

Fagus

November 2023

The Quarterly Magazine of the Friends of the Royal Tasmanian
Botanical Gardens



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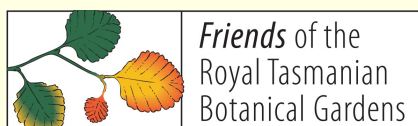
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From the Editor's Desk

Late spring, with its changeable weather, is a challenging time in the garden and the Royal Tasmanian Botanical Gardens (RTBG) is no exception. However, brave the wind, rain, sunshine, showers, high and low temperatures and come to visit the Gardens, there is always something interesting to see. The ducks and native hens have babies at this time of year so watch out for these cute creatures as you stroll around. The duck guarding the bridge (*cover photo*) was also guarding a partner and five ducklings below. I saw another duck with ten ducklings on the lawn below the Conservatory.

Welcome to the new and continuing committee members. It is a privilege to serve on the committee and is not a burdensome task. Approach the president, Lee, to offer your support. You will be welcomed and will gain an insight into the running of the RTBG. It is a good way to form closer connections with other members and Friends in a relaxed and friendly way.

The Director reports on changes to staff, visitor numbers and garden operations as well as upcoming events planned for the Gardens. Yann has included some lovely images of plants to look for in the Gardens.

The president, Lee Cole, gives us his report for the year.

Laura Wilson, Horticultural Botanist at the RTBG, writes about the insight she gained from many excellent speakers at the Tasmanian Community Landcare Conference she attended in October. The Conference was held at the Spring Bay Mill, Triabunna which many of you have visited.

Mike and Eileen Maskrey share their delight in visiting the National Botanic Garden of Wales while on an overseas trip this year. We cannot all get to travel overseas so reading this article gives us a taste of a very different garden.

Aina Dambitis continues her series on the home gardens of the RTBG staff giving us a deeper understanding of the people we encounter as they work tirelessly among the garden beds at the RTBG.

I have included another Significant Tree for you to find at the RTBG. The back story of these significant trees stimulates our curiosity about the wider world of big plants.

Friends News has words and images of the two latest successful events; a visit to the Hobart City Council Nursery and a trip to the Coaldale Walnut farm. There is also a reminder to get your photos in for the 2023 Photo Competition.

Idea images and articles for **Fagus** are always welcome, so if you have something you would like to share, please send it to me at my email address: fran.alexis@utas.edu.au

The cut-off date for inclusion in the February edition is **20th January 2024**.

I hope to see many of you at our December meeting, as that is our Christmas get together. The official part of the meeting will be short allowing plenty of time for chat over liberal amounts of festive food as well as tea or coffee.

Fran Alexis

Editor

Director's Report

Introduction

Spring is upon us and many of the Gardens' plants are in full bloom. As this will be my first full Spring season at the Gardens, I am enjoying the diversity of floral displays and of course, the warmer weather. The striking *Echium pininana* vigorously growing and multiplying in the Friends Mixed Border, are solid performers, delighting visitors with their unusual stature and tall dense flower spikes. This species, endemic to the Canary Islands is endangered and the *ex-situ* population is greater than the wild population. Each flower spike can produce over 200,000 seeds, it's easy to understand why we have so many.

I would like to welcome three new employees to the administration team. Katrina Oakley has recently started as the new Assistant Director; Katrina brings a wealth of knowledge from other roles including most recently within NRE-Tas at the Environmental Protection Authority. We also welcomed Lucia Alvarez to the team in October as the Executive Assistant. Lucia comes to us from her recent role at Spring Bay Mill as the Administration Manager. And finally, Tynesha Clark who recently filled the role of Administration Assistant. The addition of these new capable team members enables us to continue to deliver on a range of new initiatives as well as improve our customer service and administration functions.

Visitor Experience Project

The Visitor Experience Project has been kicked off with the appointment of Bence Mulcahy as the project architects. The RTBG team is working with the architects to scope and deliver on these significant facility upgrades. These upgrades will include a new Welcome Point including a café, washrooms and gift shop near the main gate, as well as renovations to the existing Visitor Centre. Archaeological site investigations have recently been completed in October. These results inform the next phase of the project with a design proposal expected to be complete before the end of the year.

Marketing & Events Update

Many of you will have visited the much-loved Tomato Plant Sale in October to get your pick of the seedlings. The event this year was another sell out success, not a single plant was left in the greenhouse. This important fundraiser helps to pay for upgrades to the Gardens infrastructure as well as our ongoing conservation programs.

November marks the beginning of our commercial events season, with major events and private weddings occurring throughout the warmer months. This events season, we are happy to support a new event. 'Cinema in the Gardens' will be showcasing movie screenings starting on 18 November and running monthly in December, February and March.

Our volunteers continue to play a crucial role in many of our efforts to keep our spaces well maintained and providing a warm welcome to visitors. On the 22 September we held a volunteers information day to provide training and knowledge sharing amongst the current volunteer cohort. Thanks to everyone who attended.

For those of you who are keen to learn more about the last years activities, the RTBG Annual Report is finalised and available for download on our website from the 1st of November.



**Left: *Echium pininana* and
Right: *Echium simplex* in Friends Mixed Border**

Garden Operations Update

The botanical team is working to release an updated Living Collections Master Plan. This document will assist with decisions to enhance and maintain the collections over the next decade. Alongside this important planning work, there have been several landscaping and building improvements completed during winter.

The new Olive Terrace below the Superintendent's Cottage is now complete with a new lawn and garden landscape, this area has an impressive outlook over kalamata olive trees and can be booked as a private event space. Either side of this new space are two other upgrades. The Pod venue has new exterior cladding, and a fresh new Easy Access Greenhouse has been glazed. The new Greenhouse will showcase plants from tropical climes while incorporating pineapples and other plants from the bromeliad family. This new space is expected to be available for visitors in early 2024.

The area located immediately to the east of the Tasmanian Community Food Garden will soon be developed into a function and event space that will cater for medium to large scale social functions. This area is currently roped off and awaiting permits.

Thanks to our hard-working Garden Operations team and the wider RTBG team for the ongoing work to improve and maintain the surroundings in preparation for our busy tourist season and the warmer months.

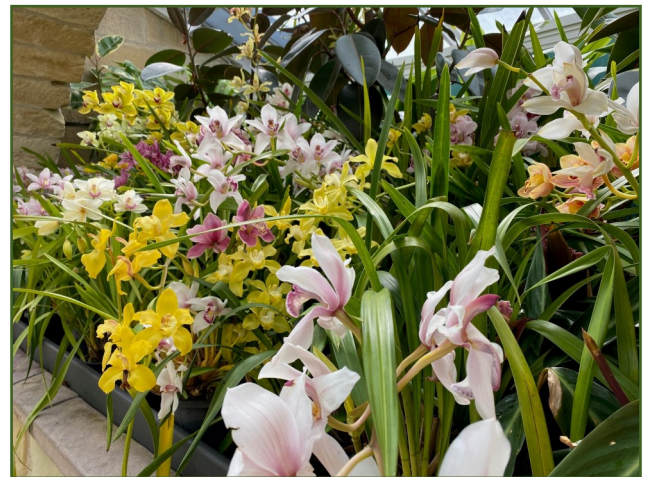
Our opening hours have recently extended to 6.30pm so I encourage you to come and enjoy the gardens as the days get longer.

Kind Regards,

Yann Gagnon

Director

Royal Tasmanian Botanic Gardens



Clockwise from top left: *Azalea mollis* in Japanese Garden; *Cymbidium* orchids display in Conservatory; *Telopea speciosissima* near Visitor Centre; *Disocactus ackermannii* in Conservatory and *Aloe plicatilis* in Resilient Garden



President's Annual Report 2022/23

During the last year Friends have maintained their links with the RTBG through continued meetings, events, volunteering and involvement. Regular meetings and conversations with the Director and staff ensure we are aware of current and upcoming developments and plans for future directions.

I know many of us feel the loss of engagement in recent years due to changes and alterations to policy and structure. The work of Friends over many years has been well recognised, has resulted in much financial and practical support across the Gardens, and is well documented.

There remains a core of members who volunteer in Gardens activities: the 'Begoniacs' continue their work propagating and potting on begonia species for use in the conservatory displays. Behind the scenes, with staff support and direction, Friends can be found volunteering in the seed bank, and working tirelessly to support gardens staff with the annual Tomato fundraiser. Others welcome visitors to the Gardens at the Hub, where they meet, greet and share their enthusiasm and knowledge or provide support by driving buggies. The majority of members participate by regularly attending our quarterly general meetings with guest speakers, attending themed guided walks in the Gardens, as well as enjoying outings and visits off site to places and gardens of interest. I encourage your active involvement.

Friends has supported the professional development of RTBG staff by funding attendance at conferences, most recently the Gardens' botanist Laura Williams.

The committee has met on a monthly basis managing day to day decisions and importantly liaising through the Director and staff on activities and developments in the Gardens. We have been kept informed of proposed developments and strategic review processes and have discussed future potential for Friends' engagement. You may well have contributed to the recent survey about the strategic review.

Members enjoying the visit to the Hobart City Council Nursery

Over the next few months, we look forward to hearing more and seeing these plans and proposals come to fruition.

Fagus continues to be a well-received publication thanks to the editorial skills of Fran Alexis and Kay Hayes. Published quarterly, the magazine includes a variety of articles from members and staff, and provides interest and focus about the Gardens, its special plantings, the work done to maintain and ensure the survival of rare plants, as well as fascinating articles about the Gardens from the past and into the future. Your contributions are always welcome.

Our annual display at the Kingston Library continues with recent acknowledgement being received. I particularly thank Jenny Parrott and Wendy Bowman for their dedication in raising awareness of the RTBG and Friends through the mounting of these displays. Exhibitions in the Gatekeeper's Cottage usually follow on from this activity. Currently access to this Friends space is restricted due to its use as a staff lunchroom. A new memorandum of understanding is in the pipeline for the use of and access to the Cottage by Friends.

As always, I encourage you to become engaged in the work of Friends by joining the committee, attending our regular meetings with guest speakers, and taking part in tours and events. The committee welcomes suggestions and ideas for visits, fundraising and events.

In closing I would like to acknowledge the work of all committee members for their dedication and individual efforts in supporting the work of Friends. I look forward to new and exciting opportunities when plans and developments are unveiled.

Lee Cole, President



2023 Tasmanian Community Landcare Conference

On the weekend of 14-15th of October, James Wood and myself attended the Tasmanian Community Landcare Conference at Spring Bay Mill, Triabunna. Conference presentations were varied – plant related presentations included Tassie’s Big Trees (a self-guided tour to see Tassie’s Giant Trees can be found here: Big Tree State), control of sea spurge and marram grass (a great success story of dramatic reductions in coastal weeds due to volunteer involvement, and a promising biocontrol: Will *Venturia paralias* stamp out Sea Spurge? - Landcare Tasmania), cultural landscape restoration and fire repatriation to return Clarke Island to a more natural environment (see Tasmanian Aboriginal Corporation), Tools for Private Land Conservation (a ‘Schedule 5’ can be used in a similar way to a Conservation Covenant to protect native vegetation on properties) and an interesting keynote by Pep Turner on how important science and on-going monitoring is in developing and reviewing management plans for threatened plant species.

On the Sunday we attended a very inspiring fieldtrip around Spring Bay Mill and the next-door venture, Sea Forest. Spring Bay Mill has a sustainability mission to practice ecological regeneration and promote sustainable living for a net positive effect on the world. Spring Bay has an on-site nursery producing over 2 000 seedlings per year, with more than 25 000 native plants used to restore the site so far. School groups spend time on the site to learn plant propagation and horticultural methods and cultural burning practices have been reintroduced in the site’s natural bushland.

James was part of a lively discussion on seed banking with fellow seed collectors Andrew Steveson (Wildseed Tas), Herbert Staubmann (Habitat Plants) and Ruth Millison (the Understory Network) talking

about concerns around the apparent decline in quality native seed availability, difficulties in accessing seed due to permitting restrictions and ideas to establish a community seedbank to make seed more available for restoration and revegetation work around Tasmania.



Spring Bay Mill. Facebook @vincent.rommelaere



Native plantings at Spring Bay Mill have both aesthetic and biodiversity benefits.



The organic kitchen garden at Spring Bay Mill.

Spring Bay also has a beautiful organic kitchen garden to supply the Mill with fresh, local wholesome food for events and to maximise biodiversity.

The next-door venture, Sea Forest, recently featured on Australian Story. Headed up by Sam Elsom (previously a fashion designer!) the company grows *Asparagopsis taxiformis* seaweed and turns it into a liquid supplement that can be fed to cattle to reduce methane emission and help combat climate change. The facility grows the *Asparagopsis* seaweed at two different life stages – a mature form grows on an old mussel lease off Triabunna with the seaweed growing to a harvestable age within only 8 weeks. An immature stage, known as ‘pom-poms’ are grown in land-based tanks with a third of the stock able to be harvested every few weeks! The seaweed is then processed on-site into a liquid supplement that can be fed to ruminant animals (both sheep and cows). A bioactive compound in the seaweed inhibits the enzymatic pathway which produces methane at the last stage of digestion. Methane has a global warming effect 28 times that of CO² causing livestock to contribute 16 % of global greenhouse emissions. Animals whose diet is supplemented with *Asparagopsis* seaweed can achieve methane reductions up to 90 %. Hydrogen is released into the atmosphere instead of methane, and the carbon (which would otherwise be incorporated into the methane) is available for the cow to use as energy, thus resulting in the accelerated growth of livestock and less feed and resource wastage. Currently this methane reduction only applies to cattle in feed lots where they can be continually fed the supplement.

Sea Forest have a dedicated team of scientists who are doing all kinds of research into alternative ways of distributing the supplement so that it can also reach cattle in range-land situations, and looking into how the *Asparagopsis* can be grown all around the world and make the supplement available to the whole industry. It was very inspiring to end the conference with two such positive success stories!

**Laura Williams,
Horticultural Botanist, RTBG.**



Left: Land-based cultivation of *Asparagopsis* seaweed at Sea Forest

Above: Experimental tanks of *Asparagopsis* at Sea Forest

Exploring a Welsh Wonderland

One of the gardens that was definitely on our 'must visit' list on our recent overseas trip was the National Botanic Garden of Wales. However, we were aware from our research that it was located in a relatively isolated region not well served by public transport. So, when Mike's cousin and his wife, with whom we were staying at the time, asked "where would you like to visit on a 3-day trip?", we immediately answered "Wales! And can we please include the National Gardens?" Our request was readily agreed to, and in mid-July we arrived at what in Welsh is entitled '*Gardd Fotaneg Genedlaethol Cymru*'.

The National Botanic Garden of Wales is located in Carmarthenshire near a place called Llanarthney which is in the valley of the river Tywi. Prior to it becoming a botanical garden, the site had a rather chequered history. In the 17th century the estate was owned by the Middleton family who built a manor house there. In 1789 Sir William Paxton purchased the estate with the view to create a water park. A new, finer mansion was built which became the new Middleton Hall. Nearby Paxton had another building constructed, known as Principality House, which became the servants' quarters. At the time of Paxton's death in 1824, Middleton Hall estate covered more than 1,000 hectares. It was then sold to a Jamaican-born West Indian merchant, Edward Hamlin Adams, who was not interested in maintaining the gardens or water features and used it only for country sports, adding new buildings solely for that purpose. When Adams died in 1875 the estate was inherited by one of his daughters, who had married into a local farming family, named Hughes. In 1919 the estate changed hands again when Major William Hughes sold it to Colonel

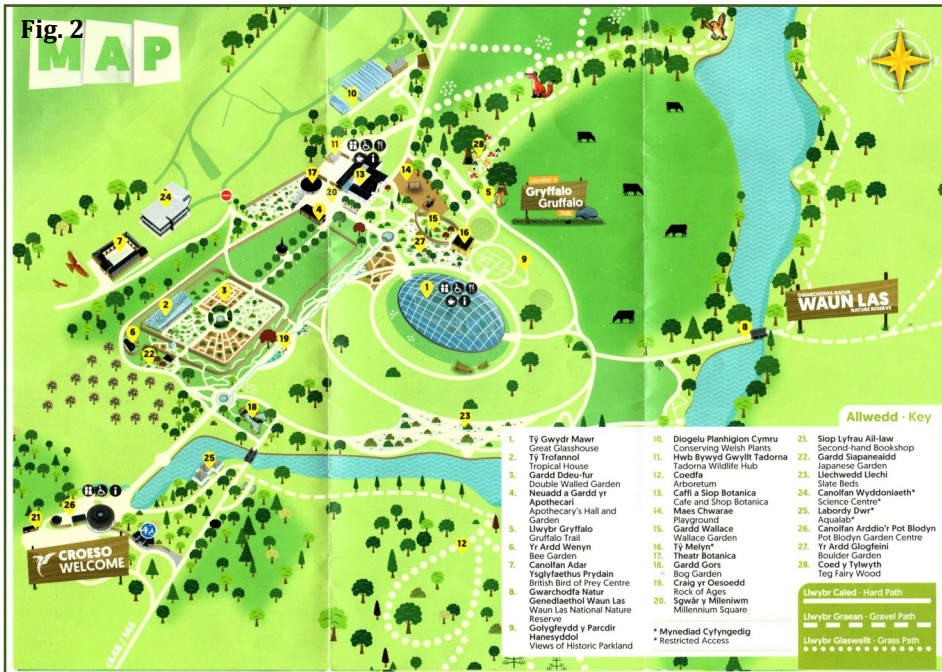
William Jones. In 1931 Middleton Hall was completely gutted by fire. It stood as a ruin for a further 20 years before being pulled down. The site was purchased by Carmarthenshire County Council who leased it out to young farmers embarking on a career in agriculture.

The estate had always had a good number of walking tracks and the landscape was always much admired. In 1978 a group of local walkers started to raise funds in order to restore the area to its former glory. The idea was put forward to establish a garden on the site, and under the guidance of the Welsh Historic Gardens Trust, an application was made to the Millennium Commission to fund a national botanic garden. The garden was first opened to the public on May 24th 2000, and the official opening by Charles, Prince of Wales (now King Charles III) was performed on July 21st of that year. The entire site extends to approximately 230 hectares. Much of this is taken up by the Waun Las national nature reserve, which comprises about 150 hectares that can be directly accessed from the botanic garden proper, and is made up of woodlands, wildflower meadows and pastures as well as a number of lakes, streams and waterfalls.

Having lodged overnight at a B and B fairly close by, we were able to arrive at the gardens as they were opening up. It was a Monday – the one day in the week that dog owners are allowed to exercise their pets within the gardens and surrounding parklands as long as they are kept on a leash. Dogs, however, were not allowed within any of the buildings or enclosed gardens, being confined instead to the numerous pathways and grassy areas. As with the RTBG, buggies were available for garden tours for those not wishing to walk (Fig 1). We commenced our own personal tour at the entrance to the gardens marked '*Coeso* (Welcome)' on the map (Fig 2) and proceeded straight ahead up the central pathway, passing on our right (#19) a series of geological exhibits in the form of groups of rocks and boulders transported there from all over Wales. The various groupings of rocks (there were six altogether) were accompanied by explanatory texts that spelt out the geological histories of the Welsh landscapes over the eons (Fig 3).



Fig. 1



comprising 785 panes of glass, covering 4500 square metres (Fig 4). The dome is orientated in a fashion that ensures maximum daily sunlight year-round. There are 147 computer-controlled vents to regulate air flow through the dome and heat is provided from a biomass furnace that prevents the internal temperature from dropping below 9 degrees C in cold weather. The landscaping within the dome was undertaken by landscape designer Katheryn Gustafson and comprises five world



geographical zones, each with a Mediterranean climate. These consist of the Mediterranean Basin itself (along with the Canary Islands), Coastal California, Chile, the Cape Province of South Africa and the south of Western Australia (Fig 5). Interestingly, the Great Glasshouse now occupies the space once occupied by Middleton Hall prior to its destruction by fire. This is most likely because it is sited in the most prominent part of the estate with wide views in all directions. Another useful fact for



The path continued a rising trajectory until we arrived at what the garden planners consider its crowning glory – the Great Glasshouse (#1). This was designed by the architect Lord Norman Foster and is the largest single span glasshouse in the world, being 110 metres long and 60 metres wide with its dome,



the trivia buffs is that in 2009 the dome was used for a scene in an episode of *Doctor Who* entitled 'The Waters of Mars'.

>>>>



On re-emerging from the Great Glasshouse, we encountered another very interesting set of gardens, clustered around Paxton's original Principality House, now simply referred to as Ty Melyn and currently used for accommodation by the horticultural staff (#16). Figure 6 shows this building above the Boulder Garden (#27). Of particular interest to us was the walled Wallace Garden (#15). This was created in homage to the naturalist and pioneer of the theory of evolution Alfred Russell Wallace (1823-1913) who was born in the village of Llanbadoc, near Usk, in what is now Monmouthshire. Along the south wall of the Wallace Garden there is a fascinating display explaining the evolution of the earth's earliest plants – the non-flowering plants. One plant to be found in this display is the Wollemi Pine (Fig 7).



Descending westward from the Wallace Garden we entered Apothecary's Hall (#4). Here we discovered a wonderful exhibit showing the importance of plants in the production of medicines. The accompanying Apothecary's Garden is laid out in a most intriguing manner. Instead of each garden bed containing botanically similar specimens or plants

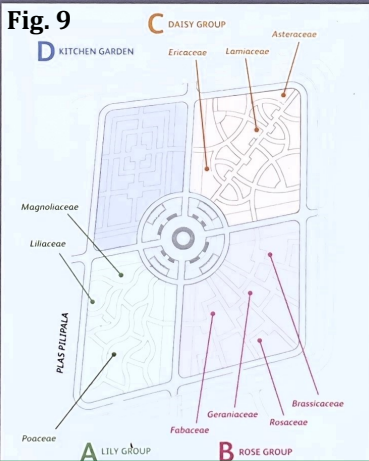


related geographically, each bed instead consists of plants which have an influence on the same body system. For example, there was one bed of plants which had effects on the nervous system, another concerning the respiratory system, another the digestive system, and so on (Fig 8).

Proceeding south-westward from Apothecary's Hall we encountered the Double Walled Garden (#3). This is divided into four quadrants, three of which continue the theme of plant evolution, this time dealing with the flowering plants (Fig 9). One quadrant is devoted to each of the following flower groups: Lily, Rose and Daisy. The remaining quadrant is given over to a Kitchen Garden, reflecting the original use of this garden 200 years ago. Within the Double Walled Garden, but to the western edge of the flower group quadrants, can be found the Tropical House (#2) which is the glasshouse that can be seen in the background in Fig. 10.

THE GARDEN IS DIVIDED INTO 4 QUARTERS

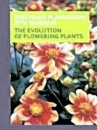
Fig. 9



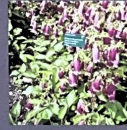
Quadrant A features plants which emerge from the ground with one seed leaf—the Lily Group. Most have leaves with parallel veins and smooth edges, and flowers with parts in 3s.

Quadrant B and C are made up of plants which emerge from the ground with two seed leaves—notice their branching leaf veins and flowering parts in 4s and 5s. Plants in **Quadrant B** evolved along an evolutionary branch we call the Roses Group. In **Quadrant C**, plants evolved along an evolutionary branch we call the Daisy Group.

Quadrant D is given over to a Kitchen Garden, reflecting the original use of this walled garden over 200 years ago.



Take a booklet from the dispenser below to learn about 10 fascinating plant families.



As its name suggests, this glasshouse contains plants of tropical origin, including bananas (Fig 11). Immediately to the south of the Double Walled Garden is found a small, but very beautiful, Japanese Garden (Fig 12).

After several hours of fascination and delight, we exited the gardens via the 'Pot Blodyn Garden Centre' (#26) where all sorts of whimsical and quirky items were available for purchase (Fig 13). So, in conclusion, we found the National Botanic Garden of Wales well worth a visit. We had learned a host of new facts concerning geology, geography, ecology, plant evolution, pharmacognosy (the derivation of drugs from natural sources), and much more. Children are also well catered for. There is a regular playground (#14), but over and above this is a fun trail relating to Julia Donaldson's children's book 'The Gruffalo'. The Gruffalo's trail (#5) leads you through Teg Fairy Wood (#28) and beyond, but we resisted this temptation!

Mike and Eileen Maskrey

Fig. 10



Fig. 11



Fig. 12



Fig. 13



A Garden for a Busy Person

Aina Dambitis

Have you ever wondered what kind of gardens the staff of the RTBG have at home? Are they dream gardens, worthy of appearing in a television series? Are they immaculate, planned, dramatic? Are they full of veggies but no bugs? No weeds. Or are they just a place to park the car?

Horticulturist Kathryn Saunders has created a stylish and sensible garden. She doesn't want to spend all her free time at home weeding, she says, and so the garden is designed to be relatively easy to maintain.

At the RTBG you will usually find her working in the resilient garden or round the POD and cacti area, or the lily pond or the conservatory terraces and long bed. She is the acting leader of the Eastern Team. Some of those areas have changed dramatically in the last few years. The team has created new designs for those spaces.

Kathryn's suburban garden is in a street where everyone gardens, each in their own way, creating their own version of Eden. There are trees and shrubs and flowers of all kinds from all over the world. Two of her neighbours have hedges along the common boundary fences (one prunes her side of the hedge but one doesn't). Mt Nelson is not too far away. The block is level. The soil has a large component of clay. She has lived there for about twenty years.

Despite the land looking so flat, the house has been flooded twice. Each time a sheet of water flowed over the ground, under the laundry door and into the house. That was the trigger for large scale drainage works along one side of the block, lots of digging and

pipes and plumbing and then, of course, there was the opportunity to rework the entire backyard and plan a new garden along that boundary fence line. New soil was trucked in, garden plots marked out and irrigation lines laid.



Now, that side area is full of established but still fairly small plants. The plot is edged with timber to separate it from the lawn. The *Acers* are bare when I visit but have provided autumn colour. Magnolias have thick green leaves which stay all year round. *Leucadendrons* are flowering in this time of late winter. *Salvias* will have blue flowers soon. Clumping, strappy plants are everywhere. New Zealand flax is growing vigorously. Many of the small, low plants grow in between the big show-stoppers, flowers on spikes and spires and long flower stems.



There is a repetition of shape and foliage type. Clumps with long, fine leaves reappear, again and again.

That rhythm of shape and form continues throughout the backyard. A circle of Tufted hairgrass, or Tussock grass, has flowered and is now a pale bone colour. The dry fronds shiver in the wind. Those seed heads will be cut back soon. They contrast with the purple-blue flowers of several *Alyogyne*s, our lovely native hibiscus.

There is an area for vegetable growing. There is a section for fruit trees, mainly citrus, but unfortunately the possums have found them. Possums run along the fence line and nibble the new growth. There is also quite a lot of lush green lawn. Jojo, the young kelpie, plays with her ball and runs. It looks like a well-behaved lawn which stays within the timber edging and doesn't creep into the flower beds.

The garden on the other side of the house is edged with a long curving line of the New Zealand Wind grass. There is so much of it that it dominates that side of the block. It separates the house from parked cars. The orange rusty colour is a surprise because the colour is so different from every other plant in that area. The auburn tones start to appear in autumn and continue into summer. It will flower later, which I would love to see. This ornamental grass is drought tolerant, will self-seed and only needs a bit of a tidy up, no fuss. The line of grasses sweeps up to the bush garden at the front of the house.

There is no front fence. Privacy from the street is created by building a mound of earth, placing some large boulders and covering it all with plants.

The dark leafed tea tree sprawls over the boulders. *Leptospermum obovatum* "starry night" will be covered with white flowers later in the season. *Banksia praemorsa* stays low and bushy and is full of flower spikes. Kangaroo paws clump along one side. *Dianellas* creep between everything. It is windy and only the strong survive out there. One remaining *prostanthera* shelters behind the tea tree. It adds some purple colour to the arrangement of plants. If you were walking along the pavement, it would feel as though you were walking past a patch of bush.

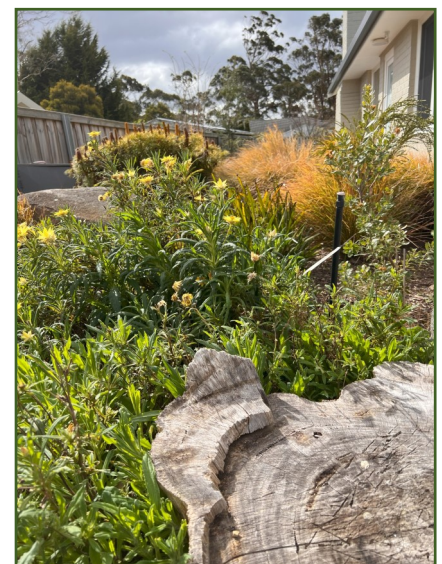
This is a stylish and sensible garden:

Stylish because the shape of the plants is coherent. The bushy, strappy, grassy look holds it all together. However, there is enough variety of foliage and colour to turn what could be an arid desert look into a green and vibrant garden.

Sensible because it needs less and less work as the plants grow. Thick mulch reduces the number of weeds and makes it fairly easy to pull them out. The lawn is contained within definite edges. The plants are hardy so need minimal watering or fertilising. Some pruning and shaping is required but it is manageable.

Each season will show off favourite trees and flowers. Kathryn's favourite plants are the red flowering kangaroo paws, the *acers* with their bright autumn foliage, and the *leucadendrons* for their constant colour.

When I visited, my heroes were *Deschampsia cespitosa*, the Tufted hairgrass, and *Anemanthele lessoniana*, the New Zealand Wind grass.



Significant Trees in the RTBG

Number 23: Canary Island Pine or *Pinus Canariensis*.

The Canary Island pine, *Pinus canariensis*, is a significant tree at the Royal Tasmanian Botanical Gardens. You can be forgiven for not noticing it because at eye level it is just another large tree trunk if you come to the Gardens via the steps leading down from the top car park to the main gate. In fact, it has several trunks and at about 26 m high the top of the tree is largely out of sight. It is an old tree, possibly planted sometime between the 1840s and 1878. Because of its height and position it is very difficult to capture in a photograph.



The Romans learned of the Canaries through Juba II, king of Mauritania, whose account of an expedition (c. 40 BCE) to the islands was preserved by the writers Plutarch and Pliny the Elder. The latter, in his *Natural History*, Bk. 6 Ch. 37, writes of "Canaria, so called from the multitude of dogs [*canes*] of great size." Volcanic in origin, the Canaries are comprised of a number of Islands, with the largest stands of Canary Island pine found on the islands with the highest mountains, Tenerife and La Palma, where it is the most abundant tree on the Islands. These islands have intrigued botanists for over 200 years because of the number of new (and endemic) species found there. Alexander von Humboldt, the German scientist, explorer and naturalist, spent a week on Tenerife in the year 1799 and in the same year the first natural history book on the Canary Islands, comprising species lists, and written by Viera y Clavijo, a Spanish botanist, explorer and professor, was released. Knowing about Humboldt's experiences, Charles Darwin was keen to botanise when the *Beagle* arrived in Tenerife in January 1832, but he was disappointed as nobody was allowed to leave the ship due to quarantine restrictions.

The Canary Island pine, *P. canariensis*, was first described in 1825 by Augustin Pyramus de Candolle, a Swiss botanist who established scientific structural criteria for determining natural relations among plant genera. He attributed the name to Christen Smith, a Norwegian botanist who accompanied the German geologist, Leopold von Buch, on his voyage to the Canaries in 1816.



It is considered significant because it is a singular example of the species at the RTBG. Like many of the large pines I have discussed in previous issues of *Fagus*, the original population of this type of tree is greatly reduced. It is endemic to the Canary Islands, an archipelago 108 km off the northwest African mainland.

Smith found and named the species along with many other plants new to science. The following year Smith was commissioned by the Royal Society to botanise in the Congo. While there, he died of a tropical fever at age 31.

The common name of this significant tree, Canary Island pine or *Pinus canariensis*, celebrates the origin of the plant on the Canary Islands. The botanical name reflects the Latin name for pine, *pinus* and the origin these pines, the Canaries, from the Latin *canes*, 'dog' (see above). In the family Pinaceae, the genus *Pinus* is easily recognised for having long, evergreen needles held in bundles. *P. canariensis* has been placed in subsection *Pinaster* of subgenus *Pinus*, section *Pinus* and the species is *canariensis*.

Forests of Canary Island pines grow between 600-2000 metres elevation and are dense in the northern cloud belt of Tenerife while those in the drier south and west are more open. The forests in the northern cloud belt are an important source of water, as the typical 50 cm per year of rain increases to over 200 cm due to fog drip from the needles which then supplies irrigation water essential for the islands' economy. The trees generally grow to between 15 and 25 metres in height and the trunk is about one metre in diameter. The main root system is strong



and extensive which allows it to colonise poor soils including lava flows and pyroclastic fall-out.

At the RTBG, our Canary Island pine is average for this species and has several trunks. The deeply fissured bark is a striking feature as you can see from the image of the sign.

In its native habitat the bark of Canary Island pine gives this tree an ability to resist fire and also hides epicormic shoots beneath so it has the facility to sprout again after fire.

The trunks are generally straight leading to upswept branches forming an open crown, which is broadly ovoid or conical. Like most conifers the leaves are reduced to needles and on the *P. canariensis* these needles are long (15 – 20 cm) and held on the tree for three to five years. Held in bundles of three, the needles have a persistent (2 - 3 cm) sheath, are bright green and slender with fine lines of stomata on all three faces.

At the RTBG the green needles are out of sight growing so high in the canopy and we only see them when they are dry and fallen where they form a thick mat under the tree.



Unopened Canary pine cone

The seed cones of this pine are also very hard to see at the top of the tree. The seed cones are symmetrical, hard and heavy. They are ovoid/conical in shape, 10 - 20 cm long and 5 – 7 cm across when unripe. Mature cones are only seen when they have been stripped and dropped by Yellow-tailed Black Cockatoos who feed on the ripe seeds, shredding the hard scales of the cone back to expose the seeds (pine nuts). The scales surrounding the seeds are stout, woody and thick. Seeds are about 12 x 6 mm with a persistent wing. Unripe cones are often dislodged when the birds feed and the cones fall to the ground. The husks of the ripe cones are also dropped to litter the ground below.



Stripped cone, dry needle and seed

The timber of the Canary Island pine has been used extensively from ancient times to build almost everything; houses, weapons, boats and tools. It is this harvesting for timber, along with clearing for agriculture which has reduced the forests of *P. canariensis*.

In times past, the dry needles of the Canary Island pine have been used for the protective packaging of bananas, an important export of the Canary Islands and the pine nuts are used for food.

Now widely planted throughout the world as an ornamental, *P. canariensis* is occasionally grown as a plantation species. In Australia it is naturally regenerating and invading native habitats of mallee shrublands. The Canary Island pine is typical of the botanical material available and favoured in the 1800s for its scientific and aesthetic appeal for botanical gardens, parks and large private estates.

Fran Alexis

Sources:

<https://marcacanaria.com/en/el-pino-canario>

Canary Island Pine (*Pinus canariensis*) · iNaturalist

Australia (ala.org.au)

www.conifers.org/pi/Pinus_canariensis.php

www.britannica.com

<https://www.researchgate.net/>

Friends' News

Visit Hobart City Council Regional Nursery

On Thursday 24 August about 20 Friends of the Royal Tasmanian Botanical Gardens visited the Hobart City Council regional nursery at Mornington, facilitated by Nicole Conway, a Friend of the Gardens who is also a trainee there.

The City of Hobart operates this industry-accredited nursery, growing high-quality plants, which it provides to government at all levels in Tasmania. Its products include advanced trees, native tube stocks and exotics for Hobart's street-tree planting project, flowering annuals and potted indoor plants as well as floral displays for special occasions.

Chris Barton, the Supervisor, Nursery Operations, with the help of Nicole and Sam, trainees at the Nursery, showed us around and answered our questions.

This nursery produces more than 30,000 plants each year for the Hobart council area, including Parliament House, government departments, schools, care groups and other councils' parks and gardens in Tasmania.



Advanced trees



Cinerarias, ready for garden planting

As soon as we arrived, the great mounds of mulch we saw indicated that we were at a serious nursery.



Mulch on a grand scale



Cymbidium orchids

Earlier this year, within its overall plan to improve and enhance Hobart's green space, on behalf of the City of Hobart, it offered Hobart residents more than one thousand plants for its nature strip program. Together with these free plants, it provided specialist horticultural advice for their planting and care.

The Nursery also has occasional plant sales which it publicises on its Facebook page and through local media.

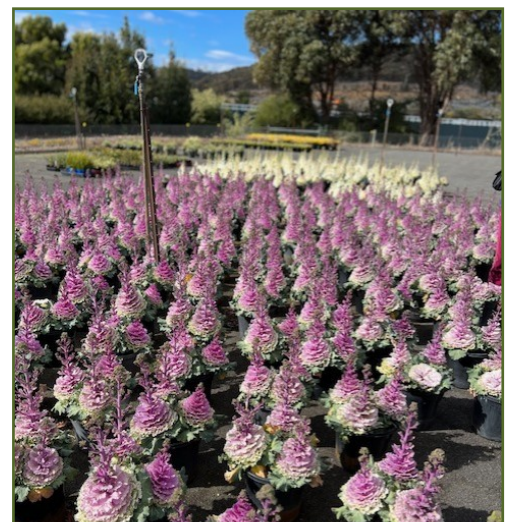
All those who visited the Nursery came away inspired and hoping to share in Hobart City's program or to influence their own council's garden plans.

Elizabeth Haworth

**October
2023**



Indoor plants



Ornamental Kale

A Visit to The Coaldale Walnut Farm

A small group of Friends visited the Coaldale Walnut Farm near Richmond to find out a bit more about the growing and processing of Walnuts. Despite some wind and slight rain, it was a good day to visit the trees which are just coming into flower. Coaldale is a small farm, established by Phil and Jane in 1997. They have since been joined by their daughter, Sophie and son-in-law Brad and work the farm as sustainably as possible with all waste shells and leaves returned to enrich the soil, avoiding chemical use as much as is practicable. The trees were only just coming into flower; we saw three tiny flowers on the end of a shoot but most trees had plentiful pollen catkins and some were starting to leaf out. We walked among the 1500 trees and heard about the varieties, mostly *chandler* and *franquette*, and their different characteristics and the hazards of frost and untimely rain.



Above: Pickled walnuts and brie on crackers.

Above right: Pollen catkins

Below right: Tiny Walnut flowers

The machinery for sweeping up the fallen nuts from under the trees as well as those for washing, drying and sorting and grading were displayed in their dormant position. The cracking machine was in noisy production so we saw the intensive work of sorting for the production of kernels for sale. As well as walnuts in the shell and kernels the farm produces pickled walnuts. For these, the walnuts must be hand-picked at a certain size and maturity during a short three-week period before they are pickled and bottled for sale. A chance to sample pickled walnuts on crackers with cheese and fresh kernels came at the end of the tour so we nibbled while watching a short video of the farm in summer production. The produce from this farm is very good – I have been buying their walnuts in the shell for a long time and am now sold on their pickled walnuts, they are so much nicer than any others I have tried.

Thank you, Elizabeth, for organising this outing.

Fran Alexis



Welcome to New Members

It is with pleasure that we welcome the following new members to the Friends of RTBG: Alison Morgan and Lorraine Perrins

Anne Crawford

Membership Officer

Benefits of Membership

In addition to knowing that you are kindly supporting and promoting the Royal Tasmanian Botanical Gardens (RTBG), you will also receive our quarterly magazine, *Fagus*. We have four meetings each year with specialist speakers on gardens and plant-related topics, and opportunities to participate in outings and activities.

You can receive discounts on *Neutrog* garden products during our twice yearly offer; and free entry to the RTBG Tomato Sales (normally \$10).

Available **only to single/joint membership** and not affiliate members, discounts are also offered on selected purchases at participating plant nurseries, garden centres and retail outlets. It is essential that you show your RTBG membership card at the time of purchase.

Botanical shop – RTBG – *10% discount*

Chandler’s Nursery – 75 Queen St, Sandy Bay – *5% discount*

Greenhill Nursery – Leslie Vale – *10% discount*

Julie’s Nursery – 2273 Huon Highway, Grove – *5% discount*

Plants of Tasmania Nursery & Gardens – 65 Hall St, Ridgeway – *10% discount*

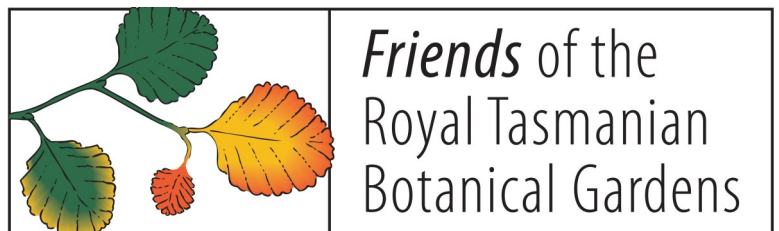
Stoneman’s Garden Centre – 94 Grove Rd, Glenorchy – *5% discount on full priced stock*

Wildseed Tasmania – 91 Weston Hill Rd, Sorell (0429 851 500) – *10% discount on tube stock only*

Woodbridge Nursery – 3 Llantwit Rd, Woodbridge (open Fri and Sat only 9.00–5.00pm) – *10% discount*

Neutrog Australia Pty Ltd—Order twice a year through Friends when notified

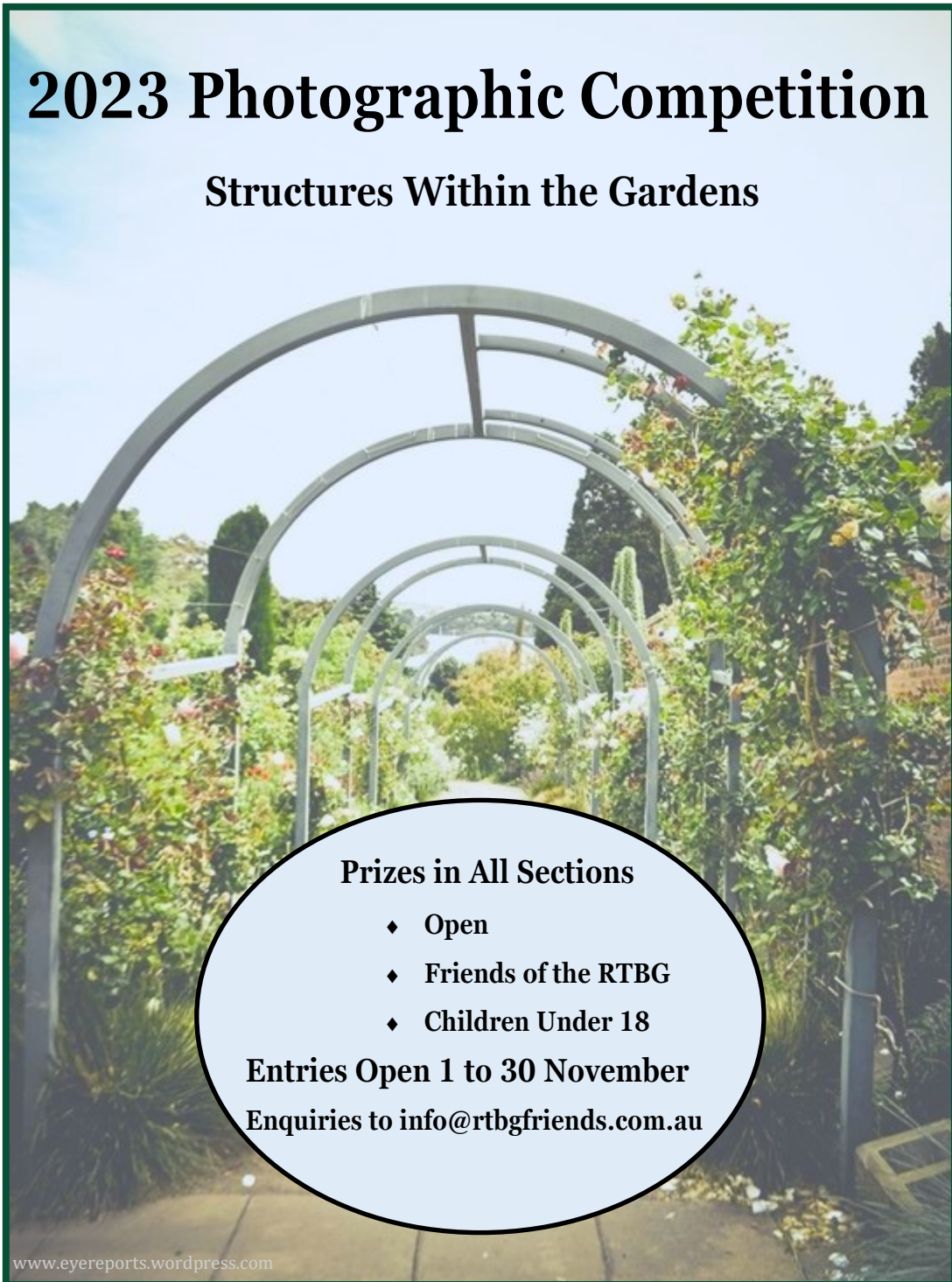
*Show your membership card
and save!*



If you know anyone who wishes to join Friends or you would like to give a gift subscription to someone, you can email membership@rtbgfriends.com.au or ring Anne Crawford on 0418517968 and a membership form will be forwarded to you.

2023 Photographic Competition

Structures Within the Gardens



Prizes in All Sections

- ◆ Open
- ◆ Friends of the RTBG
- ◆ Children Under 18

Entries Open 1 to 30 November

Enquiries to info@rtbgfriends.com.au

www.eyereports.wordpress.com

General Meeting Dates

December 2, 2023

March 16, 2024

June 1, 2024

September 21, 2024 (AGM)

December 7, 2024

At this stage all meetings will be held in the Banksia Room commencing at 10 am

Our Next Issue: February 2024

