

FRIENDS OF THE WAITE ARBORETUM INC.

NEWSLETTER 108 WINTER 2022

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](https://www.covid-19.sa.gov.au)



Waite Arboretum App



Patron: Sophie Thomson

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

Secretary: Johanna Crosby, **Treasurer:** vacant

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Committee: Joan O'Loughlin, Geoff Turner, Lynda Blake, Dr Barbara Radcliffe, Ramute Stankevicius, Jenny Birvé, Dr Kate Delaporte (ex officio) and Erica Boyle

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Eucalyptus pyriformis x *E. youngiana*. Pear-fruited mallee MYRTACEAE Hybrid. Planted 1957

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July 2021 Arboretum report. Dr Kate Delaporte

Michael Leunig: Winter

"Winter's come and I am glum. And that's a lovely thing. It sweeps away the sheer dismay that stupid humans bring. Winter, please, just make me freeze, and cool my burning brain; my over heated, much repeated, existential pain. Make me feel intensely real and lash me as you choose, so I won't dwell upon the hell of people in the news....."

Jolly good, thanks Michael for that piece of prose – it hit the spot today.

Winter is my preferred season, really, because I like cold and rain and crisp clear blue skies... and the promise of a drenching to revitalise the soil and plants. As is my usual opening, it's time for the weather! The average for the year is being met, with a very wet June. Phew. We've started mowing in the Arboretum again, and spraying under canopy to reduce fire fuel load. Like nesting swans, the annual "commencement of mowing" is a sure sign of winter. Our new approach of targeted spraying and high cutting deck for mowing is enabling more groundcover to remain over the soil – yes, a lot of it is annual and perennial 'weed' species, but the cover reduces evaporation and helps maintain biodiversity in the soil. Ideally, frequent mowing and timely spraying will reduce the weed seed bank; eventually we will not need to spray at all.

For those of you who are able to visit the campus, you may have noticed the earthworks in the area between the Battery House and the Community Garden. The Waite Campus' 'Indigenous Plant & Knowledge Garden' is taking shape! This simple garden is designed to connect the Community Garden with the Sensory garden, and will contain plants that are indigenous to South Australia (mainly) that are 'First Foods'; small herbaceous perennials and other low growing woody species that are edible. This will be primarily an educative resource for both the Waite Campus and the wider community, and we aim to incorporate indigenous language and stories about the plants through plant labels and interpretive signage. The project is supported by the Yitpi Foundation, the Arboretum, Urrbrae House and the School of Agriculture, Food and Wine. We hope to have it ready for an opening in the spring, but at the moment it's a bit of a muddy muddle! It complements the Native Grass 'Graminetum' located in the old Meteorological Station plots. A key thing for all gardens and plantings is the interpretative information, and we are working on that at the moment.

Last week I was part of an exciting workshop to discuss the "Green Urban Futures" initiative, developed by Professor Bob Hill from the Environment Institute, to bring together researchers and academics across the University who work with trees in urban spaces or related areas (eg health and well-being). I was given the opportunity to present the Arboretum as an important comparative site for research into how trees 'live' in urban spaces. With over 30 people involved, it was an inspiring discussion, and I have several new opportunities to follow up with researchers from North Terrace in the areas of shading, sap water flow, children in nature, and general community/climate change interaction.

2028 will see the 100th year anniversary of the Waite Arboretum plantings. This event should be celebrated, and we (the Arboretum team, with the FWA Committee) have a few ideas. I'd like to propose that a book is prepared – a combination of Arboretum Catalogue and History book, with features on iconic genera (eg *Dracaena*, *Quercus*, *Pyrus*) as a companion volume or within the same text. With barely 7 years to go, I need to get my skates on – if anyone is interested in being involved, please let me know, I need some persons to keep the ball rolling.

Finally... The Gate House relocation. President Wayne Harvey has provided information on the building, I will now share with you the proposed location. A number of options were put on the table during discussions, and the issue of losing large trees to the relocation was a big one. In the end, the proposed site of the Dry Rainforest Garden, was considered the best compromise. This site sits just west of the Labyrinth and is in close proximity to the Gardens and the Urrbrae House, is adjacent to Claremont Avenue for easy access, has no large trees, and the impacts of the relocation will be minimised. In addition to six *Pyrus* specimens, the site currently consists ~65 specimens comprising 32 species from 26 genera, mostly planted in 2008-09, to determine how these species would grow in the Adelaide foothills environment. There have been some standout successes, and some considered failures. At this time we are determining the extent of the proposed 'footprint' of the Gatehouse complex so we can see exactly what plants will be impacted. Erica and I will undertake an assessment of the specimens and determine the new location for those that have grown well. Some are excellent specimens, some are good but have major faults, some are poorly; we will seek to ensure that no viable species is removed from the Arboretum. Through July we will determine the new locations for the DRG specimens, which ones will be physically relocated and which will be replaced with new young plants. We are constrained by time and labour – every tree that is moved/replaced will need to be supported for a few years with watering and we need to be sure we are doing this in the most efficient way possible. More to come.

Tomorrow I commence a two week intensive teaching block, enthusing the horticulturalists, gardeners and (hopefully) Arboretum researchers of the future – it's an exciting but tiring period with much preparation, the delivery, and the marking, but an essential part of my role in within the University. See you on the other side....



Fruit of Pear-fruited mallee. July 2021 Photo JB

Report from the President FWA Dr Wayne Harvey

Our AGM for 2020 was held in early June and attended by about 50 members. The AGM was a good opportunity to share news about the plans by the State Government and the University for the ‘decommissioning and reconstruction’ of the Gate House. This is the phrase used by the State Government to refer to the meticulous dismantling of the Gate House and its re-assembly on another site, freeing up some of the Arboretum space for the expansion of the Cross Road-Fullarton Road intersection.

Rebuilding the Gate House elsewhere in the Arboretum will be accompanied by the construction of new rooms at the rear of the heritage building for use by volunteers with an interest in the Waite Campus. The University has invited various volunteer groups to participate in the development of designs for the expanded Gate House. The University is keen to ensure the expanded Gate House provides an asset for volunteer groups, such as ourselves, and I have represented the Friends at discussions with architects and planners in the design of the new building.

While detailed planning and documentation of the reconstruction work is still underway, we can note the expanded Gate House will provide office accommodation, an open space for meetings or activities, and storage for hand tools etc. The new complex will include kitchen facilities, toilets, first aid, and other amenities suited to volunteers at work in the arboretum. The expanded Gate House will be oriented North-South with the original heritage entrance facing South toward Claremont Avenue. The design of the new rooms on the Northern side will provide natural light through extensive glazing that will provide views into the Arboretum.

The Dry Rainforest area adjacent to Claremont Avenue remains the University’s preferred location for the expanded Gate House. This location will provide limited vehicle access and minimal parking off Claremont Avenue, mostly as short stays for service vehicles.

This will be a major undertaking by the University and the State Government. Much more preliminary work is required before on-site work can begin. The project could require 12 months of on-site activity once the decommissioning and reconstruction begins. The Friends will continue to be a part of that preliminary work and I encourage all members to participate where and when they can. The University will invite volunteers to be part of the effort to make this happen with minimal disruption to the Arboretum while providing an asset for all.



Pinus torreyana Soledad Pine, Torrey Pine PINACEAE California. 1954. The needles are up to 30cm long and the cones are heavy and can be up to 15 cm long. The only known wild stand grows in Southern California where the coastal fog supplements the 400mm per year rainfall.



Pinus pinea Stone Pine is notable for having a trunk clear of branches to a height of 3-10m. The canopy is often parasol-shaped and in this tree the lowest bough has become compromised, despite being supported by a type of tree crutch for many months. The tree looks healthy and balanced after losing this heavy bough. The bough has been cut into pieces and the pieces will be used in the labyrinth.



President of the FWA, Dr Wayne Harvey addressing members at the AGM.



Waldorf High School Gardening Students. Tuesday 22 June 2021. The group took a tour in the Arboretum and they were interested in the theme “Plants that provide for us”. Terry Langham introduced the tour.

Aboriginal Cultural Heritage Management Workshop. Jenny Birve

May 26 2021 Green Adelaide Region

Aboriginal Education Workers 163 Greenhill Road.

Spokespeople:

Allan Sumner descendent of the Ngarrindjeri, the Kurna and the Yankunytjatjara people from central Australia. Teaches Aboriginal arts and culture.

David Mott. Principal Consultant, Senior Archaeologist

The workshop was well attended with many volunteer groups eager to learn more about Kurna cultural heritage. I attended as a member of the Friends of the Waite Arboretum.

Allan Sumner told the story of Tjilbruke and the emu hunt. He talked about the burial sites around Adelaide and the need for respect and trust to protect land sacred to the Kurna people. David Mott mentioned that the Aboriginal Heritage Act dates back to 1988 and is specific for SA. Other States like VIC. have more recent legislation and SA needs updating to further protect important cultural sites.

<https://www.legislation.sa.gov.au/LZ/C/A/ABORIGINAL%20HERITAGE%20ACT%201988.aspx>

I felt that the workshop conveyed to us all that we are living among these amazing treasures, things like the shelter trees, petroglyphs, middens, rock paintings, burial sites- and to learn more about Aboriginal culture is certainly enriching to our life in Australia.

Garden of Discovery Working Bees By Erica Boyle

A proactive group of volunteers gathered at the Garden of Discovery on a winter morning of June for a working bee to keep the garden tidy and new growth under control. Our GoD WB volunteers are members of the Mediterranean Garden Society, South Australian Branch (SAMGS). Like every year we host four working bees for this lovely group of hardworking gardeners to come and help us keep the Garden of Discovery as beautiful and packed with plants as ever. The valuable advice, constant assistance and kind suggestions of the landscapers, artists and garden designers of the group are an additional bonus! This garden is also maintained by our regular team of Tuesdays and Fridays garden volunteers throughout the year. (New regular volunteers for this garden are always welcome!)

The Garden of Discovery was established in 1996 and in 2009, with the collaboration of the SAMGS, a major remodelling of the garden began. Since then, SAMGS donated and planted many Australian natives including eucalyptus, banksias, acacias and native grasses – some of these genera being subjects of research at The Waite. Native plants that are adapted to the soil and climatic conditions were selected for the garden offering shade, shelter and protection to birds and wildlife, adding a wonderful range of textures and colours through their foliage and flowers.

The SAMGS has developed a beautiful website highlighting the plant selection in the Garden of Discovery.

It also contains interesting information on climate compatible gardening using plants from the five Mediterranean regions of the world and a colourful gallery of handsome species to keep in mind at the moment of designing your garden. If this type of gardening is your cup of tea you can always become a member of the group and enjoy interesting talks and enjoyable events. Enjoy more information here:

<https://www.mediterraneangardening-southaustralia.com/>



Brachychiton rupestris planted in 2011 by SAMGS (sourced from SAMGS website) and current tree making an impressive statement at the eastern entrance of the Garden of Discovery.



Stunning *Lagerstromia indica* (Crepe Myrtle) trunks with Peter Waite's Garage as backdrop. Photos EB



Imposing shape of *Schinus molle*, Peruvian Peppermint tree from Peter Waite's time.

Thebarton Senior College volunteer in the Palm Section. Erica Boyle.

Creating habitat for our birds, bees, butterflies and other creatures. Erica Boyle.

Add water features to your garden and you will get a lot of visitors! If you are not planning to build a large pond in your garden (like the one in the photo) you can still provide a source of water for birds, bees and butterflies by simply adding a birdbath in your garden to create a little paradise for them. Placing it near a prickly bush, like the thorny *Acacia paradoxa* can provide not only food for birds when in bloom, but also shelter and a nesting site throughout the year.

Now that you have water and a shrub, why not to add some *Scaevola*/ fanflowers as a groundcover plant, a *Hardenbergia* as a climber, a couple of *Pimelea glauca* or *Correa* species for winter flowers and one or two *Cullen australasicum* for all year round provision of pollen and nectar for native bees and butterflies? *Cullen australasicum* has beautiful pea purple flowers that can grow from 0.5 up to 2.5m and it is also foodplant of the beautiful Chequered Swallowtail butterfly (*Papilio demoleus sthenelus*). As you see, with little you can attract beautiful creatures to your place and provide highly-in-demand habitat for our Australian wildlife.



Keep your birdbath/s topped up and clean.

Shallow, bowls of water at ground level between your plants are ideal for small lizards, geckos and blue-tongue lizards.

To create a better environment for us all a good start is to just provide some reliable water in your garden.

For more plant ideas to use in the Adelaide Plains and Mt. Lofty Region visit our Waite Arboretum BB&B section link here: <https://www.adelaide.edu.au/waite-historic/arboretum/BB&B/>

We have been very fortunate to receive a wonderful group of students accompanied by two lecturers –Sylvia and Lisa- coming from Thebarton Senior College, Intensive English Language Program for two morning volunteer sessions in the Arboretum. They visited us for an initial tour of the Arboretum lead by our wonderful guides who captivated the students’ attention and admiration for our wonderful collection of trees. Following the tour, the students were very keen to contribute their time on two beautiful sunny mornings to weed and mulch a large section of the palm trail. Heinz Froehlingsdorf, Secretary of the Palm and Cycad Society SA and palm expert gave the students an informative introduction to the site and to the exuberant collection of palms that he along with other PASCOSA volunteers have been developing during the last 25 years! It’s wonderful to see when different parts come together and generate great results. The effort the students (and teachers) put into these sessions has been captured in the photos below. Thank you TSC students!



Hardenbergia violacea Photo EB



Scaevola albida Photo EB



Flowers *Brachychiton rupestris*. Photo EH.

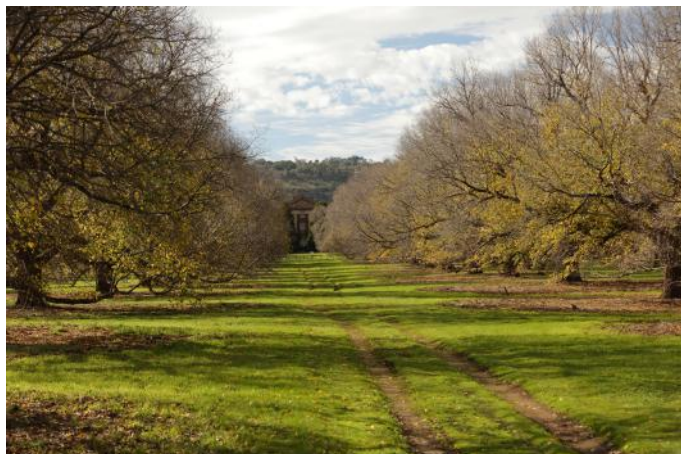


Macrozamia communis. Zamia, Burrawang palm ZAMIACEAE NSW 2000



Elm Avenue - English or Dutch?

Dr Jennifer Gardener



The Arboretum Elm Avenue is a splendid and dominating landscape feature on the Waite Campus, framing an eastwards vista from Fullarton Road to the centre of the main Waite building and an elevated westwards view from the main building to the sea. The avenue of 76 trees (#1101 - #1177) is listed on the National Trusts of Australia Register of Significant Trees (No. 190) with State Significance <https://trusttrees.org.au>.

The scientific nomenclature of these elms is problematic. The trees were supplied by C. A. Nobelius Nursery in Emerald Victoria which was instrumental in the introduction of elms to Australia in the early C20th. Our specimens were received as English Elm with the scientific name *Ulmus campestris*, a synonym of *Ulmus procera* which is native to Western and Southern Europe, and was planted in 1928 -1929.

Our Elm Avenue trees display great variability in the leaf characteristics which distinguish elm species. On any one branchlet leaves can be found of different size, venation, surface texture, hairiness, apex shape, marginal teeth, basal overlap of petiole, flat or contorted, clumping on branchlets or well spaced. It is clear that our trees are hybrids and do not closely fit *Ulmus procera* although some leaves display some of those characteristics such as small size, hairiness, and clumping.

The Dutch Elm *Ulmus x hollandica* is a natural hybrid between Wych Elm *Ulmus glabra* and Field Elm *Ulmus minor* which commonly occurs across Europe wherever the ranges of the parent species overlap¹. Confusingly Dutch Elm is commonly but incorrectly called English Elm². A variety of leaf types of Dutch Elm have been cloned in Victoria showing different proportions of the characters of the two supposed parents and at least three clones are recognised. Clone 'Hollandica', which our elms most resemble, sometimes intergrades with *U. procera*².

Both Field Elm and English Elm have a suckering habit and young suckers with corky branches like Elm Avenue. So our elms may have inherited that trait from one or both species. Managing these troublesome suckers is an ongoing challenge.

¹The current view is that the Arboretum Elm Avenue is closer to Dutch Elm with some English Elm in the mix. Perhaps *Ulmus x hollandica x procera* best describes this ambiguity. Hopefully future DNA testing will one day clarify its lineage.

¹https://en.wikipedia.org/wiki/Ulmus_x_hollandica

² Spencer, R., Hawker, J. & Lumley, P. (1991) *Elms in Australia* Royal Botanic Gardens, Melbourne

Atalaya hemiglauc Jenny Birvé



Atalaya hemiglauc Whitewood. Cattle Bush. SAPINDACEAE. Arid Aust. #268A

This species always looks magnificent in the Arboretum. (July 2021)

Hemiglauc is from Latin referring to the lighter coloured under-surface of the leaf. Found in the north-east corner of South Australia and in sandy soils in open woodlands in arid areas. Also found in Western Australia, Northern Territory, Queensland and New South Wales. This tree has some 13 different Australian aboriginal language names (Latz 1995). A distinctive tree to about 13 m high with grey scaly bark. Root suckers can occur and sometimes may occupy several hectares. The tree gum is found on the trunk and branches in big globs. For bushfood for the Arrernte people it is collected and made into a lump, kneaded until soft, and is then eaten.

The leaves on adult plants are all or mostly compound, and the leaflets are flat, entire, linear-oblong to oblanceolate, mostly 70-130 mm long and 6-18 mm wide. The flowers are white and have a distinct calyx and corolla.

The calyx comprises five, nearly circular hairy sepals and the corolla comprises five oblong much larger hairy petals. The fruit are very distinctive, being indehiscent but separating into fruitlets each with a prominent wing.

Although grazed by stock, fruits can be toxic to horses, but dried leaf extract has no ill effect.

The timber is uniformly pale-yellowish, soft with a fine close grain, and used by Aborigines for carving of artefacts.

Dehiscence is recognized as the splitting along a built-in line of weakness in a plant structure in order to release its contents, and is common among fruits, anthers and sporangia. Sometimes this involves the complete detachment of a part. Structures that open in this way are said to be dehiscent. Fruit pods can be divided into those that release the seeds (called dehiscent) at maturity, and seedpods which do not open at maturity (indehiscent) and require predation, or decomposition to release seeds.

[https://en.wikipedia.org/wiki/Atalaya_\(plant\)](https://en.wikipedia.org/wiki/Atalaya_(plant))

<http://eflora.nt.gov.au/factsheet?id=5342>

[https://en.wikipedia.org/wiki/Dehiscence_\(botany\)](https://en.wikipedia.org/wiki/Dehiscence_(botany))

Native Trees of SA. Woods and Forests Department



Atalaya hemiglauca Panicles 5-20mm long.



Atalaya hemiglauca Samaras grow to 20-40mm long, hairy, with wings erect.

Seat of the Season. Terry Langham

PROF. OTTO SCHMIDT 1947-2011

July 1947 – 31 May 2011



Trees nearby

Casuarina cristata Belah, CASUARINACEAE N.S.W. QLD 1957

Casuarina collina New Caledonia 1928 (right)

PROF. OTTO SCHMIDT

In 1977, he was awarded his Ph.D. from Freiburg, having worked in developmental genetics of the leafhopper.

“In 1991, he applied for the position of Professor and Head of Department in what was then the Department of Crop Protection at the Waite Campus of The University of Adelaide. He took up this position in 1992, and worked at the Waite until his death.

Otto was the sort of supervisor and mentor who inspires enthusiasm, love and respect in his students.

The three words which possibly best describe Otto are enthusiasm, optimism and generosity.

We honour his lifelong achievements and mentorship in insect immunity and host-parasite interactions ...” (Asgari 2011, p.16).

For more on Seat of the Season friendsofwaitearboretum.org

Winter in the Arboretum 2021



Eucalyptus preissiana subsp. *preissiana* MYRTACEAE WA



Corymbia #1817B MYRTACEAE



Eucalyptus kessellii subsp. *eugnosta* MYRTACEAE WA



Eucalyptus sporadica MYRTACEAE WA 1955



Jagera pseudorhus Foam Bark Tree SAPINDACEAE NSW QLD



Lyonothamnus floribundus Catalina Ironwood ROSACEAE. A monotypic genus of trees in the rose family. It is endemic to the Channel Islands of California, where it grows in chaparral and oak woodlands of the rocky coastal canyons.