property. All members are welcome. Sophie of course, is our Patron.

We anticipate another screening of a suitable new release at the Capri towards mid-year to be run by the three Friends' groups, as we did last year.

A further excursion for the year is proposed in spring. This will be late September or early October, to the famous property, Anlaby

Even though the New Year is well upon us, I would like to wish all our members the very best for 2015.

Henry Krichauff



## IN THE ARBORETUM FROM THE CURATOR

### Arboretum activities

Fire risk reduction - mowing, slashing and brushcutting - was the focus of work in the Arboretum from late spring to the start of the fire ban season and a contractor was engaged to assist groundsperson Andrew Walters in this essential and intensive task. In October all the Arboretum and garden sculptures were refurbished by conservator Peter Maxwell and regular maintenance is scheduled from now on. With recent welcome rain comes the unwelcome new crop of weeds. The Declared noxious weed Caltrop or Cathead *Tribulus terrestris* is particularly challenging with its deep root, rapid flowering and abundant burrs following rain. Control is both prolonged and difficult.

My colleague Marian McDuie and I have continued to work with app developer Carlos Carvalho, Oak Systems on the development of our Arboretum app, checking all the geospatial data, plotting walks and fine tuning the layout and functionalities. The app has undergone testing and we are getting very excited as the project comes to fruition. We plan to launch the app on 26th of February and Sophie Thomson, well-known gardening presenter and writer and Patron of the Friends has accepted my invitation to do the honours. A small group of contributors has been formed to work on the images and text. The app will be an ongoing and long-term project as more content is added. If you would like to assist, please contact me. All Friends are invited to attend the launch.

In October, students from Flinders University Department of Screen and Media filmed a micro-documentary on the Waite Arboretum and development of the Urrbrae House Gardens. Wendy Fowler created, produced and directed the film, with fellow students assisting with cinematography, sound recording and editing. I was delighted with the finished product. Well done Wendy and team.

Sadly in October Una Wagner passed away. Una was my first volunteer, starting 1993 at the age of 71 and continuing every Tuesday for the next 17 years until she reluctantly had to give it up at the age of 87. For many years, long before there was an Arboretum groundsperson or vehicle, Una and I did much of the physical work in the Arboretum – planting, dragging hoses around all summer to water new plantings and weeding. She was very proud of the Urrbrae House Gardens too, much of



Una Wagner at the watercourse in 1996.  
Photo Messenger Newspaper.

which she helped to plant. Even after retiring from active volunteering, she would often stop by on a Tuesday morning to cheer on the current volunteers. She loved the watercourse, coming daily to feed the ducks. In 1996 she collected a successful 400-signature petition to keep watercourse flowing when the University decided to divert the bore water straight to the dam. Una was an inaugural and Life Member of the Friends, a generous donor and staunch supporter of the Arboretum, campaigning against a proposed new kindergarten building in the Arboretum, recruiting new volunteers and providing encouragement to me personally.



Dr Peter Nicholls receiving certificate from Ms Kate Robertson. Photo Jennifer Gardner.

In November the annual Waite Historic Precinct thankyou event was held for our the volunteers. The work of all the volunteers was gratefully acknowledged and Kate Robertson, Chief Engagement Officer of University Engagement



presented certificates to those who have contributed 5, 10 or 15 years of service. Arboretum, garden and FWA Committee volunteers alone contributed over 3,000 hours which includes working bees by Palm and Cycad Society, Mediterranean Garden Society, Heritage Rose and Rose Societies. I warmly thank all our volunteers for their support.

Also in November André Bivé a year 10 student at Scotch College spent a week doing work experience in the Arboretum and gardens.



André Bivé & Terry Langham.

Activities included testing the Arboretum app, assisting Terry with his installation of the native bee hotel and gardening. It was a pleasure to have André and I wish him well in his future studies.

### Light Horse Brigade canters into the Arboretum



1 On 26 November the Arboretum and Urrbrae House Rose Garden were localities for filming three scenes for a forthcoming TV documentary 'Changed

Forever'. The film is set in WW1 and directed by Serge Ou. Three magnificent horses were included in the cast attended by their wranglers who are members of the Australian Light Horse Association (SA) and regularly participate in re-enactments. Watch the film



2

to see the horses walking down Elm Avenue and the cast take tea in the rose garden. It was great fun to observe the filming. There is never a dull moment in my varied job!

### Visitors

In October I attended a very stimulating two-day botany course presented by Prof. David Mabberley at the Botanic Gardens of Adelaide. Prof. Mabberley is Executive Director of the Royal Botanic Gardens, Sydney and a prolific author with almost 300 publications including 17 books. Mabberley's 'The Plant-book' an overview of the world's flora is a highly regarded text. So I was delighted when he accepted my invitation to visit the Waite Arboretum while he was in Adelaide. It was his first visit to the Arboretum and he was surprised at the uncommon, rare and endangered species we have and particularly interested in our new Australian Citrus collection as he recently described a new species. I was proud to show the Arboretum to such a distinguished visitor.



Trevor Sepping and Stuart Gibbs, RBG Cranbourne.

In December I was pleased to welcome Trevor Sepping and Stuart Gibbs, Horticultural Technicians of the Dry Rainforest and Arid Inland Collections and colleague Cali Salzmann who were on a study tour from The Royal Botanic Garden Melbourne - Cranbourne (Australian Garden). They were impressed with the Arboretum collection will return this year to collect propagating material. Also in December I hosted a visit from seven Trustees of The Johnston Collection in Melbourne who were touring historic houses and their gardens in Adelaide. They showed their appreciation with donation of \$250 from the Trust and a personal donation of \$700 from the Ambassador of the Johnston Collection.

1. Jack, the horse and wrangler. 2. Horses and wrangler in Elm Avenue. All photos Jennifer Gardner.



### Waite Arboretum Bee Hotel opens for business

Thirty volunteers and visitors celebrated with chocolates handmade by Sylvia Piddington when Dr Katja Hogendoorn cut the cord to officially open the Waite Arboretum Bee Hotel on the 9th December. The hotel, exquisitely carved from Arboretum timbers by volunteer Terry Langham, was designed to accommodate many of the 80 species of native bees in the Arboretum, some of which have already taken up residence. The hotel was Terry's labour of love over nine months of planning and execution. It will be a

valuable research asset for Katja and her PhD students, an educational tool for schools, an opportunity for citizen science and will expand the boundaries of audience engagement with the Arboretum.

The year ended on a bright note with a well-attended and enjoyable joint Friends Christmas party.

My best wishes for the New Year to all the Friends of the Arboretum. I look forward to seeing you at events.

Jennifer Gardner

### Cork Oak, *Quercus suber*



Cork Oak at the Waite Arboretum. Photo Ron Allen.

During preparation for a guided walk at the Waite Arboretum for the Treenet Symposium in September 2014, I became interested in Cork Oak as a special tree.

*Quercus* is a Latin name for the Oak tree while *suber* is an old Latin name for cork. Cork is a special kind of bark where the dead cells are waterproofed by a wax called suberin.

Cork Oak is a medium sized tree usually having spreading branches. All of the branches have a thick bark, which is pale grey in colour and is deeply creviced.

Cork Oaks are evergreen Oaks with quite small leaves. They create light dappled shade which allows grass to grow under the canopy. They are considered to be clean trees with little leaf drop. The trees are fire resistant, undoubtedly because of the qualities of the bark and minimum leaf litter. The evergreen oaks are collectively known as live oaks, especially in the USA. The leaves are very similar to those of the Holm Oak, also known as Holly-leaved Oak (*Quercus ilex*). They are variable in shape but usually oblong with serrated edges. They are glossy



Thick bark of *Quercus suber* #431.1 planted 1954.

dark green above and dull grey underneath. The tree has separate male and female flowers. The male catkins are yellow and weeping and the female flower develops into a fruit which is a typical acorn up to 30 mm long, slender with a pointed tip.

The acorns form a very important part in the production of the famous Spanish ham *jamón ibérico*. After weaning, piglets (black Iberian Pigs) are fattened on barley and maize for some weeks and then allowed to forage amongst the Oak trees until close to slaughtering time, when they are fed on a rich diet of acorns. The hams from the slaughtered pigs are salted and left to begin drying



Cork Oak foliage. Photo Ron Allen.



for two weeks, after which they are rinsed and left to dry for another four to six weeks. The curing process then takes at least twelve months, although some producers cure their special hams for up to 3 years. No wonder this ham is so expensive.

Cork Oak and Holm Oak are two of the trees which are preferred for truffleries. Truffles form a symbiotic relationship with trees. Traditionally pigs have been used to find truffles in Spain and Portugal, although dogs like Beagles are now commonly used.

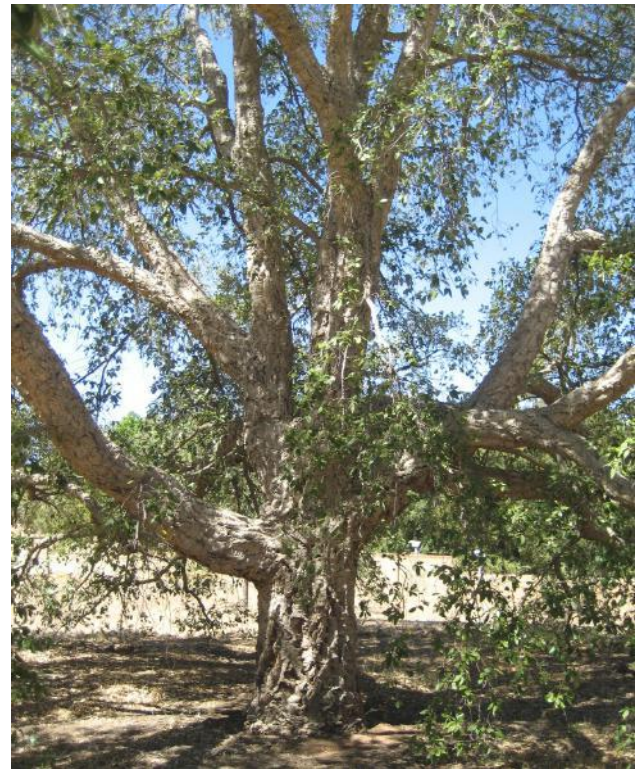


Bowl showing Cork Oak bark. Photo Ron Allen.

The wood of Cork Oak shows the strong medullary figure typical of the Oaks, although darker in colour. Unlike the bark, the wood has very poor strength and durability and it is common to see a branch where the wood has rotted away leaving the durable bark as a 'tube'. It is the cork which is the most valuable economic part of the tree. The thick bark of the Cork Oak has been harvested for thousands of years, and was valued by the Romans who used it as an insulator, to make sandals, corks for floats for fishing nets etc. It is said that one cubic centimetre of cork contains 40 million air cells, making it warm to the touch, light in weight and buoyant.

#### Manufacturing Cork

The cork strippers (tiradores) work in pairs, one man clambering up the tree while the other stays on the ground. They chop delicately into the dead bark, gauging its thickness by the sound resonating from the steel axe, and carve out door-sized slabs. The typical axe is shaped like those medieval axes with a sweeping curve on the cutting edge. The spongy cork peels with a crackling, tearing sound, baring the tree's bright yellow, living layer of bark. This paler color will redden in a day or two and although the trees looks injured, the inner bark will seal itself and



Bark on the trunk and branches. Photo Jennifer Gardner.

quickly take on an opaque, stuccoed look. As the years pass the bark will thicken and darken once again, to reddish mahogany, to chestnut, and back to silvery-charcoal grey.

The bark of the cork oak is stripped away every nine to ten years and it takes at least 25 years for a new tree to become profitable. The first stripping produces cork which is too hard to be easily handled because it has an irregular structure. It is used in products like flooring and insulation. The second harvest produces better material, but still not good enough for cork bottle-stoppers. Only the third and subsequent harvests produce cork with an even structure which is good enough to be used for wine stoppers. Mature trees can produce up to 60 kgs of cork and they will provide a harvest for some 200 years. An average Cork Oak can produce one tonne of raw cork which is said to equate to 65,000 bottle stoppers.

The best quality cork comes from the south of Portugal (Algarve and south Alentejo) and Portugal produces more than 50% of all the cork in the world.

Ron Allen

#### References

The Complete Book of Trees of Britain and Europe, Tony Russell, Hermes House, 2005

[www.saomarcosdaserra.com/cork.php](http://www.saomarcosdaserra.com/cork.php)



FRIENDS OF THE WAITE ARBORETUM NEWS

Christmas Party



Barb Wheaton, Henry Krichauff and Isabella Rawnsley.



Marian Wells, Judy Symon and Jo Prescott.

About 50 people enjoyed the Christmas Party on Monday 1 December, which was jointly hosted by Friends of Urrbrae House, Friends of the Waite Arboretum and Friends of the Waite Conservation Reserve.



Sophie Thomson and Jennifer Gardner.

Vicki Cheshire, President of FOUH, welcomed people and spoke briefly about key achievements of each group during the year. She thanked members for their support and extended best wishes for the coming year. Lynette Zeitz, on behalf of the university staff located at Urrbrae House, thanked the Friends for their support and work during the year.



Bob Boardman, a Friend and Marilyn Gilbertson.

We were very pleased that our patron, Sophie Thomson, was able to attend. We also appreciated the attendance of Leah Grantham, Director Stakeholder Relations, University of Adelaide Engagement Branch.

Following the formalities, people moved to the drawing room for a jolly round of carol singing.

Marilyn Gilbertson



Laurel Crouch and Nettie Davidson.



Tomai Martin and Jennifer Gardner.

Photos 1, 2, 3, 4 Jennifer Gardner

Photos 5, 6 Lynette Zeitz

**NEW MEMBERS**

We warmly welcome the following new members:

Mr Vincent Langham and Ms Sarah Gehling of Mitcham

Mrs Patricia Frith of Willunga

Mr Ben Seamark of Greenhill

Angus Davidson of Uraidla

Jo Davidson of Birdwood, NSW

Lindy Davidson of Tallebudgera Valley QLD



## FRIENDS OF THE WAITE ARBORETUM NEWS

### FWA Community Wiki



This is our **Friends of Waite Arboretum Website** and it is separate from our presence on the University website. Here you can see more photos and read more up-to-date information about Friends activities. Please do take the time to look at the Friends website. Copy and paste the address below into your browser.

<http://www.communitywebs.org/friendsofwaitearb/>

Terry Langham (FWA committee member) is our website manager. Terry will be letting us know what's happening with the website from now on.

### From The Website Manager

Websites do change in regards to ease of use, changing technology and members' needs. Our current changes and ideas include: updating our Labyrinth Visitors Book website page/s and setting up a Gallery (photo/s pages/s) on the FWA website.

Members are welcome to put forward suggestions and comments in regards to any aspect of our website and members are invited to submit articles, photos, notices etc. Please note the choice of including any material on the FWA website is at the discretion of the Website Manager and or the FWA Committee.

Please do not hesitate to contact Terry Langham in regards to any FWA website matter: (08) 8379 9302, 0459 091 777, [terrytpot@hotmail.com](mailto:terrytpot@hotmail.com), Website Manager, Friends of the Waite Arboretum, University of Adelaide, Waite Campus PMB1, GLEN OSMOND 5064.

Terry Langham

### Guitar Concert a Great Success

The evening of November 21<sup>st</sup> was fairly warm but the people who came to the fundraising Twilight Concert organised by the Friends of the Waite Arboretum were not complaining about the weather. They enjoyed a glass of wine and a biscuit and then an hour of wonderful music, provided for them by two handsome young men who play guitar very well.

Jacob Cordover and Rupert Boyd met and formed as a duo in the year 2000 while undertaking studies at the Australian National University School of Music, where they studied with renowned Australian guitarist Timothy Kain. The *Australian Guitar Duo* has been broadcast on radio stations throughout Australia and the United States and was a prize winner of the chamber music division of the Australian Guitar Competition. Both musicians play hand-made Australian guitars.



Jacob Cordover and Rupert Boyd.  
Photo by Jennifer Gardner.

On the 21<sup>st</sup> Jacob Cordover and Rupert Boyd played a wonderfully balanced programme which really entranced the listeners. The pieces included *Songs from the Forest* by Nigel Westlake along with other selections chosen to fill one hour of delightful music. It was evident from the comments as people were leaving that these musicians are very popular at Urrbrae House, and it is to be hoped that they will return next year. Several copies of CDs were sold so there will be opportunities for some to listen again before that time. The Urrbrae House Drawing Room is a wonderful acoustic space for music.

The concert raised over \$600 for the Friends of the Waite Arboretum.

Beth Johnstone



## WAITE ARBORETUM BEE HOTEL

The Waite Arboretum Bee Hotel is a recently installed 'five star' accommodation complex for solitary native bees in the Waite Arboretum.



The completed Waite Arboretum Bee Hotel with launching wreath.

Waite Arboretum Curator Jennifer Gardner instigated this bee hotel and managed the project

with enthusiasm as Terry Langham, a member of the Friends of the Waite Arboretum and a Tuesday morning volunteer designed, constructed and installed the bee hotel with assistance from Friends and supporters of the Waite Arboretum.

The bee hotel is also available for study and research purposes for University of Adelaide researchers, students, and other interested persons (school students). There are at least eighty recorded species of native bees in the Waite Arboretum. South Australia has approximately 500 species of native bees and there are over 2,500 native bee species across Australia.

The bee hotel is situated near the Mallee section on the right hand side of the walking path along the watercourse towards the water birds sculptures from Walter Young Avenue (entrance opposite the car park).



Blue Banded Bee, *Amegilla* sp. (11mm).

A large majority of Australian native bees are solitary bees. In most species of native solitary bees one

female will mate and then build nests for her eggs. They "do not store any honey in their nests but only collect tiny amount of nectar to feed their young" (Aussie Bee: <http://www.aussiebee.com.au/faq.html>, 2014, p.3). Native social bees do make honey, but not a lot of honey and in cooler areas they need all the honey they can make to survive in the winter months.

Native bees are thought to be better pollinators of some crops because of their size and special behaviour. "Many native plants depend on solitary native bees for seed production and propagation" (Hogendoorn and Keller 2012, p.1).

Native bees range from 2mm to 24mm in size. South Australia native bees include Green Carpenter Bees, Reed Bees, Blue Banded Bees, Teddy Bear Bees, Leafcutter Bees, Resin Bees, *Homalictus* bees and Masked Bees.

40mm and 16mm nesting holes.



The timber logs of the bee hotel have had holes drilled into them to form bee nesting accommodation. Nest materials such as paper straws can be placed into the drilled holes and bundles of nesting materials can be placed into the larger holes of 16mm and 40mm as well as the sawn rebate sections.



Blue Banded Bee



Jewel Beetle

Waite Arboretum *Dracaena draco* logo.

The bee hotel artwork includes lettering: Waite Arboretum Bee Hotel, a representation of a native Blue Banded Bee, *Amegilla* sp., a Jewel Beetle, *Castiarina gardnerae*, the Waite Arboretum logo *Dracaena draco*, and a teapot.



The construction was created to achieve a sculptural functional artwork and designed for maximising benefits for native bees, protection from adverse weather conditions, minimal maintenance, long life, easy access for viewing, research and for maintenance tasks and activities.

A variety of holes were drilled into the five logs ranging from 3mm diameter at 70mm deep to 4, 5, 6, 7, 8, 10, 16, 38, and 40mm holes at between 100mm, 120 and 150mm deep. A couple of the 3mm and 4mm drills broke as holes were drilled into the harder timber of the *Eucalyptus astringens*. The electric drill had to be held firmly and very straight to prevent the drill grabbing and then losing control drilling the 38mm and 40mm holes. Unfortunately this did occur on a few occasions.

Photo 1 from <http://www.aussiebee.com.au>  
Other photos this page by Terry Langham.





Nesting holes, 'T' 8mm diam, 150mm deep, 'E' 5mm diam 120mm deep. Photo Terry Langham.

A number of these drilled holes form nesting 'homes' for the native bees and some of the holes can have various nesting materials placed into them for example paper straws, bamboo, and some native grasses. Rebates were cut into the top and bottom of the logs to allow placement of nesting materials.

For example bundles of dried herbaceous garden plants (raspberries, brambles, teasels and elder), soft deadwood such as banksia and mud bricks of



Above: Dr Katja Hogendoorn cuts the cord. Below : Watching the launch. Photos by Jennifer Gardner.



Waite Arboretum Bee Hotel launch on 9th December 2014. Photo Sylvia Piddington.

rammed earth and various mixtures of clay and sand can be used.

Dr Katja Hogendoorn, on Tuesday 9th December 2014 launched the bee hotel by cutting a ribbon beautifully made by Sylvia Piddington who provided home-made chocolates to share with those in attendance: Tuesday's morning volunteers, and Waite Arboretum staff, friends and supporters.

One exciting part of the launch was observing *Homalictus sphecodopsis* bees hovering above the ground nearby. Katja pointed out this was a result of many feet disturbing the ground. Fortunately our disturbances appeared not be too troublesome as the bees seem to have disappeared after a short time – hopefully returning to their nests in the ground.

We hope that many native bees of the Waite Arboretum will take up residence in this bee hotel. Monitoring will be an ongoing activity along with trialling a variety of nest materials in the hotel.

Terry Langham

#### References:

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Heard, T. 2014, CSIRO, [www.sugarbag.net](http://www.sugarbag.net) accessed April – November 2014.

Richard, S. July 2011, ISBN: 978-0-9805886-1-3.



## Waite spirit continues

Peter Waite's generous donation of land to South Australia for the primary purpose of providing a space for education and research into agriculture started something which, if he were to return today, would astonish and delight him. Not only has his gift facilitated developments not even imagined in his time, but the concept of donating also remains true and strong.



Tomai digging. Photo Laurel Crouch.

As witness to this, I draw your attention to the garden space to the south of the Coach House. This was for a considerable length of time a neglected area, but in 2010 one very clever and generous volunteer surveyed the space and decided to retain the garden bed by building a dry stone wall, stone by stone. Working in spare time from study Laurel Crouch, who had begun as a volunteer in the gardens at Waite in February 2009, slowly built the wall using materials sourced from around the precinct, thus rescuing the mulberry tree by replacing soil around its roots.

Laurel was joined by Tomai Martin, who had begun as a volunteer in December 2008, and together they devised a plan to plant the area. They did this in the



Tomai Martin and Laurel Crouch. Photo Brian Richards.

soil that was there, but after enduring two summers and constantly losing plants it was accepted that the clay was a contributing factor. The only way forward was to go 'back to the foundations'.

So in 2012 one trailer load of commercial compost was supplied along with some dry manure from a pony club. This was to be a starter to work into the clay. This was not successful, because it did not combine and remained as three separate substances. So the challenge became: 'How to create a garden from nothing?' The epiphany: make your own soil!

Laurel and Tomai started to collect bags of wet manure, green waste and winter leaves from the streets of Adelaide to fill the dug-out trenches. This has been a mammoth task, as many hours have been spent collecting resources and digging with a mattock. Most people, especially volunteers, would have given up at this stage, but not these two wonderful young women. Since April 2012 it is calculated that they have dug into the area 187 bags of manure, which they carried to the garden from various places in the boot of Laurel's small car. Along with this, they have collected and delivered countless bags of fallen leaves and green waste. Doing this has allowed the enrichment of the soil to develop a garden that now gives pleasure and provides space for reflection and relaxation.



The Garden today. Photo Brian Richards.

Despite setbacks, disappointment and the lack of ready funds, these two just kept going – even though some of their enormous amount of work had to be done during evening hours.

It has been an inspiration for other gardeners who also work hard at Urrbrae gardens to see this continuation of the spirit that epitomises the precinct. It has delighted visitors to the garden, and adds another dimension to the site. All done with respect for Peter Waite's generous spirit.

Beth Johnstone



SUMMER IN THE ARBORETUM



*Cassia fistula*, Golden Shower Tree is the state flower of Kerala in India and the national flower of Thailand, where the yellow colour symbolises royalty. Origin India, south-east Asia.



*Citrus glauca*, Desert Lime. The small, edible fruit have a strong lime-like flavour. It is heat, drought and cold tolerant and hybridises with other citrus species. Origin arid Australia.



*Cupaniopsis anacardioides*, Tuckeroo. The fruit is the favourite food of many birds and the tree is a food plant for the larval stages several butterfly species. It is planted in parks, gardens and along streets. It is tolerant of strong, salty winds. Origin NSW, Qld.

*Ficus macrophylla*, Moreton Bay Fig is a strangler fig. The figs are a valuable food source for mammals and birds. There are 42 species of fig native to Australia. All are edible and all are pollinated by fig wasps. Origin NSW.



*Clerodendrum tomentosum* has white flowers which are pollinated by moths. The petals drop leaving a fleshy red calyx and shiny navy blue, four lobed drupe. The tree attracts birds and butterflies. Origin NSW, Qld, NT, WA, PNG.



*Tipuana tipu*, Yellow Jacaranda is an attractive deciduous tree with 'helicopter' seeds. It is very adaptable and fast-growing and is listed as an environmental weed in Qld. Origin Bolivia, Argentina.



*Eucalyptus pumila*, Pokolbin Mallee is a very rare species and is only known from one locality in the Hunter Valley. It is a small multi-trunked tree that flowers profusely. Origin NSW.



*Eucalyptus nutans*, Red-flowered Moort included in the list of Declared Rare Flora of WA. It is a small mallee which is known from two areas on the south coast. Origin WA.



*Ceratonia siliqua*, Carob has been cultivated for its edible pods and seeds for thousands of years. Trees are usually either male or female. Above, fruit has begun to set on this female tree. Below, the green and ripe pods. Origin Mediterranean.

