

NEWSLETTER

WINTER 2017

NUMBER 92

FRIENDS OF THE WAITE ARBORETUM INC.

www.communitywebs.org/friendsofwaitearb

FORTHCOMING EVENTS

FRIENDS OF THE WAITE ARBORETUM EVENTS

Free Guided Arboretum walks

The first Sunday of every month
at 11.00 am.

Walks meet at Urrbrae House
on the lawn

Afternoon Tea with Prof. Mike Keller, Dean of Waite

Thursday 27th July 4pm-5pm

Drawing Room Urrbrae House

RSVP to Beth Johnstone on
83571679 by 5pm 23rd July

Visit to Laidlaw Plantation

9.30am Thursday 21st Sept. 2017

Meet at Urrbrae House steps

Enquiries Beth Johnstone
83571679

WHAT'S ON AT URRBRAE HOUSE

More details at:

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



Patron: Sophie Thomson

President: Beth Johnstone OAM, **Vice-President:** Marilyn Gilbertson OAM

Secretary: Johanna Crosby, **Treasurer:** Dr Peter Nicholls

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Committee: Erica Boyle, Dr Wayne Harvey, Terry Langham, Dr Kate Delaporte
(ex officio)

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Photography: Erica Boyle, Eileen Harvey, Jenny Bivré



Sapium sebiferum, Chinese Tallow Tree. Euphorbiaceae Family

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From the President

The Friends Annual General meeting was held early in April and we were entertained by an illustrated presentation from Dr Kate Delaporte. Entitled "*Gumnuts Revisited; a Continuing and Consuming Passion*", it gave our members an opportunity to hear about the work that keeps her very busy, both on and off the Precinct. Kate has a passionate approach to her work and her enthusiasm is infectious. Several members expressed a desire to visit Kate's site and so we have arranged a date for a visit with Kate to the Laidlaw Plantation.

Visit to Laidlaw Plantation

Meet Dr Kate Delaporte at the steps to Urrbrae House at 9.30am on Thursday 21st September. Kate will escort us to the site where she will talk about the work she does there.

The site visit will require some walking and will take about 2 hours.

Morning tea will then be available in the Volunteer's Room at Urrbrae.

Enquiries to Beth Johnstone 8357 1679

The nominations for the committee came from the current members and so the committee remains the same. We are still searching for a Treasurer to assist Peter Nicholls who wants to retire. We have been very fortunate to have Jo Crosby commence as Secretary. Jo is taking over some of the tasks previously done through Dr Jennifer Gardner's office and is demonstrating how lucky we are to have her for this role.

We held a very successful film event early in the year and would like to hold another one in October if we can find a suitable film. We enjoy working in collaboration with the other Friends groups and it raises the profile of the Precinct. The committee is considering different ways of fund raising to complement those used in the past.

The Friends committee have remained conscious of the need to have the gardens looking at their best for 2021, when the 19th World Federation of Rose Societies will be held in Adelaide. Erica Boyle has ensured that the garden volunteers keep this in mind. The committee commended Erica for her successful efforts in recruiting new volunteers and for her enthusiasm and diligence. She brings great skill and dedication to her tasks and all of the volunteers enjoy her effective and cheerful approach.



Pond with new sprayer.

The gardeners noted that the small bubblers in the refurbished ponds were not effectively oxygenating the water. Replacement sprayers were purchased and donated by Dr Brian Richards AO, and they seem to have achieved a better outcome. The ponds will continue to be monitored.

One of the major concerns for the Arboretum is the low rainfall during the past month. The forecast for July and August is not encouraging, either.

The Waite Arboretum and Gardens Instagram account has some 400 plus followers and people continue to benefit from the Arboretum App. Social media is proving to be a means of spreading the message about the Arboretum to other parts of Australia as well as locally.

Afternoon Tea with the Dean of Waite

Thursday 27th July from 4pm to 5pm in the Drawing Room Urrbrae House

Enquiries Beth Johnstone 8357 1679

Please RSVP to 8357 1679 by 5pm 23rd July to allow us to cater.

Our volunteers and the people who live in the immediate area feel a connection to the Arboretum and Precinct Gardens and usually monitor progress and developments with a great deal of interest. The Committee are offering members the opportunity of attending an afternoon tea where Professor Mike Keller, Dean Waite and Stuart Matthews, Manager of the School of Agriculture, Food and Wine will give a brief outline of plans for the Precinct. We hope to have lots of members attend and hear for themselves about future plans and events in this special part of the University.

Beth Johnstone OAM

Arboretum news - from Dr Kate Delaporte

Those of you who have spent time with me know how much I follow the weather! I am constantly obsessing about rain, and, well, quite frankly, I'm feeling very let down by this autumn's efforts, and indeed June. Not much winter rain and the shallow rooted plants are feeling it. A late dry summer turned into a late dry sunny autumn, and a very dry first month of Winter. Still, on the bright side, the weed germination and growth has been slow, allowing for Andrew Walters to make good progress on weed control, and the leaves have stayed on the trees longer for a wonderful extended colour display. And haven't turned into a soggy, slippery mess.



Guide, Linda Blake and part of the group on Sunday

Sunny winter days do lead to more people being out and about, and spending time enjoying the Arboretum and Urrbrae House Gardens. (A special last minute note – 52 visitors to the Arb free guided tour on Sunday July 2nd! Many thanks to Eileen and Erica for rising to the occasion to provide promotional material to the Advertiser, and Linda for last minute assistance to Eileen for guiding on the day! Much appreciated!)

I have lead a few special groups through the Arb over the last few months; students from the Australian Horticulture Centre of Excellence, colleagues from the Waite Research Institute, and, surprisingly, internationally renowned chef Jock Zonfrillo from the Orana Foundation (<http://theoranafoundation.org>). Jock and I spent several hours walking and talking, tasting things and admiring the trees, with a focus on those that are edible, and exploring how we might work together to utilise the fantastic resource that is the Arboretum for future research collaborations.

A particular focus of grounds work this season has been Elm Avenue. The wonderful rains of last spring rejuvenated Elm Avenue, but with that rejuvenation came rampant sucker and canopy growth. Andrew



Elm Avenue East. Photo Kate Delaporte

Walters and external contractors have worked hard to lift the low canopy and remove the suckers, and the Avenue looks wonderful and wearing its autumn best.



Adam and Molly and the drone (left).
Photos Kate Delaporte

Another focus has been the Bunya Pines. This fruiting season, the Bunyas dropped about three cones each. Luckily, not on anyone, and the possums, rats and parrots had a feast, but, as occurs every so often, concerns were raised regarding the potential risks these falling cones pose, and how we might mitigate that risk. With the support of Andrew Brokenshire (Service Delivery), I made contact with the UA drone team, Molly and Adam, from the School of Biological Sciences Unmanned Research Aircraft Facility: Centre for Applied Conservation Science. One sunny day in June, Adam, with Molly and I and Jennifer looking on, flew a drone to the top of each of the seven Bunya Pines in the Arb, to look for the presence of cones or flowers. We did not see anything in particular, and will revisit each tree on a quarterly basis to look for changes that may indicate cone formation. This will enable us to

forecast the risk posted by different trees, and plan accordingly. It was a lot of fun, and I have 30 minutes of drone footage from the ground to the tops of the trees that I hope to show all of you one day.

The North West Arboretum is ably and energetically maintained by a small but dedicated team, and I have proposed that we have a special monthly walk to promote that area. So, without warning, I am springing on the Guides that we will be doing this as the October Free Guided Walk! The site is home to many species endemic to the foothills and Grey Box woodland, and the native grasses have done well. We are seeking to highlight to the community how important this area is, as an example of revegetation and regeneration in a very urbanised environment.

As raised in the Summer FWA Newsletter, the 8th BGANZ Congress, 22-25th October 2017, will be held in Adelaide hosted by the Botanic Gardens of South Australia. The theme is "Preservation: Exploring and Adapting", and underlies the need for adaptation of botanic gardens in their ongoing environment and the ever-changing attitudes of the community. This covers both the natural, cultivated and political environment, and the required strategies to ensure the preservation of endangered species can continue.

Waite Arboretum will be hosting a tour during that Congress, please let me know if you are available to assist in the management of the visitors who will arrive after lunch on Tuesday 24th October.

<https://kaigi.eventsair.com/QuickEventWebsitePortal/bganz-congress-2017/info>

As always, thank you for your continuing support and encouragement. I am still not here all the time, as I follow up on new and exciting opportunities for research and the Arboretum, but I value all of you. I was proud to be asked to be speaker at the 2017 FWA AGM; I really enjoy sharing my story with a willing and knowledgeable audience and, as Beth has mentioned already, I am inviting you all to visit my main field site, the Laidlaw Plantation, located to the east of the Arboretum on Cross Road, on the Spring Equinox, Thursday 21 September 2017. I hope to see you there! The Curator's Office door is always open (figuratively, because it is very cold in Urrbrae House this winter and I have the heater on), as are my ears and my mind.

Dr Kate Delaporte

Members news - from Erica Boyle

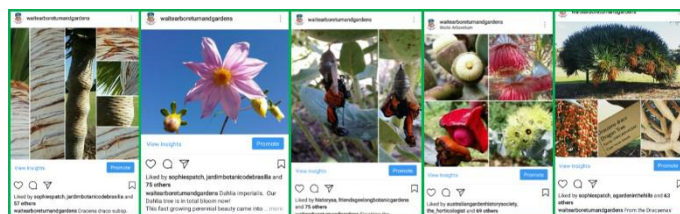
Deathcap mushrooms in the Arboretum

Amanita phalloides, have been found in the Waite Arboretum. They are very toxic and the ingestion of even a small amount will cause serious illness and may be fatal.

You are advised not to pick or eat any wild mushrooms from the Waite Campus as poisonous mushrooms may resemble edible ones. Information about Deathcap mushrooms can be found on the Australian National Botanical Gardens website. <http://www.anbg.gov.au/fungi/deathcap.html>



Instagram update



The Waite Arboretum and Gardens Instagram account is little by little winning more followers. Already 415 people or institutions are enjoying part of the Arboretum and Gardens atmosphere shown in each photograph we post. Be transported by the images of Peter Waite's wonderful land and the varied and always fascinating forms of life in this place. Follow us through Instagram at: [waitearboretumandgardens](https://www.instagram.com/waitearboretumandgardens).

Help us by sharing this information with your family and friends. Let them discover this marvelous place open to the public every day and only 10 minutes from the CBD. If you do not have your Instagram account yet, you are still able to find us on Facebook through our page at [waitearboretumandgardens](https://www.facebook.com/waitearboretumandgardens).

Enjoy Fridays volunteering at the Gardens

The Waite Arboretum and UH Garden volunteers now have the choice of another day to enjoy working in the Precinct Gardens. If you are busy on Tuesdays, you can now join us on Fridays. The same routine applies for Fridays: start 9.15am to 12.00pm with a break for morning tea at 11am.

If that sounds attractive, don't hesitate to contact me at: erica.boyle@adelaide.edu.au

Wheat ready to grow



Russell, one of our long-service volunteers, has been waiting for the first drops of rain to sow the wheat seeds in the wheat display section of the Garden of Discovery. After a couple of weeks, tiny monocot leaves started to grow and reach for the sky!! Good job Russell!

A very sad loss



Adam Burgess (44), Curator of the Living Collections and key member of the National Arboretum Canberra staff, passed away on the 1st of May after a surgery complication. He worked in the establishment and development of the National Arboretum from the start. Those who met him will remember the passion and love Adam had for every tree of the Arboretum. He leaves behind a huge legacy. Adam will be greatly missed.

South Aussie with Cosi

In October Andrew ('Cosi') Costello visited the Waite Campus to film a segment for his "South Aussie with Cosi" program that was aired on Channel 9 on 28 April 2017.

Astonishing aerial views of the Urrbrae House and Waite Campus were featured. Also delightful footages of the Gardens where our volunteers Peter, Aranka and Pat were highlighted while



working in the roses. Undoubtedly it was the best way to feature the commitment and hard work volunteers bring to the Gardens. Please enjoy the video. You will also discover more about the history of Urrbrae House and the Waite Campus through the interviews with Urrbrae House Manager, Lynette Zeitz and Dean of Waite, Professor Mike Keller. If you missed it on TV you can view it online at: <http://www.thewaite.org/south-aussie-with-cosi>

U3A Adelaide tour of Waite Arboretum



In May Arboretum guides Linda Blake and Jenny Birvé lead a group from U3A Adelaide on a tour of the Arboretum. Our volunteer tour guides lead free group tours through the Waite Arboretum and Gardens on the first Sunday of each month at 11am. Tours on other days can be booked for groups with a minimum of 10 visitors at any time. Booking at: erica.boyle@adelaide.edu.au

New sounds in the Garden

We are delighted to have Dr Brian Richards, AO (recently awarded Officer of the Order of Australia), volunteering with us at the Urrbrae House Gardens. Thanks to Brian who donated some main parts for the little pond pump, we can now enjoy the cheerful sound of splashing water. The pond attracts not only birds and butterflies, but every child who comes to enjoy the Labyrinth, stops to look at the pond, listen to the water and admire 'Andy', our little white fish.

Time to prune roses

The roses are cared by our team of volunteers who deadhead flowers in summer and autumn and now in winter, when most roses are dormant, carry out the harder pruning. Some plants still have



spectacular blooms, such as the Rose "Duet" (1961 - USA) that Rosemary brought last Tuesday to decorate our Volunteers' Morning Tea table. The great work our green-team is doing encourages roses to produce new growth and wonderful blooms in following seasons. It is a pleasure to see how has nature brought these lovely people together to work and enjoy each other's company while birds sing in the background.

Mediterranean Garden Society working bee.



Members of the Mediterranean Garden Society held their second working Bee in the Garden of Discovery in May. They pruned, trimmed and cleared native plants including *Plectranthus argentatus* and *Adenanthos sericeus*, which now looks beautiful and elegant below the Casuarinas. The next MGS Working Bee will be held from 9 to 11am on Sunday, August 27. If you are willing to come to help and have a nice Sunday with this lovely group of knowledgeable people, contact me at: erica.boyle@adelaide.edu.au

Celebration of Dr Brian Richards' AO award



To celebrate Dr Brian Richards' AO award (Officer in the Order of Australia) for his distinguished service to geotechnical engineering and soil science, the AFW School Manager, Stuart Matthews visited us to share an enjoyable time with the guest of honor and the volunteers at a Tuesday morning tea.

Erica Boyle

Selections from the Labyrinth Visitors Book 2016 - compiled by Terry Langham

January 2016

"It's a year since I first visited and I come regularly. So beautiful – peaceful. A special place. And my mother worked at the Waite in the 30s! Blessing and gratitude." (A)

"On my holidays. I come here I here very happy with this beautiful place. I like here and I love Australia. I may come here again if I have some time. This is my wish." (Zhaing K)

"I love bringing the children here. So beautiful and peaceful. Fabulous."

"The Labyrinth shows that in life there are no dead-ends and only chances to start over." (Kieran, aged 12)

February 2016

"Prachtige tuin! Goed sfeertje. Ik kom zeker terug! Beautiful Garden. Great atmosphere. I will definitely come back." (Desiree, The Netherlands)

"On days of bloom and sunshine; we cherish the place the place our hearts collect and divide." (Adam and Clare,).

"It is always a delight to visit and muse in the garden." (Margaret)

"I am very pleased my friends Rylee and Lexi had fun here and saw the baskets and bee hive."

March 2016

"What a wonderful surprise to see the labyrinth from the rose garden. Yes, extremely old garden ornamentation with mainstream purpose as well. Reminds me that there is still beautiful and unexpected sights as we take our journey through life. Cynicism aside for today! Thank you".

"This is a very beautiful garden. Thank You!" (Paul and Emma, Vietnam)

"This garden is pritty because there is a maze and some flowers and some roses and a place to relax and play around a lot." (Isabel, aged 7)

"I love the smell of the roses and the how pretty the garden was. But I thought it disappointing that the fish ponds were all dried up. They should be pixed!! THEY SHOULD BE FIXED!!!" (Holly)

April 2016

Quiet and peaceful, loved the birdsong." (Liz, Cornwall, U.K.)

"It is a great place to go if you are having a bad day or if you are feeling sad" (Charlie, aged 11)

"When you have made it to the middle, face south and you will see lots of beautiful trees. Also just saw a koala AWESOME!!" (Amber, aged 10)

"This is my oasis thanks to everybody's hard work here!" (Jeanne)

May 2016

"World International Labyrinth Day 10.45am - Enjoyed the morning walk of the trees and the labyrinth. Morning visitors included 5 magpies. The new water bubblers blend in beautifully with the labyrinth!" (S.K.P.)

"The birds are chirping in excitement while I go into my inner self, taking care at every corner to take time and several steps loving it. When a fighting angry and arguing couple walked pass, the contrast between the peace and tranquillity and that energy of anger could not have been greater. What a gift to us all is this labyrinth and nature as such. Thank you for offering this place to us all." (Gabrielle)

"Running around the labyrinth with my grand-daughter. Lovely!" (Daniel, Brisbane)

"Walk your troubles away around the labyrinth."

June 2016

"Solace and wisdom await me here and I am grateful for the labyrinth and thank everyone who is caring or has been building this magic spot from the bottom of my heart." (Gabrielle)

"First time to open this book. This is lovely. I love the Rose Garden and Arboretum. I like walking around these areas when feeling tired and frustrated. The Peace and Beauty have refreshed me and comfort me a lot. Thank ..., thank this place, and thank people working here." (Jia)

"I loved it here. I fell over once but apart from that it was awesome! P.S. I went on an excursion here." (Scarlet, aged 7)

July 2016

"What a lovely surprise! A beautiful labyrinth – and answer to my question by the end. Thank you."

"What a clever design for a labyrinth! Thank you!" (Tilly, Warragul Victoria)

"Amazing! What a lovely place hidden south of the city! Can't wait to be back here again in spring to check out the roses!"

August 2016

"It has a really nice garden." (Ollie, Mum and Dad)

"Such a stilling experience, walked in memory of my friends, Shauna and Helen – loved and held in Wellness." (J)

"Thank you for creating this lovely place. The light is lovely here at 4.30pm, and I can imagine it's beautiful always. A respite from our busy lives, birds fluttering and twittering overhead." (Virginia, Canberra ex Netherby, SA) "PS You need a new pen."

"Bigger than the Mulberry Bush." (Annabel and Dad)

September 2016

"Lovely place. I especially come here to walk the labyrinth. Will come again! Thank you!" (J and C)

"A wonderful connection. Thank you." (Neville, Ipswich City

Council, Ipswich Queensland)

"This place is so peaceful! Love the maze and wildlife. How did you make it so good?" (Angus)

"We got lucky with the weather today, toured the Arboretum with Science Club and the kids found this beautiful area. If the sum of life is what we do. Then the people who make this garden and maintain it live a fulfilling and meaning life. Thanks." (Wendy, Milton, Maia and Zac)

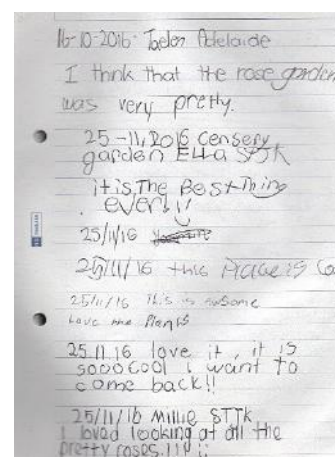
October 2016

"I enjoy the fresh air and the space to run around and do cartwheels. Listening to the birds chirp makes me feel free and happy. This place is a hidden treasure in the city of Adelaide." (Summer, aged 11)

I enjoyed walking around the maze and getting to the middle while I was walking around. I thought about things that happen in my life." (Tetti, aged 9)

"Beautiful roses and cool over-grown labyrinth - again." (Amber-Rose)

November 2016



"Came here with the love of my life. It's so beautiful here, I wish I could stay here forever. It's like a dream to me. I will forever remember the beauty of this place. It's nice to be here with someone that I love. Thanks for everything." (Harrison) "I won't ever forget this." (Ally)

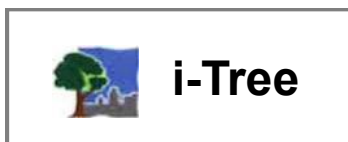
"Back for a nostalgic visit (graduated in 1985). What a wonderful place to have spent 4 years of my life." (Robert, Norwich U.K.)

"Has the feel of Europe's stone circles." (Fran, Bruny Island)

"Visited today at 6pm. Beautiful!! Thanks to all the gardeners!" (Fzoin and Christine, Alstonville, Northern N.S.W.)

December 2016

"Waite campus is so beautiful. I love coming here every weekend as a time out. The stunning roses make me feel calm and happy. I can't wait to take my children and even grandchildren (if and when I have them). Overall a stunning place cherished by many. Makes me feel happy – my second home." (Grace, aged 14)



Recently I was invited to a meeting of the South Australian Mediterranean Garden Society to give a brief presentation about the

work I am currently doing as the new Officer of the Waite Arboretum at the Waite Historic Precinct. What follows is an extract from the article published in the MGS SA Branch newsletter number 67 Summer 2016 and reprinted here with their kind permission.

i-Tree

The on-going research is based on software developed by the US Department of Agriculture, Forest Service, called i-Tree. It is a free-access application that uses data collected in the field to quantify forest structure, the environmental benefits that trees provide, and their value to communities.

We all know about the benefit trees represent for communities, how important they are for our health and well being. We also know trees are fantastic habitat for wildlife and birds and that they give us the most essential of the elements that enable us to live: oxygen. However, even being aware of all this, it is extremely difficult to quantify these benefits.

Well, i-Tree uses the forest data to do it. After its data processing, the program is able to provide, for instance, the annual air pollution removal (NO₂, O₃, CO), the carbon storage and sequestration, oxygen production, avoided runoff (rainwater captured and absorbed by trees) and a dollar value is added to every one of these environmental benefits. That is how i-Tree provides baseline data that can be used to measure the value of the Arboretum and to set priorities for more effective decision-making regarding our beloved Arboretum trees, just 7 km from the CBD.

It is worth mentioning that this project could not have been carried out if Dr Gardner hadn't been involved in a previous outstanding development: a complete electronic Arboretum catalogue. This was combined with an accurate digital map developed in collaboration with colleague, Marian McDuié. That project prompted them to develop the Waite Arboretum App - a free innovative application down-loadable from both iPhone and

Android platforms (launched in February 2015).

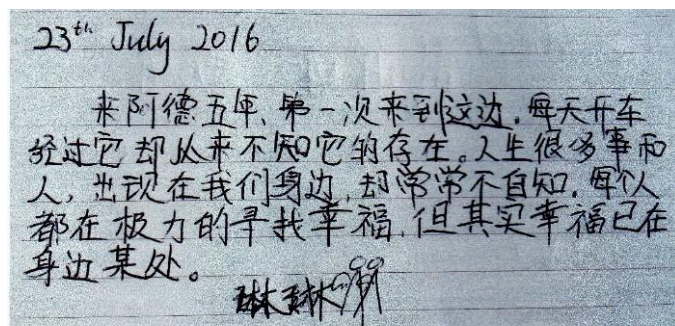
That means that you can have the whole forest at your fingertips and, easily access heaps of up-to-date information about the 2500 specimens located in the 27 hectares of land bequeathed to the University of Adelaide in 1914, by one of the most generous and visionary South Australians, Mr Peter Waite.

The Waite Arboretum App makes the information of every specimen available at the tap of a finger. It enhances the experience of visitors allowing them to find specific trees of interest, to follow a themed walk, to learn about the trees and to discover other features. It is also a valuable tool for researchers, educators, professionals involved in any tree related profession - arborists, landscape architects, urban planners and the nursery industry. The usage of this current technology also appeals to children who are very keen on using tablets and smart phones for learning and play. The free Waite Arboretum App can be downloaded from the iTunes App Store or Google Play.

Moving from my home country with my family was a huge and hard decision and many things and projects were left behind. However, the new opportunities Australia offered to me and my family since we arrived, have been profoundly rewarding. In my case, being involved in this wonderful world of trees, plants and inspirational people has been one of my greatest and most satisfying achievements. I keep a long list of names in my heart of all the people who were key factors in my smooth settlement into my new country.

Erica Boyle

More from the Labyrinth visitors' book 2016



"I've been in Adelaide for 5 years and I can't believe it's my first time visiting here. I don't know it at all though I drive pass this place every day. There are a lot of things and person in this world, which appear around us but we didn't notice. Everyone is trying their best to find the happiness, while it has been already around you somewhere"

(Linlin, 23/7/2016)

Fire and the Arboretum



MFS on site at cork oak. Photo Jennifer Gardner

The Arboretum had a grass fire on October 18th 2015. About 1,000 square metres of grass near the oak collection was burnt. Fortunately, the grass in the Arboretum had been kept low that year, reducing the fuel load, and there was no wind on that day. The MFS from the Glen Osmond Station were quickly on site, reducing the spread of the fire. Never-the-less, a large cork oak, other oaks and a pear tree were scorched.

The cause of the 2015 fire was considered to be suspicious and a Crime Scene Investigation Officer inspected the ignition areas. Grass under two *Quercus* species appeared to be the primary sites of ignition and these two specimens (*Q. suber*, planted in 1954 and *Q. pubescens*, planted in 1973) have sustained scorching into the canopies. As at



December 2015, some foliage appeared to have survived.

The immediate effect of the 2015 fire and radiant heat on the trees is evident in the photo. However, Arboretum management does not believe any long-term damage will result from the fire.

Q. suber six weeks after the fire. Photo Wayne Harvey

The ground-level vegetation in the Arboretum is dry in summer and would provide enough fuel to sustain fire. A grass fire in 2006 was the first fire of any significance at the Waite in the last 20 years. The November 2006 fire effected about 10% of the total area of the Arboretum and was thought to have

been started by the malicious or reckless activity of a small group of young adults. The fire was slow moving with a low intensity, rated by the CFS as "mild". The effect on the trees was minimised by the management practices of keeping the Arboretum grass cut low and keeping areas under tree canopies clear of fuel. The 3 hectares burnt in 2006 were largely planted with exotic species, which suffered more from the fire than Australian native species would have been expected to.



Photo courtesy of the University of Adelaide

The condition of the trees in the fire scar area were recorded immediately after the fire and their condition reviewed at intervals. An initial prognosis by an arborist listed those specimens destroyed by the fire and those specimens likely to survive. Many of the surviving trees showed leaf drop after a couple of weeks, with an expectation of regrowth in subsequent months. Various treatments of the effected trees by the University were designed to maximise recovery. The condition of each effected tree was recorded just after the 2006 fire, including any treatments given (watering with a sugar solution, frequent watering, mulching, pruning etc.). A photographic record of each effected tree was also made.

Sixty of the 208 trees effected in 2006 were lost altogether, including a specimen of the very rare Saharan Cypress, *Cupressus dupreziana*. (Other specimens of this tree, previously raised from locally held seed, are planted elsewhere in the Arboretum). Today, only about 90 of the initial surviving trees are still alive.

Many trunks of the trees killed by the 2006 fire were salvaged and used to create the Waite Labyrinth.

Apart from the loss of many trees, the 2006 fire provides a demonstration of how exotic trees respond to damage from fire and radiant heat.

Even trees which have survived the initial heat damage may show signs of gradual decline over many years. The records from the 2006 fire held by the Waite provide an opportunity for researchers to see how various exotic tree species tolerate fire and recover after several years.



Remains of *Cupressus glabra*. Photo Wayne Harvey

The spire-shaped stump near Walter Young Avenue was a specimen of *Cupressus glabra* planted in 1937 but killed by the 2006 fire. This stump remains as a reminder of the long-term damage caused by fire.

Dr Wayne Harvey and Dr Jennifer Gardner OAM

A Significant Tree: *Arbutus andrachne* #820B



Colourful bark of *Arbutus andrachne* #820B.

The Arboretum specimen of *Arbutus andrachne*, the Oriental or Grecian Strawberry Tree, has been designated as a Significant Tree by the National Trust of South Australia. The specimen is tree number 820B and can be found in the western section of the Arboretum, just south of Walter Young Avenue. *Arbutus* species have colourful trunks and lower branches as the bark exfoliates. The fruits in this genus are distinctive, hence the regular reference

to strawberries in the common names.

In assessing the Arboretum specimen, the panel of experts at the National Trust observed that -

"The tree is of excellent form and is therefore a good source of propagating material. It is situated in the historic Waite Arboretum which is part of the University of Adelaide. The tree is a free standing specimen and a great looking tree particularly in late spring/summer when its cinnamon coloured bark and white flowers make a spectacular display."

A. andrachne flowers



The Register of Significant Trees is a national database set up and maintained by the National Trusts of Australia. Each state operates its own nomination and assessment procedure. However, a series of national standards of assessment ensure the Register is consistent across all states. Four categories of criteria determine whether a tree is significant or not. They are scientific, social, historic and aesthetic.

South Australia's Significant Tree Register has been in operation since 1983 and contains over 800 entries representing over 7,500 trees. In 2012 the South Australian National Trust initiated the National Register which now contains over 25,000 entries.

Once a tree has been accepted to a State Register, the details are published on the *National Trusts of Australia Register of Significant Trees* website. The owner of the tree, the local government body responsible for the area, local service providers and, where appropriate, the relevant Aboriginal organisation are alerted to this outcome. Inclusion on the Register does not confer any extra protection for a tree or group of trees but is intended to improve the community's and the regulators' appreciation of the local value of the specimens.

The National Trusts of Australia encourage anyone to nominate a particular tree or group of trees for nomination to the Register of Significant Trees. An online Nomination Form can be found at www.trusttrees.org.au. The website also sets out the various components of the four categories of criteria against which all nominations are assessed.

Dr Wayne Harvey

"The Blacksmiths Tree"

While visiting Melbourne in May this year, I was keen to visit the memorial tree built and erected to commemorate the lives lost in the disastrous forest fires in the Kinglake district in 2009. A close friend is a fellow woodturner and member of the International Wood Collectors Society, and is also a member of the Victorian Blacksmiths Association. Recently he gave a presentation about this memorial tree, thus my interest in seeing it. I thought it was in the small township of Kinglake itself, but after some fruitless search, I sought help and discovered that it was in the village of Strathewen, at the foot of the ranges directly below Kinglake. The only direct route to this was by a steep winding dirt road, and after numerous warnings about being cautious I decided to take the descent. It was steep. About two thirds the way down I saw a sign which indicated that the dirt road was a fire track and suitable for four-wheel drive vehicles only - too late it seemed! At least the roads back to Melbourne were all sealed. At the base of the hill were several scattered houses and eventually I found the Peter Avola Memorial Park and the memorial tree.



It is easy to forget the amount of tragedy left as a result of this "Black Saturday Fire". It was the worst natural disaster in our country's history. The fire was so fast and so severe that many people were unable to get out of its path. Over 170 people perished and 7000 were left

homeless and many townships were destroyed. The small township of Strathewen of about 200 residents was almost destroyed by the fire with the loss of 23 lives.

A week after the fire, volunteers were called to work on a tree project which became known as "The Blacksmiths Tree". Hundreds of blacksmiths from about 200 countries across the world forged leaves and sent them to Australia for the tree. The 9.8 m steel, copper, bronze and titanium tree



includes 3500 leaves inscribed with the names of people who died, as well as messages of hope for those left behind. The tree weighs 2.5 tonnes. The trunk took more than 11 hours to forge using heavy industrial equipment.

The Blacksmiths Tree was erected on February 14th 2014 almost five years to the day after the fire. It is an extraordinary piece of community art which is now a gift to all of the communities affected by the disastrous fires of 2009. The tree looks like a dead, fire affected gum tree and it fits perfectly into its natural surrounding landscape.

The video clips associated with the following web page give a graphic view of the process of constructing the Blacksmiths Tree.

www.blacksaturdaymuseum.com/strathewen.htm

The Blacksmiths are continuing with the project and are adding some seats which have the flames and the foliage as a theme.



The Tree is situated at the Peter Avola Memorial Pavilion 160 Chadds Creek Road, Strathewen, Victoria.

Ron Allen

Photos Ron Allen

WINTER IN THE ARBORETUM



Hakea cristata, PROTEACEAE. The woody fruit (below) with its toothed crests is well camouflaged amongst the foliage. Origin: WA



Sapium sebiferum, Chinese Tallow Tree, EUPHORBEACEAE. In Asia the small seeds coated in white wax (see photo on front cover) are harvested for the production of soap and candles. They also produce an oil used in the biofuel industry. Origin: warm, temperate regions of China and Japan.



Nuxia floribunda, Forest Elder, BUDDLEJACEAE. In traditional Zulu medicine the bark is used for a strengthening potion after a family member has died. Flowers produce a lot of nectar making this a good honey tree. Origin: southern Africa



Hakea francisiana, Grass-leaf Hakea, PROTEACEAE. *Hakea* after Baron Christian Ludwig von Hake, a patron of botany and *francisiana* after George Francis, the first Director of the Adelaide Botanic Garden. Origin: WA, SA

Eucalyptus pyriformis, Pear-fruited Mallee, MYRTACEAE. An very attractive mallee with large (6 cm) white, cream, yellow or red flowers. It has ribbed, pear-shaped buds and large, rounded fruits. Origin: WA



Eucalyptus leucoxylon cv 'Euky Dwarf', MYRTACEAE. This is a cultivar of SA Blue Gum and grows to about 6 m in height rather than 10 - 30 m. Flowers are pink red or cream.



Ficus benghalensis, Banyan Tree, MORACEAE. The Banyan Tree is the national tree of India. It produces propagating roots which grow downwards as aerial roots. Once these reach the ground they grow into woody trunks. India's giant Banyans are the largest trees in the world by area of canopy coverage. One tree has more than 3,000 trunks and a canopy area of 3 square km. Origin: India



Pararchidendron pruinosa, Snowwood, LEGUMINOSAE. Snowwood is closely related to *Acacia*: there are similarities in the flowers and seedpods. It is a medium sized rainforest tree with bi-pinnate leaves and fragrant pom-pom shaped flowers that open white and then fade to a yellow colour. The colourful twisted seedpods hold the shiny black seeds. Origin: NSW, Qld