

FRIENDS OF THE WAITE ARBORETUM INC.

NEWSLETTER 109 SPRING 2021

FORTHCOMING EVENTS

Free Guided Arboretum Walks The first Sunday of every month at 11 am. Meet on lawns Urrbrae House. Please observe all SA Official Covid-19 directives when visiting the Arboretum. Covid-19.sa.gov.au

> Made While Nobody Was Looking.

Basketry Exhibition Urrbrae House

19 Feb - 1 March 2022



Waite Arboretum App





Patron: Sophie Thomson

President: Dr Wayne Harvey, Vice-President: Terry Langham

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Callistemon flowering just south of the Gatehouse.

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2021 Arboretum report. Dr Kate Delaporte

And suddenly it is October and both winter and sprinter are long gone...and we are now within Sprummer – a time of "changeable weather and storms in eastern and southern Australia" according to Professor Tim Entwisle https://blog.csiro.au/five-seasons-inaustralia-meet-sprinter-and-sprummer/; it rains, it doesn't rain, we have storms at inopportune moments, necessitating the cancellation of long awaited and carefully planned events, and then it gets hot and everything gasps and wilts and 'gets a bit pink'... (especially me!)

The Arboretum looks good, I think, a definite green carpet and few bare patches, with the trees carefully sprayed around and the groundcovers being mowed regularly. Things are flowering, shooting and fruiting as they do. Soon it will be the time of the Caper White Butterfly caterpillars - please be sure to visit the Capparis mitchellii in November for the annual extravaganza! In my July newsletter I mentioned that the Waite Campus' 'Indigenous Plant & Knowledge Garden' was taking shape; suddenly it is finished and awaiting planting! There have been a lot of very positive comments regarding the landscaping, while it may be a little different to the existing gardens, we have sought to complement them with similar materials and colours, but maintain a distinctly Australian feel. We have also endeavoured to 'reuse, repurpose and recycle' where possible, utilising objects from other projects or areas where possible, for example, the wire used in the fencing was sourced from the Waite Conservation Reserve where it had been used as tree guards in the early days, and the large flat stones are left over from the Garden of Discovery, and the fallen habitat timber sourced locally. Now we are developing the planting list and interpretative signage in collaboration with indigenous community members. Many thanks to Martin Crabb, Dan Johnson and others from Programmed Property Services who put so much into the construction of the garden, and to the Yitpi Foundation, the School of Agriculture Food & Wine, the Friends of Urrbrae House and the Waite Arboretum who have supported this special garden.

2021 Horticultural Interns and teaching in Horticulture At the start of Semester 2 each year I seek interest from the students studying Agricultural Science at the School of Agriculture Food and Wine to undertake volunteer placements in the Arboretum and Urrbrae House Gardens. As part of their degree, they are required to undertake work experience placements at different types of Agricultural enterprises. I am always trying to promote trees, gardening and horticulture as alternatives to traditional agriculture, and this year we have five intrepid students who are learning about different aspects of management in the Arb, gardens and WCR. We have a special project where the students are learning specifically about ornamental eucalypts and I am taking them through the steps of selection and propagation through to grafting in February. I am supported in this endeavour by Erica Boyle and Peter Bird, where the students learn the joys of weeding and weeding.

During Winter/Sprinter, I have a lot of interaction with students in my role as a teaching and research academic (in addition to the Curator role). In July I am course coordinator for the elective subject Horticultural Production and Quality III. This subject is about intensive production of our fruit and vegetables, as the name suggests, but there is also room for discussions about amenity horticulture, and nurseries, and 'food culture' where we ask the students to reflect on where their food comes from, what inputs are required and whether it is sustainable and sensible to produce food in certain ways. Horticulture is a very diverse industry and intensely interesting. Encouragingly, numbers are increasing each year, which bodes well for the future of horticulture teaching at Waite. And why is this important for the FWA? I send a lot of time with the students during the course and I put on my Curator hat as often as I can, and encourage Arb exploration and volunteering, and interest in the wide range of research opportunities within the Arboretum. In September I got brave and volunteered myself to participate in the First Year Agricultural Production Tour; 5 Academic staff and 80 first year students, 2 buses and 3 support staff travelling throughout the mallee and the Riverland visiting sites and learning about intensive horticulture and animal production, organic horticulture, mallee cropping and farming, and the mighty River Murry. It was a fun trip and a great way to meet the new students and again, encourage them to explore all aspects of horticulture as a future career.

From both of these activities, I have a number of students showing interest in undertaking research projects in the Arboretum over the next couple of years which is very encouraging! I'll have more to share on that in the next newsletter!

We are undertaking research in propagation of the Arboretum plants. In 2021, we collected acorns from as many oak species as we could, and in August I planted about 500. So far, Beck (the 2nd year student) and I have potted up just over 300 little trees from 10 different species – some have germinated well, some not so well. This is valuable information on how our collection is interacting with our environment and each other. We have also upped our engagement with a couple of venerable specimens that were in place during Peter Waite's time: the Mulberry tree and the purple Prunus. The original specimens are looking a little worse for wear, but with the help and propagation expertise of Tate Hancox we have replicated the Mulberry through cuttings and Tate has top-worked the Prunus successfully. Preserving the older specimens by vegetatively propagating them strengthens our links to the past and heritage, often overlooked in this time of new developments and road widening.

For now, as spring slides into summer – Sprummer – I can take stock and spend my time catching up and following up new leads for research and progressing teaching ideas for 2022. There is never a dull moment and I look forward to sharing progress updates with you in the coming newsletters.

Here's to a rainy mild Sprummer....

Kate, 7 October 2021



Lasiopetalum discolor and Halgania cyanea flowering in the Bird, Butterfly And Bees Garden Photo EB





Report from the President FWA Dr Wayne Harvey 2021

Site works to expand the Cross Road-Fullarton Road intersection are now evident, with the demolition of a landmark house on the Northwest corner of the intersection and the removal of several trees along Fullarton Road, adjacent to the Urrbrae High School campus. We have received notification from the State Government that the site clearing and other preparations will continue through this Summer and into Autumn next year. There is no indication yet of the scheduling for the proposed dismantling of the Gate House.

The importance of trees to the community and the environment remains topical and, when invited to be a signatory to the Kew Declaration, we had no hesitation. Attention is being increasingly given to the 'social role' of arboreta and botanic gardens, as well as the scientific role. Many parks and gardens around the world are now reflecting on their structures and services to ensure they are engaging with their local communities in an attempt to encourage community participation in the retention and restoration of vegetation. The Waite Arboretum is a scientific resource and a community asset, as the response to the threat to the integrity of the Arboretum from the intersection upgrade showed. Community pressure helped to minimise the loss of trees from the road works, and I suggest the community needs to continue to maintain its position as a defender of the environment.

The Arboretum and its surrounds continue to attract foot traffic as visitors use the grounds as a thoroughfare and as a destination. Counters were installed in strategic places almost 12 months ago and are recording about 200 visitors per day through one entrance alone. The information on visitor numbers and patterns will help us to demonstrate the level of community interest and assist with decisions about the best location for signage and visitor amenities.

Your Management Committee has met twice since their election at the AGM held in June this year, and is working on a schedule of activities over the next couple of years that will see further focus on the Arboretum, its place in the University's history and its role in the maintenance of a sustainable tree cover in Adelaide and beyond. We will announce these activities as plans and dates are finalised.

The Management Committee has agreed to hold subscription rates at last year's level. Membership renewal notices are now available and the Committee encourages early renewal, with additional donations where possible. All member funds go towards the development and promotion of the Arboretum in accordance with our Constitution.

FWA Management Committee 2021

Elected by Members: Ms Marilyn Gilbertson OAM Ms Joan O'Loghlin Dr Barbara Radcliffe Ms Ramute Stankevicius (Treasurer) Ms Jo Crosby (Secretary) Ms Jenny Birvé (Editor) Mr Terry Langham (Vice President) Dr Wayne Harvey (President)

Representing the University: Dr Kate Delaporte (Arboretum Curator) Ms Erica Boyle (Waite Arboretum Officer)

The Kew Declaration

The Royal Botanic Gardens Kew and the global organisation Botanic Gardens Conservation International have prepared the "Kew Declaration on Reforestation for Biodiversity, Carbon Capture and Livelihoods". The Kew Declaration arose from a conference held in February this year at Kew, England, attended by 2,400 delegates from 113 countries. The Declaration aims to promote a framework and policies to ensure the protection of intact forests and the adoption of effective restoration strategies to protect biodiversity, mitigate climate change and improve livelihoods.

The Declaration takes a global position and outlines key requests to policymakers, reforestation financiers and practitioners everywhere to enable better decision-making for reforestation.

The Kew Declaration centres on "Ten Golden Rules" for restoring forests. They are; 1) protect the existing forest, 2) work with the locals, 3) maximise biodiversity, 4) select the right area, 5) use natural forest restoration, 6) select species that maximise diversity, 7) use species that can adapt to changing climate, 8) plan ahead, 9) learn by doing, and 10) make it pay.

The FWA Management Committee supports the Kew Declaration and the principles behind it.



Dracaena draco subsp ajgal dragon-tree DRACAENACEAE Morocco 2001. When young it has a single stem. At about 10-15 years of age the stem stops growing and produces a first flower spike with white, lily-like perfumed flowers, followed by coral berries. Soon a crown of terminal buds appear and the plant starts branching. Each branch grows for 10-15 years and re-branches, so a mature plant has an umbrella-like habit. Dracaena is a monocot and unlike most monocots the trunks do undergo some secondary thickening. There is no continuous sheath of cambium that the conifers and dicot trees have.



Busy WORKING BEES! By Erica Boyle

I am very happy to say that this year, as compared to last year where COVID was affecting all our programs and activities, working bees have seen not only a wonderful gathering of hardworking volunteers, but also a generous contribution of time to keep our gardens and arboretum looking beautiful. Three working bees took place since my last article.

A group of rose-experts from the Heritage Roses of Australia- SA branch under the instructions of the most impressive Trish Frith, arrived in the garden on a cold August morning to prune the last rose bushes left unpruned. A total of seven volunteers dedicated 28 hours to the task.

The Heritage Rose collection is located in two different sections: one, in the southern beds between the small arbor leading to the Labyrinth and the *Washingtonia filifera* palm near the Andrewartha gate on Claremont Ave. The second half occupies the rather large Lshaped planting bed at the southern end of the main lawns facing the newly planted circular parterre. Heritage roses are those which were popular before the modern Hybrid Tea roses made their debut in 1867 with 'La France', the first of this class bred by Jean Baptiste Guillot of France. Gallica, Damask, Centifolia, Moss, China, Tea, Bourbon, Hybrid Perpetual, and Noisette are some of the wellknown Old-fashioned or Heritage roses characterized by their charming cupped or rosette flower shapes and powerful fragrance in the shades of white, pink, purple and mauve.

The second Working Bee on a Sunday morning took place in the arboretum palm collection with seven members of the Palm & Cycad Society SA branch coordinated by Heinz Froehlingsdorf and accompanied by friends and partners. A new addition to the collection, *Encephalartos laurentianus*, was planted. A total of 25 hours were calculated for this group.

Lastly, members of the Mediterranean Garden Society - SA branch arrived on the third Sunday of spring ready to tidy up, weed and prune the lush foliage of so many drought-tolerant shrubs that have grown so much thanks to the generous winter rains. Although the Garden of Discovery usually lacks plants with striking flowers, what makes it stand out each season are the different shades of green, the contrasting textures and unusual shapes of their foliage. A total of nine volunteers lead by Mark Barnett donated a total of 27 hours of gardening time.

Working bees are an important part of our volunteer and community engagement programs at Waite and we thank the members of the different groups for their continued faithfulness to the gardens and arboretum's living plant collections.

Arboretum and garden VOLUNTEERS – WHAT A TREASURE!

Our regular team of skilled 'arboretum and garden' volunteers arrives every Tuesday and Friday to perform a very diverse range of activities. Briefly mentioning them will give you an idea of how lucky we are to have their expertise. Volunteers help fight weeds like thistles and creeping oxalis from the rose beds, Kikuyu stolons from under the mallee trees, wireweed from the BB&B and some others from the Graminetum.

Heritage Roses of Australia SA working bee. Pictures EB

Garden of Discovery

working bee.



Hand weeding the mallee trees.



Of course, after this mulching is a must to prevent new weeds from emerging while keeping the soil moist. Fertilizing the roses for the spring display is also an important task. Newly planted specimens such as rose bushes, perennials in the Sensory Gardens, native seedlings in the BB&B and arboretum-North West Corner, ferns in the Coach House Garden, native grasses in the Graminetum all need special attention in addition to water.

Science week with one of the Arboretum guides taking a tour.



Other projects include; the maintenance of the Labyrinth which requires the old decayed wooden logs to be replaced by new ones cut from fallen branches in the arboretum; pruning the numerous shrubs like salvias, abelias, coprosmas, rosemary, lavenders, pelargoniums, daisies, saltbushes, nandinas....; planting new



seedlings; watering and feeding new plants around the Labyrinth area; data-recording of flowering pears and phenological stages of garden specimens; collecting seeds and acorns from trees; installing plants and tree labels; cementing special plaques and signs; looking after the Native Bee Hotel; keeping the arboretum and garden tools sharp and in good conditions, making coffee for morning tea; propagating plants and much more!

It is that connection with nature that we all share, those pleasant conversations or the moments when we all stop to observe the beauty of a rose or the flight of a butterfly, or the swimming of fish in the pond; it is the steaming coffees in the cool mornings or moments in which together we rejoice for the good job done or for the showy flowering of the trees; it is that positive attitude and passionate commitment what makes this program a success and the volunteers in our team, a treasure! On a personal note, I feel very fortunate to be working along these wonderful people with whom I can share my love for plants and nature.

Connecting people to nature thanks to our arboretum GUIDES. By Erica Boyle

Our wonderful arboretum Guides have been quite busy the last few months preparing special walks for two different events:

Science Week at Waite organized by the Australian Society of Plant Scientists: a series of short, fun and engaging talks and tours were organized at the Waite Campus to explain the critical role that plant scientists and agriculturists play in feeding and clothing humanity. Happy to be part, the guides offered five different tours of the arboretum and gardens. The organizers also offered other tours of the TERN Library and the Plant Accelerator at Waite. The event attracted many people of all ages, many of whom attended multiple tours. Head of School, Agriculture, Food and Wine Professor Martin Cole opened the event and gave one of the many interesting talks of the day. One of the fun activities for children that seemed to have been very popular was Sciren's 'Strawberry DNA extraction'. (https://www.sciren.com.au/). A total of 33 visitors enjoyed the tours provided by Eileen, Linda, Barbara, Henry and Jenny.

Three other special tours were prepared by our guides for the 'Nature Festival SA'. The festival was a collaborative effort of organizations, artists, and community members who signed up to host events throughout the ten days it lasted. The motto of the festival is to connect nature and society.

The tours offered were promoted by Nature Festival and sold out very quickly. 'Trees of the Mediterranean', 'Aromatic Trees' and 'Rare and Endangered Trees of the World' were the walks led by Linda, Jenny, Barbara, Terry and Henry. Unfortunately, the weather was not good for one of the walks and it had to be cancelled. Twenty people attended the tours.

Thank you, ARBORETUM GUIDES, for helping people connect with our wonderful trees and magnificent green assets on the Waite campus.







XMAS GIFTS

FWA Green cotton shirts \$30 (Non-members \$40) S/M/L

Caps and Brimmed hats \$20 (Non-members \$30)

Tote bags \$25 Garden aprons \$25

Dracaena seedlings \$50, raised from parent species in the Arboretum.

Available from Tues 2/11/21, 10 am -12 noon and Tuesday 7/12/21 from 9:30 am to 10:30 in the Volunteers Rm. email: <u>friendswaitearboretum@gmail.com</u>

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Note– membership dues will be sent out in the next Newsletter, Summer 2022. A lovely gift for XMAS in recognition of our beautiful University of Adelaide Waite Arboretum.





Macadamia tetraphylla. Rough-shell Macadamia. QLD 1929



This species has dense foliage and grows up to 18 metres in height. The leaves, which have toothed margins, are 7 to 25 cm in length. As the species name "tetraphylla" implies, it usually has four leaves equally spaced around each leaf node, whereas the other main commercial species "integrifolia" has a variable leaf number but usually three. It has long, pendant white to creamy pink to purple flowers, followed by woody, rounded fruits which are 2 to 3 cm in diameter and contain edible seeds.

Ironically, even as the macadamia has spread worldwide in commercial agriculture, it is now listed as a vulnerable species in its native Australia due to habitat loss and degradation.



Encephalartos laurentianus. Kwango Giant Cycad. Steve Geyer and Heinz Froehlingsdorf planting a new species on the September Palm & Cycad Society working bee. The Waite Arboretum Palm & Cycad Collection now comprises 327 specimens representing ~143 species.



Araucaria bidwillii Male strobili are up to 20 cm long, produced at the ends of short, lateral branches and made up of numerous spirally arranged scales, each with a diamond-shaped, expanded summit covering about 12 pollen cells. Trees bear seeds in 1-2 year intervals. Male flowers usually appear at the base of the crown in young trees and female flowers at the top. As the tree grows older, the male and female flowers move closer to each other.



Friends of the Waite Conservation Reserve 20th anniversary

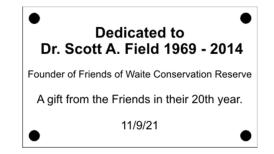
The FWCR 20th anniversary celebration was held on 11th September at the Netherby Spur Lookout on the Loop Trail in the WCR. The Adelaide Vice-Chancellor Professor Peter Høj unveiled a table to commemorate the late Dr Scott Field, inaugural President of The Friends of Waite Conservation Reserve. Peter Høj also spoke of the excellent work the volunteers do in the WCR.

For more detailed information on the life of Dr Scott Field see Peter Bird's article

https://friendsofwaitereserve.org.au/resources/newsletter/ April 2015 Newsletter.







The tables in the WCR are built by Innovation Engineering. The photo, by Clint Garrett. See the Arboretum to the left of the table especially Walter Young Ave. There is a Cedar of Lebanon, *Cedrus libani*, in the Waite Arboretum in memory of Dr Scott Field.

Seat of the Season. Terry Langham In memory of Ian JOHN Adelaide 1931 – 2013 and Birte JOHN Copenhagen 1930 – Adelaide 2006

Trees #407 and #408 *Quercus pubescens*, Downy Oak, FABACEAE. 1972. These oaks were planted by Professor J. A. Prescott on 14th August 1972. Prescott was a staff member from 1 October 1924 and Director of the Waite Institute from 1 May 1938 – 31 January 1956.







Spring in the Arboretum 2021





Ficus macrophylla. MORACEAE Moreton Bay Fig. NSW 1893



Rhodosphaera rhodanthema ANACARDIACEAE Deep yellow wood. NSW QLD. 2003 The genus includes this single species. Red flowers form in panicles in the months of September to October. Male and female flowers are sometimes on different trees. The yellow timber is fine grained.



Melaleuca xerophila MYRTACEAE This melaleuca occurs in arid locations in central SA and WA. There are around 23 melaleuca specimens in the Waite Arboretum and this one is flowering in the first 2 weeks of Oct. this year. There are over 200 species in Australia, growing from the tropical north to inland and coastal areas including Western Tasmania. A few tropical species grow in countries to the north of Australia. Flowers come in many colours and the bark and tree trunks on some species are unique.





Styrax officinalis STYRACACEAE Snowdrop Bush. Mediterranean, Asia, Americas.

There are 130 or so species of *Styrax* and they are the source of 'storax' a gum used in perfumery which is obtained by making cuts on the branches and collecting the exudate. The resin is used for cooking and medicine. The pure white flowers are scented and produce nectar. They occur in clusters of 3-6 and resemble orange or lemon blossom. Green fruit the size of cherries and covered with white felt take their place, the seeds of which are sometimes used for making rosaries.