

# Dovyalis

Friends of Bendigo Botanic  
Gardens Inc. Newsletter

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*Wedding in the gardens 2015*



*The pavilion*



*'Crackling Caldera' Iris*

## From the President - Jan Orr

*Good things happen when we work together*

Our Botanic Gardens has a long, interesting history. The State Government officially gazetted land for a Botanic Garden at White Hills in 1867. It was designed and established in the 2nd half of the 19th century. Many species of Northern Hemisphere trees such as pines, oaks, elms and poplars were planted as well as Acacias and a Kei Apple (*Dovyalis kaffra*) from South Africa and even a South American peppercorn (*Schinus terebinthifolia*). Fortunately many of these trees have survived.

Samuel Gadd, the garden's first curator and designer, clearly thought he was making a Botanic Gardens for Bendigo's future generations.

After such a promising start however, by the end of the 20th century it was a Botanic Garden in all but name only. Since WW2 the gardens had been a caravan park and then lost a large section of lagoon and land to make way for a swimming pool. All its shrubberies and garden beds were removed to become an open 'lawnscapes' that could be maintained by one man on a tractor mower. It was now a parkland with a few sad animals in dusty pens under the majestic trees.

Samuel Gadd's grand design had become a victim of Bendigo's amazing system of local government.



Eventually council amalgamation brought the city and surrounding shires (and Borough) together to form the City of Greater Bendigo (CGB). Perhaps the new title was the spur the city needed to restore and develop the city's Heritage Public Gardens. We now had a name to live up to.

The new council began to assist interested community members to form Friends Groups for the various public parks and reserves in the city. The aim was to establish a more formal link between the community who use these public spaces and the council who manages them.

Friends Groups enable the council to become better informed about the things the community enjoys and to quickly learn of any problems that are occurring there. In addition, the community can be consulted and informed of any proposed changes to the parks and gardens.

Our Friends Group have been partners with the CGB Parks and Gardens Staff in the journey to restore the Botanic Gardens to a garden worthy of Samuel Gadd's vision.

Every member of the Friends, both past and present, by their membership, has conveyed to council that the community cares about and values our Botanic Gardens. We have become the community voice that informs the council about our appreciation of the gardens.

The significant allocation of council resources needed to develop and maintain these gardens is fully vindicated by the thousands of appreciative visitors to the Gardens. In the short space of 15 years The City of Greater Bendigo has turned the Bendigo Botanic Gardens into a beautiful public garden for the whole region to enjoy.



## Cannas in Bendigo

### Brad Creme - Curator Bendigo Botanic Gardens



*Photo: Canna 'Stuttgart'*

#### What's old is new again

My first experience with Cannas was going on a tour of the 'new' Rain garden several years ago at the Royal Botanic Gardens Melbourne with Bill Bampton, now head gardener at the Diggers Clubs Heronswood. They had used an innovative tiered storm water collection system to maximise runoff from Birdwood Avenue and surrounding streets and had chosen what I considered to be a range of boring old 'nanna plants', the Cannas, to put in this bed. I didn't understand at the time why Bill and his colleagues had chosen to display an old fashioned heritage group of plants, rather than using something new, something contemporary or something Australian for their new landscape design. It wasn't until later in my horticultural journey that I came to appreciate the form and function of Cannas and what a clever and appropriate choice it really was.

Cannas are beautiful, they have significant heritage value in Bendigo and in Melbourne, they can cope with wet and dry soils and some are even true aquatics performing best fully submerged. I find them to be 'hopeful, cheerful and optimistic' plants in that they're easily propagated, easily traded with friends, and can survive a good drought to burst back into flower next year. There are not many other plants that can achieve all of that.

Along with the Lavender collection, our Canna collection is one of 2 nationally recognised collections held at the Bendigo Botanic Gardens to be registered with the Plant Trust, formerly known as the Garden Preservation and Conservation Association of Australia (GPCAA). The President of the Plant Trust, Stephen Ryan, has helped us with our Canna development and has a strong interest in this group of plants himself.

#### Lookk back before you look forward.

The history of Cannas in Bendigo is fascinating to research and somewhat murky, but information does exist from several key sources. In 1921, 19 Canna varieties and a number of dahlias were received from John Cronin, Director of the Botanic Gardens Melbourne. We believe Cannas existed from the 1920's in both the Queen Victoria Gardens in Bendigo's CBD, as well as the Royal Botanic Gardens Melbourne. It is thought that trade between regional gardens saw the Cannas become widespread throughout the early 20th Century. They have been at the Entry Promenade of the Bendigo Botanic Gardens, White Hills since at least the 1940's and possibly much earlier. Bendigo's Canna Collection is unique in Victoria because it is a named collection rather than a mixture of unnamed rhizomes and plants.

The Heritage Significance Assessment from 2007 tells us that the Entry promenade was an area of colour and floral displays since the 1940's and this is where many Cannas were grown. This area of the garden is the only area that has had a continuous high level of horticultural maintenance since 1857. It was known especially in the 1940's and 1950's as an area rich in floral colour and a rotating annual and perennial plant display which included Cannas.



*Photo: The Entry Promenade in the 1940's had lots of floral colour and lots of Cannas especially on the western side.*

During the 1990's as the gardens were beginning to be transformed, many Canna cultivars were lost during these developments. Most were removed to make way for the redesigned Entry Promenade. The new 'French Renaissance styled Garden' with the 'Avenue of Honour' was built around the year 2000.

Cannas must have seemed by some to be just 'Nanna Plants' that were due for being replaced with something new and exciting. Fortunately, some of our garden staff understood the heritage value of such a diverse and well named collection and tried to preserve as much of it as possible. Many of the Cannas we now display were literally saved from the tip by our dedicated horticulturalists and potted up and later re-identified.

We are now going full circle and thinking of ways to bring back more Canna diversity and more floral colour to the Entry Promenade to replace large areas of mass plantings of Yucca and Viburnum.

## Function over Form

Apart from heritage and aesthetic concerns, other gardens have been taking advantage of the functional and biological characteristics of Cannas. Many successful experiments have led to real world applications in the areas of rain gardens, stormwater treatment systems, bioretention systems, waste water and septic treatment applications and as floating islands to reduce blue-green algae outbreaks. Many in China and India have used Cannas to treat sewerage and manage stormwater. The Royal Botanic Gardens Victoria has used them in their Rain Garden to filter and make use of urban stormwater runoff. In filtration wetland projects, Cannas have been shown to be more effective than the traditionally used Australian native plants such as *Carex* and *Juncus* species because of their unique range of functional attributes.

Cannas:

- are tolerant of drought and dry soils
- are tolerant of water logged and saturated soils
- are tolerant of most soil types from well draining sand to boggy clays
- are adaptable to low and high nutrient loads
- can remove high levels of nutrients by harvesting and removing the leaves each year at pruning time
- can reduce total suspended solids and nitrogen in wastewater including sewerage
- have fast growth rates

One of the keys to their success in waste water treatment systems is that they provide an ornamental quality to the landscape which native plants often can't match. For those that prefer form over function, this often makes them more popular with locals and even politicians because they look good while doing their job. This is important when trying to sell and promote a new residential development site, high profile industrial site or a public recreational lake treatment system. Never underestimate the political value of a good photo opportunity in front of colourful plants when trying to promote a potentially boring water filtration project.



*Photo: The Floating Canna Island in the Ornamental Lake at the Royal Botanic Gardens Melbourne site has been shown to reduce nutrient levels and reduce the incidence of blue-green algae outbreaks while providing an ornamental and heritage landscape feature that is very popular with visitors. Someone once said that good design is a fusion of form and function which the canna island design certainly has. Perhaps we'll see this solution in Bendigo's recreational lakes and billabongs in the future.*

## Bendigo's Collection

Our current collection can be divided into 3 main groups.

### 1) The Heritage Cannas:

These are ones that were bred in the 19th or 20th Century outside of Australia. Fine examples include:

- Semaphore, bred in 1895 in France by Vilmorin and Andrieux. It is unusual because it has both bronze foliage and yellow flowers.
- Madam Butterfly, bred in 1930 in the USA by Howard and Smith and part of the Grand Opera series of Cannas.
- Italia, bred in 1893 by C. Sprenger which has big bold orchid type blooms of yellow flowers with splotches of orange and red held above bluish green foliage and grows to over 2 metres.
- Cleopatra, bred in 1895 and is especially interesting because it's a 'sport' meaning some stems have purple leaves with red flowers and others have green leaves with yellow flowers, all on the same plant. It's a reliably bizarre mutation that can be retained by dividing the tubers. The original 2 for 1 deal.



*Photo: Canna 'Semaphore' – Bronze foliage and yellow flowers are a rare combination*

## Cannas in Bendigo continued...



Photo: *Canna 'Italia'* – A tried and tested heritage variety from 1893 that's tough, reliable and tall, a perfect plant to inspire the beginner gardener or get the brown thumb of the family back into

### 2) The Australian Bred Cannas:

These have been bred here in Australia from the 19th Century through to the modern day. Some are also considered 'heritage cannas' if they were bred before 1950 such as the 'Cole' cultivars from the 1930's and 1940's. Charles Frederick Cole bred lots of varieties and named them all after his family members. I assume he saw something of each of them in his new creations, such as 'short and pretty', 'tall and bold', 'colourful and quirky', or perhaps he just picked the next name on his family tree, I'm not really sure....

Cole varieties we hold include:

- L.G. Cole, a large yellow flowered variety
- Edwin Cole, a pink and cream flowering variety to 1.5m from the 1930's
- Ruby Cole, a pink flowered, green leafed variety
- Alex Cole, with its yellow flowers and orange speckles is a stand out in any garden



Photo: *Canna 'Alex Cole'* – a spectacular floral display

Some newer Australian bred cultivars come from Queensland growers Frank Hogan and Mrs Reiss. Both are still growing Cannas in Queensland as I write this and Stephen Ryan has provided some of them to us. Frank produced Bleeding Heart, Brolga Dance, Paperwhite and even Canna 'Stephen Ryan' which is a tall, cream flowered variety.

Mrs Reiss produced Just Gorgeous, Cherry Red, Watermelon Pink and Canna 'Mrs Reiss'. I think both Frank and Mrs Reiss would be grateful to know that their life's work is being kept, nurtured and preserved for future generations alongside the Cole varieties and the older exotic cultivars.

### 3) The Species Cannas

These show us the diversity of the genus apart from the *Canna indica* cultivars which dominate the rest of the collection.

Examples include:

- *Canna edulis*, the edible canna obtained from Violet Street Primary School's gardening guru Brian Hosking.
- *Canna musafolia* which is a gorgeous foliage plant growing to 3 metres which has insignificant flowers and is all about the look of its banana tree like foliage.

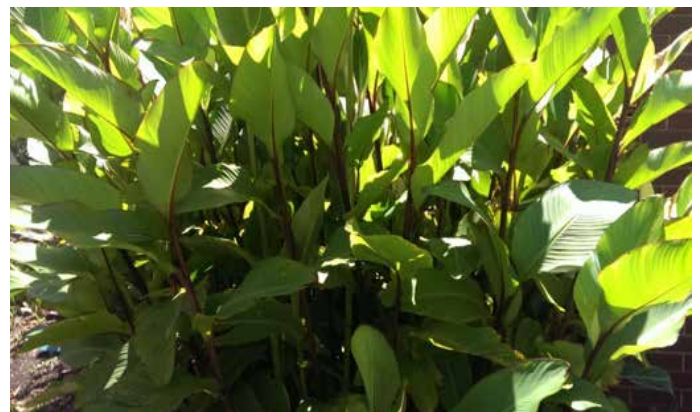


Photo: *Canna musafolia* – It's all about the foliage rather than the flowers.

We have also obtained other *Canna* species from Stephen Ryan in February 2016 including:

- *C. glauca* - The 'Wild Water Canna' is from the wetlands of the Americas from Florida right down to Brazil. It grows as an aquatic and has naturalised in South East Asia where it has become its own variety, *Canna glauca* var. *siamensis*
- *C. compacta* (from Brazil and Argentina)
- *C. altensteinii* which is like a sturdier *C. musafolia* that won't fall over as much
- *C. indica* 'Purpurea'
- *C. warscewiczii*
- *C. paniculata*
- *C. x ehemanii* which is a tall cross with *C. iridiflora* and has downward facing flowers almost like a fuschia.

Many of these species Cannas can be grown from seed as well as rhizomes and stay to true to type when seed grown which the hybrids can't do.



*Photos: Canna paniculata (left) Thin petals of orange and yellow sit atop foliage which reaches 5 metres tall in its native Central America.*

*Canna warszewiczii (middle) The burgundy edge to the green foliage makes this short species a stunner in any landscape. It stays under one metre so use it as a groundcover to suppress weeds and provide the cohesive 'cool tropical look' to your garden.*

*Canna indica 'Purpurea' (right) Canna indica has been hybridised and bred so often that the original plant is all but gone from nursery shelves. The striped foliage of 'Purpurea' was one of the first variants that stood out from the crowd.*

Modern exotic cultivars have their place and there are many new varieties coming onto the market all the time but we intend to focus our collection on the 3 main categories we have now. As part of our efforts to promote conservation and education, we're going to keep telling the story of Heritage cultivars and Australian bred cultivars as it fits in with the main themes of the Bendigo Botanic Gardens.

I'm indebted to all those that have bred, maintained and experimented with Cannas worldwide. Without their enthusiasm for the genus, I wouldn't have been part of the great cultural and horticultural tradition of growing Cannas in White Hills. Cannas are making a well-deserved comeback!

#### References:

- <http://www.clearwater.asn.au/resource-library/papers-and-presentations/royal-botanic-gardens-melbourne-lessons-learnt-transforming-an-existing-garden-bed-into-a-raingarden.php>
- White Hills Botanic Gardens, Bendigo Heritage Significance Assessment and Strategy, Lee Andrews and Associates Heritage Consulting, March 2007  
Tuesday 26/1/16

## Bird Observations in the Gardens

- Anne Bridley

### Tuesday 26/1/16

While I was potting up some cuttings behind the Samuel Gadd Centre, I was distracted by the loud whooping calls of some **Blue-faced Honeyeaters** that flew into the nearby Grey Box trees. These handsome olive-green and white birds are one of the few species that are willing to mix it up with the aggressive, grey Noisy Miners (another honeyeater). After a few noisy minutes, the Blue-faced Honeyeaters flew out, leaving the slightly smaller Noisy Miners in possession.

### Tuesday 9/2/16

The walk across the gardens to Scott St gives me a chance to observe what birds are using the open areas. They are just as important for some birds as the shrubs and trees. Well-watered lawns provide food for **Wood Ducks** (grass, insects), **Galahs and Red-rumped Parrots** (seeds) **Magpie-larks and Magpies** (insects), **Blackbirds** (soil invertebrates). **Willie Wagtails** hunt for insects above the grass. **Superb Fairy-wrens** dart out from cover to pounce on small insects.

### Tuesday 23/2/16

A pair of **Long-billed Corellas** on a branch of a Yellow Box drew my attention as one bowed to the other. This was followed by mutual preening, as they each delicately nibbled the head and neck feathers of the other bird. An interloper alighted on the branch a short distance away and then sidled towards the pair, which flew up to a neighbouring branch. If the corellas had been at a nest hollow, they would probably have seen the newcomer off. The gardens today resound with the screeches of **Musk Lorikeets** from the tops of the River Red Gums. **Rainbow Lorikeets** add their harsher calls. The Rainbows are not nearly as common as the Musk, but their numbers have increased markedly over the past decade, perhaps reversing a decline that occurred since the early part of last century.



*Bluefaced Honeyeaters*

## The Billabong

- research and article Helen Hickey



It may be difficult to imagine, but the Bendigo Creek was described in 1850 by residents as a series of waterholes, clear as crystal and populated by numerous Kingfishers and Duckbilled Platypus. This principal watercourse began life as winter and spring rainfall atop the Big Hill Range. It then meandered down across the central flats through the areas the diggers named Kangaroo Flat, Golden Square, Bendigo or Commissioner's Flat, and on to its junction with Back Creek; a smaller tributary also arising near Big Hill Range. Bendigo Creek then trickled past the famously rich Seven White Hills to Epsom and Huntly, wandering northward for a further 70 kilometers merging with the Mt Hope Creek to eventually join the Murray.

Its wonders were of course no surprise to the Dja Dja Wurrung, whose people have been associated with the waterway well before European history.

Inevitably, as in the history of colonialization, the waterways of this town were polluted within a year of white settlement. Blame the gold rush and the greed of those eager to make their fortunes, blame the ignorance of times past, perhaps especially blame that notorious Henry Frenchmen (Mon dieu!), who, in 1851, blasted the reef to lower the water. By doing so he let spill the last water left in the upper Bendigo Valley. As summer progressed, those who remained on Bendigo began to sorely miss the 'sweet clear water'.

By early December 1851, Melbourne learnt of the first deaths from filthy water and poor sanitation.

To improve flows, the creek was straightened (1858-1860s) and at this time a loop of the river became cut off and isolated. A natural island was formed by this meander and it was here that the pavilion (accessed by a footbridge) was located. In 1861 the local health inspector reported that the creek bed had been transformed into an artificial lake, and the gardens were 'now assuming quite an attractive appearance'.



*An early photograph features a group on the bridge leading to the pavilion on the island.*



*Competition photograph published in The Bendigonian Feb 1895. Shows a group near the lagoon. Footbridge and structure on the island thought to be an aviary can also be seen.*

Decades later an area behind the pavilion was filled in as part of the work on construction of the pool c1957 and the pavilion was then no longer on an island. In 1983 earthworks formed a new smaller island as a refuge for native birds

But what use is it blaming past practices for the deteriorated conditions of the Creek? Certainly it won't bring back the crystal clear water. Far better perhaps to celebrate the work that has gone into restoring what is now known as the White Hills Billabong.

The Friends of Bendigo Botanic Gardens was formed in 1999 and the motto 'Promote Protect Restore' encapsulates the group's aim to ensure the future of Bendigo's public gardens. In the winter of 2005 the Friends of Bendigo's Botanic Gardens undertook a revegetation program to return the flora on the island to more closely resemble the Creek's natural flora prior to European settlement.

The condition of the Billabong and island in terms of vegetation and water quality is improving and the area continues to have considerable scenic quality.



The supply of water into the Billabong is at present a challenge, the long hot summers take their toll and presently the Billabong is almost empty. The Curator, Brad Creme, is keeping all options open and this includes exploring four ways to manage it:

Do nothing, it is almost empty over summer which is normal.

Seek permission from Coliban and the EPA to add recycled water to it, similar to the way Lake Weeroona is managed.

Storm water inflows from the surrounding streets could be used to maximize the amount of runoff collected from our catchment area.

Use water harvesting and storage as part of the proposed visitor centre to top up the Billabong when we want to from stored storm water.

Whatever option is decided upon, it is highly unlikely that we will see the days of platypus and kingfishers in such marvelous abundance again. But the optimism and success of the Friends of the Gardens is such that it may not be long before we see the day when 'yabbies' and other native birds regularly grace our White Hills billabong and give pleasure to those who visit.

## Fungi of the Bendigo Botanic Gardens

Photographs and text by Joy Clusker

[Keep a lookout for some of these fungi after rain. Joy Clusker has recorded these images in the gardens over several seasons.]



**Woodchip fungi, *Leratiomyces ceres***, often found in the mulch in cooler seasons after rain. Very common



**Smooth Cage Fungi, *Ileodictyon gracile***, they appear from an egg-like structure and smell quite bad as they become covered in spores. Appears in autumn.



**Shaggy Parasol *Chlorophyllum bunneus*** are common on manured garden beds. Many of them have been seen in the mulch behind the aviary



**Fly Agaric, *Amanita muscaria*** appear in autumn after rain under the Oak trees



**Lawyers wig or Inkcap, *Coprinus comatus***, they appear in grassy areas and often dissolve into a black inky mass by the next day.



**Arching Earth Stars, *Geastrum pectinatum***, great one for kids to find amongst the leaf litter.

## Jean Dennis - FBBG Botanical Illustrator

### Trip to Darwin to paint new *Brachychiton* species in flower



Jean Dennis (a member of FBBG Botanical Illustrators Group) recently flew to Darwin to illustrate a rare and newly identified species of *Brachychiton* (*Brachychiton chrysocarpus*). Jean Dennis was keen to illustrate the plant whilst it was in flower at Darwin's George Brown Botanic Gardens.

It takes her anywhere between 120 to 180 hours to complete an illustration and she uses a magnifying glass to record the finest details which need to be scientifically correct. Painting in watercolour she uses just 6 colours to mix the palette of shades needed.

***Brachychiton chrysocarpus*** was only recently discovered in outback Northern Territory at Fish River Station. It grows to approx 1m in height, has small pale-pink flowers that are about the size of a thumbnail and small clusters of brown seed pods.

Jean has been a botanical illustrator for over 20 years and has now documented the entire 44 species of the *Brachychiton* family. Her journey with Botanical Illustration is described in her own words below.

"I was introduced to botanical illustration during my senior years at art school in England.

In 1953 my family migrated to Tasmania and it was there that I commenced nursing at a local hospital later moving to Geelong for my general training. After marrying and having a family the desire to paint resurfaced, so I studied drawing and painting at a nearby college.

A move to Melbourne in the early 1990's gave me the opportunity to pursue botanical illustration.

I joined a group of artists (now known as the Whirly Birds) at the Royal Botanic Garden, Melbourne.

Classes with Jenny Phillips, master classes at the Botanical Art School Melbourne, and on-going botanic workshops with freelance teachers widened my spectrum of techniques and mediums.



*Mary Delahunty Rose*  
painted by Jean Dennis

In 1994-5 I exhibited several works in two Rose Exhibitions, the first one at Como House, Toorak, and the second the International Rose Show, Exhibition Building, Melbourne.

I loved painting roses and was sure I had 'found my thing'.

The idea however was blown away during a painting holiday in outback Australia. I discovered *Brachychiton*.

The rugged trees intrigued me. They grew mainly in arid country and in their deciduous state could pass for dead, except for brilliant red blooms sparsely scattered along craggy branches.

So, how did a 59 year old come to start a project that would take her thirteen years to complete?

I became frustrated by the lack of information to the lay person about these striking plants. Why hadn't someone picked them up and run with them. The flowers were large and lovely and yet few species appeared to have been painted. I was by this time working on several *Brachychiton* paintings. I decided I wanted others to enjoy these rare flowers so decided I would paint them all.

But how to go about collecting each species? My then husband and I holidayed with the caravan each year but were not experienced outback travellers.

I began by studying every plant book I could find that might give me a clue to locations. I approached council staff, field naturalists, rangers and botanists as we travelled. Information was sparse. Specifications for the project began to form. I would paint the flowers life-sized, from their native habitats.



The Brachychiton project has taken me on a wonderful journey covering many thousands of kilometres of the Australian outback. A journey I would repeat again tomorrow given the chance.



*Brachychiton collinus* painted by Jean Dennis

My aim has been for the collection to be exhibited in each state. This is coming to fruition with a solo exhibition at Castlemaine Art Gallery in October 2016. The collection will eventually be published in a book.



*Brachychiton vitifolius* painted by Jean Dennis

Brachychiton were little known until 1988 when Gordon Guymer, now Professor Guymer, presented a paper describing them: A Taxonomic Revision of Brachychiton (Sterculia) G.P. Guymer 1988. This was the first comprehensive report written on the genus, although it had been recognised since 1802. I eventually acquired a copy of this paper and it continues as my reference today.”

## “Paddock to Park”

March 13th 2016

### Food Fossickers return to Bendigo Botanic Gardens

After two sell-out picnic events previously, Food Fossickers returned again this year to the Bendigo Botanic Gardens showcasing the very best products of the region.

Lovely weather and the location under shade trees in the beautiful gardens added to the atmosphere and everyone’s enjoyment.

Participants were invited to ‘think sizzle, think smoke, think cured meats and slow cooking’.

Local Restaurants along with Bendigo and Heathcote wine makers and producers were well represented. Bendigo Beer popped up again this year providing a brew to accompany lunch, along with local olives, cheeses and condiments. The ultimate carnivore’s feast could be found around the stall holders.

Vegetarians were also catered for, and those with a sweet tooth loved the artisan ice creams, puddings and biscuits.



## Pines in the Bendigo Botanic Gardens

Article by Marilyn Tulloch and Jane Cleary

Pinus is a large genus of long-lived, evergreen trees with needle-like leaves and seeds held inside cones. They are ideal for Bendigo's poor soils, heat, wind, frost and drought.

There are dwarf forms suitable for bonsai and pebble gardens, but we usually envisage them in parks, farms, as commercial timber plantations or as the 'Christmas Tree'.

Differing species of pinus may be identified by tree size and colour, by the patterns of their bark, by the number of 'needles' in each cluster, the needle length, by the shape, size and colour of the cones and by the appearance of the seeds – whether winged or not.

At Bendigo Botanic Gardens we are indebted to the early city fathers who were responsible for the establishment of the gardens where from 1870s, pines were planted along the north and west boundaries. Early records show Canary Island Pine - *Pinus canariensis*, Aleppo Pine - *Pinus halapensis*, Monterey Pine - *Pinus radiata*, Maritime Pine - *Pinus pinaster*.

The four large Aleppo Pines that dominate the north west end of Scott Street today may be from the original plantings. More of the Aleppo Pines and some pines are seen on the western boundary, the largest being at the Havelin Street end.

Seeds from these pines have been propagated by the Garden Staff and now grow as replacement trees, ensuring continuity in our Gardens.

The mature Stone pines have an umbrella shape, mottled platelet bark and edible seeds used in cooking, for example, in pasta.



Photo: Stone Pine

Other significant pines in the west 'Conifer Walk' are:

Long -Leaved Indian Pine or Chir Pine – *Pinus roxburghii*

Torrey Pine or Soledad Pine – *Pinus torreyana*.

The Torrey Pine is now endangered in its natural habitat. This highlights the importance of Botanic Gardens keeping collections of a genus and exchanging plant material with other Botanic Gardens and Horticultural Institutions.

The significant pines are marked on the Garden Brochure, available in the Gardens. By using this leaflet you can take a self-guided tour of the significant trees in the Gardens. To book a walk, contact the Friends (FBBG) ph 0419 324 294 or Jane on 54484396

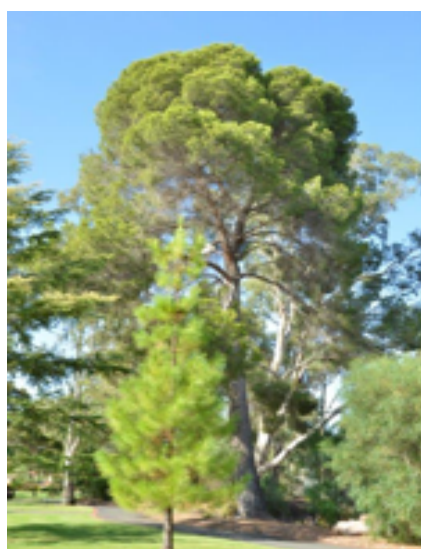


Photo: Aleppo Pine with Canary Island Pine in foreground

Many more pines have been planted over the past four years. Notice their juvenile form and watch them grow to maturity:

Monterey Pine – *Pinus radiata*, - are very fast growing and often used in plantations.

Maritime Pine- *Pinus pinaster*

Japanese Red Pine – *Pinus densiflora aurea*

Weymouth Pine- *Pinus strobus pendulata*

Bhutan Pine- *Pinus wallichiana*

Gallipoli Pine – *Pinus brutia*

Canary Island Pine – *Pinus canariensis*

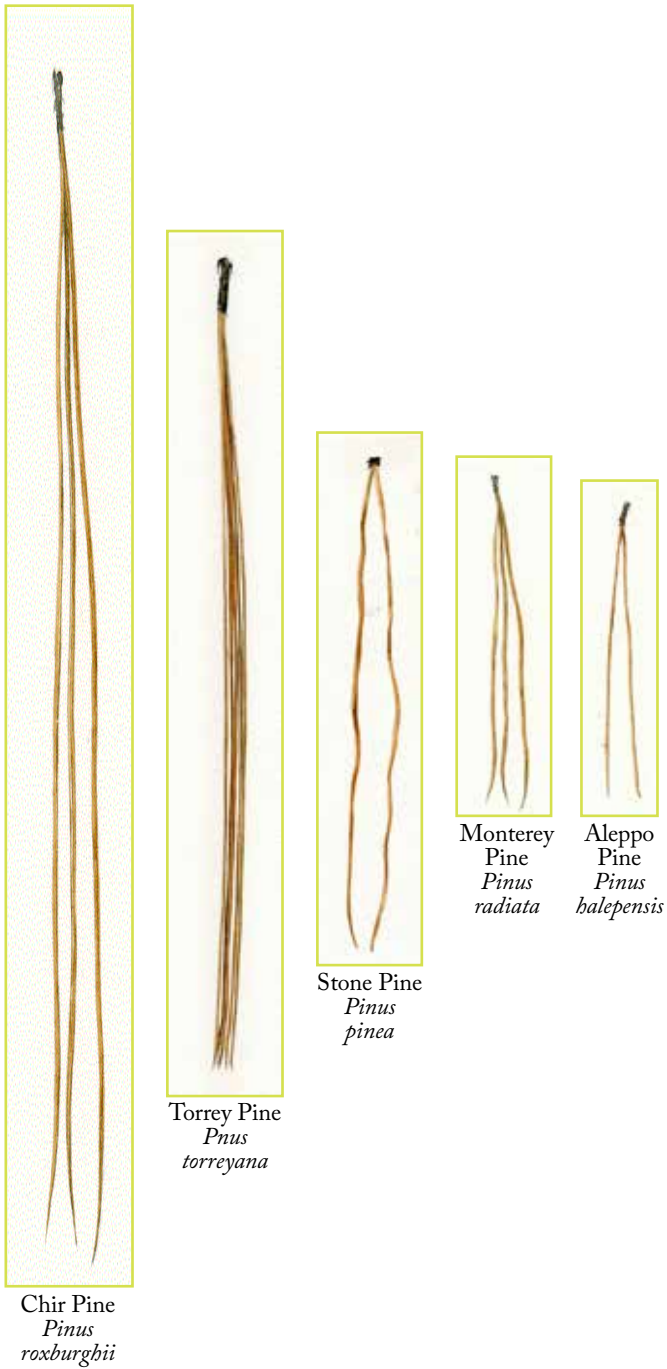
Some of these trees are long awaited replacements of trees planted in the 1870s.

Sit at the seat made from a felled Stone Pine on the north side of the garden. Count its rings to estimate its age and reflect on what has happened in the Gardens in the last 150 years.

**Pine Needles**

*Illustrations by Jan Orr FBBG Botanical Illustrator  
(reduced in size)*

The *Pinus* species can be distinguished by the size and grouping of the needles as well as the structure of attachment.



**Pine Cones**

*Illustrations by Pam Sheean FBBG Botanical Illustrator*



## What's On - 2016

### The Friends' Monthly General Meetings

Meetings are held at Bendigo Botanic Gardens **Samuel Gadd Centre** - 2.30pm on 3rd Tuesday of the month (except December) and are open to all members.

Office bearers are elected for 2 year terms and the annual meeting is held in August.

**Growing Friends** propagate plants for the gardens and for sale as well as assist the BBG staff in the gardens.

They meet on the 2nd and 4th Tuesdays + 1st and 3rd Wednesdays of each month (9:30am - 11:30am) at BBG nursery (behind the Samuel Gadd Centre). Plants are available for sale during Growing Friends on the 4th Tuesday of the month and special sale days.

### Botanical Illustration Group

Meet Saturdays 9:30am – 4.00pm & Wednesdays 9:30 am – 12.00pm at the BBG Samuel Gadd Centre. New members welcome

May Sat 7th	<b>FBBG Plant Sale</b> 9am-2pm Saturday prior to Mothers' Day	Friends Nursery, Samuel Gadd Centre Napoleon Cres Entrance BBG
May Wed 18th.	<b>TALGA (The Australian Lavender Growers Association) Mini Conference. "Plant to Plate"</b> Historical Homestead displays, Lavender Farm for lunch, quest speakers, demonstrations	Starting at the Best Western Airport Motel Attwood (near Melbourne Airport) 9am www.talga.com.au ph 0412 748 270 or 596488238
May Sun 29th	<b>Open Day for Botanic Gardens</b> throughout Australia and New Zealand. Guided Walks, Botanical Illustration and plants for sale.	Bendigo Botanic Gardens, White Hills.
July 30th	<b>Creswick Garden Club</b> Luncheon with Sophie Thompson	The Tangled Maze - Midland Hwy, Springmount creswickgardenclub@gmail.com
August 16th	<b>FBBG Annual General Meeting</b>	Samuel Gadd Centre, BBG
October 1st - 30th	<b>Botanical Art Exhibition</b> <b>Brachychiton illustrations by Jean Dennis</b>	Castlemaine Art Gallery 14 Lyttleton Street, Castlemaine, Vic 3450   Phone (03) 5472 2292
October 29th-6th Nov	<b>Castlemaine and District Festival of Gardens</b>	Castlemaine area ph 03 5427 2839 castlemainefestivalofgardens@gmail.com
Nov 5th	<b>FBBG Plant Sale</b> 9am-2pm	Friends Nursery, Samuel Gadd Centre Napoleon Cres Entrance BBG
Nov 12th- 13th	Botanical Illustrators Exhibition "Nature in A5"	Samuel Gadd Centre, BBG. Enter from the Gardens



**Ghost fungi**, *Omphalotus nidiformis*, has a bright luminescence at night and grows on stumps and living trees. There are some that come up every year in the native garden. [Photo and text Joy Clusker.]

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