

Colour in Winter Walk 2022

This walk was developed by Pam Cooke and Kay Saunders as a Themed Rostered Walk for the public in August 2022. Along with some favourite plants from previous 'Colour in Winter Walks', some new plants have been added. Glenys Bishop assisted.

Theme

The ANBG is proud to be a place to display Australian plants and one of the characteristics of these plants is that the vast majority of them are evergreen, keeping their leaves over winter.

So the Australian landscape at this time of the year looks very different to the bleak views in the northern hemisphere winter.

Here the landscape is dominated by green foliage. But there is colour in our winter plants and on this walk, we shall find some of the colours, not all of which are flowers.

By the end of the walk we want visitors to appreciate that native plants exhibit some glorious colours even in winter and to understand what contributes to the colours of the leaves, berries, seeds and flowers.

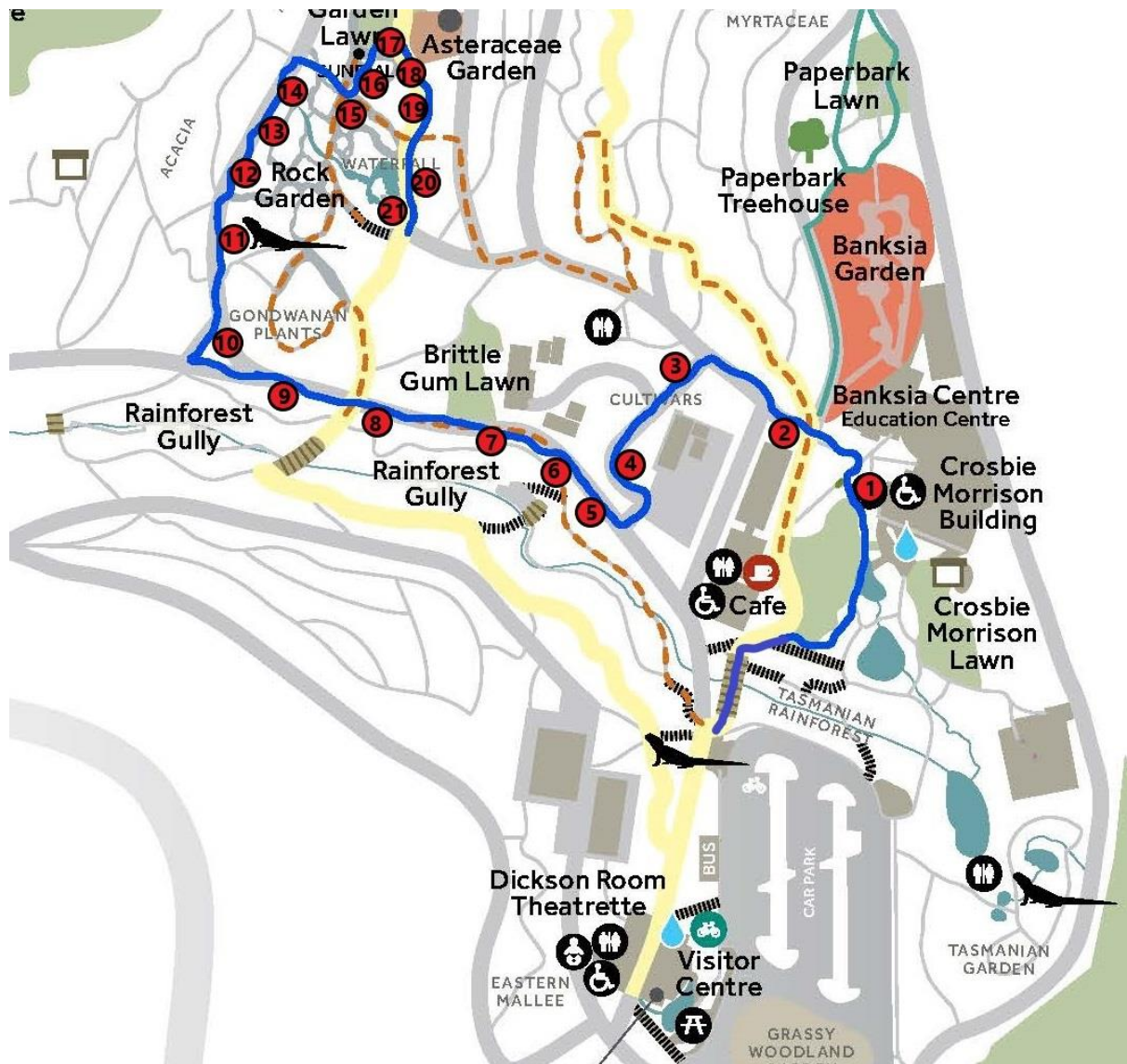
Alternatives for Wheelchairs and Scooters

After Stop 16 instead of crossing the Rock Garden lawn continue along the path and turn right at the Friends Shelter and head back along the path to the Rock Garden.

Plant List - Colour in Winter Walk 2022

Stop No	Plant	Common Name
1	<i>Epacris purpurascens</i>	Port Jackson Heath
1	<i>Isopogon formosus</i> 'Grey Pink Sparkler'	Rose Coneflower
2	<i>Banksia spinulosa</i> var <i>spinulosa</i>	Hairpin Banksia
3	<i>Brachyscome multifida</i>	
4	<i>Eustrephus latifolius</i>	Wombat Berry
5	<i>Correa lawrenceana</i>	Tree Correa
6	<i>Asplenium australasicum</i>	Bird's Nest Fern
7	<i>Rubus moluccanus</i>	Native Raspberry
8	<i>Thelychiton speciosus</i>	Rock Orchid
9	<i>Macrozamia lucida</i>	Burrawang
10	<i>Chamelaucium</i> 'Cascade Brook'	Geraldton Wax
11	<i>Prostanthera rotundifolia</i>	Round Leaf Mint Bush
12	<i>Grevillea lanigera</i>	Woolly Grevillea
13	<i>Xerochrysum bracteatum</i>	Golden Everlasting
14	<i>Hypocalymma xanthopetalum</i>	
15	<i>Hakea obtusa</i>	
15	<i>Hakea corymbosa</i>	Cauliflower Hakea
16	<i>Acacia Tryconophylla</i>	
17	<i>Thryptomene saxicola</i>	Rock Thryptomene
18	<i>Kunzea pulchella</i>	Granite Kunzea
19	<i>Alyogyne huegelii</i>	Native or Blue Hibiscus
20	<i>Guichenotia ledifolia</i>	
21	<i>Rhodanthe anthemoides</i>	Chamomile Sunray

Map



Stop 1

Plant Name: *Epacris purpurascens* (Port Jackson Heath)

Location: Take the new path beside the Friends Lawn, plants are on the right near the seat.

Colour theme: white or pinkish showy flowers

Distribution and habitat: This is a rare plant that grows in swamps and scrubby country on sandstone based soils around the Gosford and Sydney area.

Of interest: This is listed as threatened in NSW. It is killed by fire and re-establishes from soil-stored seed. Threats include urban or rural development, urban run-off leading to flooding, erosion, altered soil nutrients, weed invasion and plant pathogens. Other threats include altered fire regimes, physical damage of individual plants and habitats by the public. A targeted strategy has been developed to manage the sites where this species occurs. [NSW Office of Environment & Heritage]

Uses: A very attractive plant to grow in the garden. Thrives in part shade, tolerates light frost and requires moisture for most of the year. [ANBG Growing Native Plants]

Plant Name: *Isopogon formosus* 'Grey Pink Sparkler' Rose Coneflower

Location: On the new path next to the *Epacris*

Colour theme: purple flower and purple foliage

Distribution and habitat: *Isopogon* is a genus of around 35 species, all occurring only in Australia. They are found in the southern half of the continent in temperate regions. Most are small to medium sized shrubs having flower clusters arranged in globular heads. The fruits are also globular in shape giving rise to the common name of "drumsticks". Some are also called "coneflowers" although this name is more usual in the related genus *Petrophile*. *Isopogon formosus* occurs naturally in Western Australia and is generally found growing close to the coast in heath land and dry sclerophyll woodlands. It can be found south of Perth from Busselton to the Stirling Ranges and as far as Esperance.



Uses: *Isopogon formosus* is an erect or spreading shrub 1.5-2 m tall. The leaves are divided and crowded along the stem. The young growth is silky-hairy, often reddish and is a particularly attractive feature of the plant. The flowers are deep mauve to pink in colour. They are present in winter and spring, conspicuously displayed on the ends of the branches. The flower clusters are around 50 mm in diameter and are followed by the spherical (barrel-shaped) seed pods which remain on the plant for an indefinite period.

The styles are long, bright yellow aging to a red colour. Globular cones are borne terminally in the leaf axils in late winter - spring they are 1.5-2 cm in diameter. The fruiting cone is held on the plant for some time before breaking up.

Isopogon formosus lacks a lignotuber it cannot regenerate from the rootstock if burned. It does not suffer from any particular pest but is susceptible to the root rot fungus *Phytophthora cinnamoni*. It is not considered to be at risk in the wild.

This plant is a cultivar “Pink Sparkler”. The naturally occurring form of *Isopogon formosus* is difficult to cultivate in the eastern states, as it will not tolerate humidity and is less hardy than some of the naturally occurring eastern species. This is a commercially available garden form.

Derivation of the name: *Isopogon formosus*

Isopogon - iso – equal, pogon – beard alluding to the fringed flowers.

formosus - beautiful or good looking.

References:

<https://www.anbg.gov.au/gnp/interns-2004/isopogon-formosus.html>

Australian Native Plant Society

Stop 2

Plant Name: *Banksia spinulosa* var *spinulosa* Hairpin Banksia

Location: At the end of the Ellis Rowan Building in garden bed on the left.

Colour theme: Orange flower spikes

Distribution and habitat: *Banksia spinulosa*, sometimes known as Hairpin Banksia, is native to the three eastern States of Australia, extending along the coast from Victoria to Cairns and distributed from the coastline into forest areas of the Great Dividing Range. In coastal areas of New South Wales it tends towards a dwarfed habit but further in the mountains it is taller and more upright.



Of interest: The flower spike colour, with variations of brown, red, orange and gold. The flower spikes range from 10-20 cm in length. A spike may contain hundreds or thousands of individual flowers, each of which consists of a floral tube and one long wiry style. The styles are hooked rather than straight. The style ends are initially trapped inside the upper perianth parts, but later break free.

The individual flowers open from the top of the spike and provide a long flowering period from autumn through the winter to spring when the three stages of cone development can be observed - bud, flower spike and seed capsule. Leaves are long and narrow, 3-8 cm long by 2-7 mm wide, and variably toothed.

This is one of a group of banksias with "hooked" styles projecting from the axis of the flower spike. In *B. spinulosa* these styles are often deep red or black in colour and this has given rise to the common name of "Hairpin Banksia", however, the styles may also be orange or yellow.

The seeds are enclosed in follicles attached to a woody cone and are generally retained within the cone until burnt.

Despite the specific name, the foliage is not "spiny" in any sense that suggests that it is painful to touch.

A popular cultivar, *Banksia* "Giant Candles" is a hybrid with *B. spinulosa* as one of its parents. Giant candles, a registered cultivar, accepted for registration on 23 July 1980, is a spontaneous hybrid between *B. ericifolia* and *B. spinulosa* var *spinulosa* that arose in cultivation in the garden of Ms Sylvia E Peach of Hellawell Road, Sunnybank Hills, Queensland.

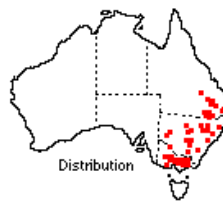
Stop 3

Plant Name: *Brachyscome multifida* Cut-leaved Daisy, Rock Daisy, Hawkesbury Daisy

Location: Turn right along the path above the Ellis Rowan Building, section 124, a couple of patches of *Brachyscome* can be seen.

Colour theme: purple and yellow – a flower that has two different types of “flowers” of two different colours

Distribution and habitat: The beautiful *Brachyscome multifida*, is a perennial herb found in the grassy understories of woodlands and open forests. It is naturally distributed throughout the temperate areas of southern Queensland, New South Wales and Victoria.



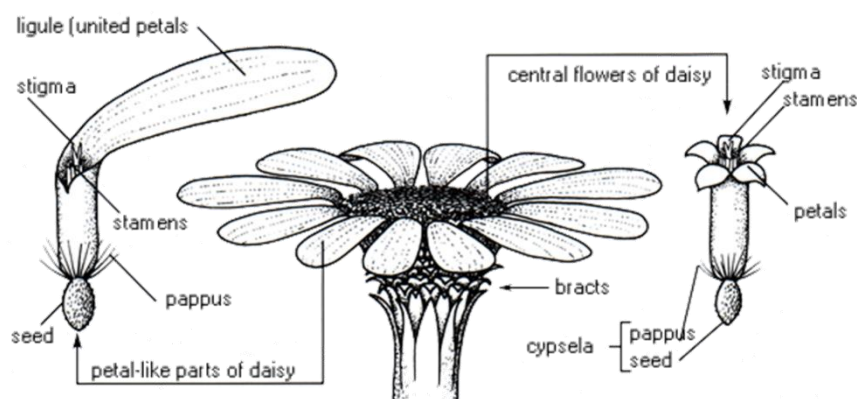
Of interest: It is a member of the Daisy Family – and shows one of the special features of the daisies.

Generally, daisies are made up of two types of flowers. Around the edge are the ray florets which have a prominent ‘petal’. These are generally brightly coloured and attract pollinators to the flower. There are usually many ray florets arranged around the periphery of the flower.

In the centre are the disc florets with tubular petals.

One or more circles of small leaves (the bracts) surround the base of the flower clusters. In some daisies, these are prominent replacing the ray florets as in the everlasting daisies which we will see later on.

Some daisies (e.g. dandelions) have ray florets only. Other daisies (e.g. Billy Buttons) have disc florets only.



A daisy flower (Asteraceae) — a composite head of many small flowers

Stop 4

Plant Name: *Eustrephus latifolius* (Wombat Berry)

Location: On the left above the depot as you near the end of the bitumen path.

Colour theme: Orange berries

Distribution and habitat: It grows in open forests, extending into dry woodlands and rainforest from Vic right up to Cape York and in New Guinea and New Caledonia.

Of interest: It has white or pinkish flowers with six 'petals', three of them fringed. Baron von Mueller, the first director of the Melbourne Botanic Gardens, envisaged them as a food crop 'This climber produces sweet though only small tubers, which, however, are probably capable of enlargement through culture.' But it never happened. Some suggestions for why not: Cribb and Cribb (1975) 'Wild Food in Australia': In Asia and Europe the main food plants have had the benefit of many centuries of cultivation which has led, through selection and hybridisation, to the production of forms vastly superior in the wild. Since 1788, food plants from other regions were already so far in advance after a long period of cultivation that it seemed hardly worth starting work on Australian species. At that stage, Macadamia was the only commercially produced Australian native food. John Newton, in "The Oldest Foods on Earth", attributes the lack of interest in Australian plant foods to food racism, that Europeans settlers did not want to eat what Aboriginals ate.

Uses: The berries ripen from green to orange, splitting to show shiny black seeds surrounded by an edible, sweet, white pulp that is said to taste a lot like coconut. (seeds and skin discarded). The roots swell into small earthen coloured tubers 1-3 cm long, which taste sweet and juicy. Aboriginals ate them either raw or roasted but they are not easy to dig from hard soil.

The vine-stems of Ethe Wombat Berry, stripped of leaves, were also used to tie objects [Dengarden, ANPSA, Plant Net]

The name wombat berry comes from the fact that wombats dig around the base of the plant to get the tubers to eat.

Stop 5

Plant Name: *Correa lawrenceana* var *glandulifera* (Tree correa)

Location: Road edge of rainforest near the metal sentinel

Colour theme: greenish yellow flowers

Distribution and habitat: *C. lawrenceana*, commonly known as tree correa or mountain correa. Shrub or small tree. The species is found in rainforest and sclerophyll forest in Tas, Vic, NSW and Qld.

Of interest: Most people know correas as small shrubs but sometimes they can be the size of a small tree. *Correa lawrenceana* grows to between 0.6 and 9 m in height, and has leaves with a shiny, dark green upper surface which are 2.5 - 10.5 cm in length and about 1 - 7 cm wide. The flowers are produced during the winter and spring and also sporadically throughout the year. They are typically yellow-green although other colour forms are known.

The flowers are bell-shaped and are comprised of 4 petals fused together into a tube. There are 8 stamens which extend beyond the end of the bell. There are eight recognised varieties of *C. lawrenceana*.

C. lawrenceana var. *glandulifera* Paul G. Wilson The type specimen was collected from Springbrook in Qld in 1929 and occurs in a small area along the NSW/Qld border. It grows to 6m tall.

Stop 6

Plant Name: *Asplenium australasicum* (Birds Nest fern)

Location: There are several on edge of rainforest and if the sun is shining, pick one in the sun as the spores show the bronze colouring.

Colour theme: Bronze spores

Distribution and habitat: *Asplenium* is a genus of ferns, commonly known as "spleenworts". There are about 700 species worldwide with around 30 native to Australia. *A. australasicum* is found in wet forests and rainforests of south and central coasts of New South Wales and coastal Queensland to Cape York. The species also occurs in Asia. *A. australasicum* grows on trees (epiphytic) or rocks (lithophytic) and occasionally in the soil. It consists of large, elliptical shaped fronds arising from a central stem to form a deep, saucer shape. The spreading fronds can reach about 3 metres in diameter.

Of interest: Beautiful bronze spores on back of leaves. The spores on the underside of the fronds occur in parallel rows and appear bronze in the sunshine. Spores are not seed. Ferns evolved before plants with seeds. They have spores which usually fall to the ground where a leaf like structure develops and produces male and female parts that are united with the help of water. A new plant then emerges.



Stop 7

Plant Name: *Rubus moluccanus* Native Raspberry, Molucca Bramble

Previously known as *Rubus hillii*

Rubus - Latin for bramble bush

hillii – after Walter Hill, former director of the Brisbane Botanic Gardens

Location: On the left of the rainforest verge, opposite the seed bank and also further along opposite the Brittle Gum Lawn

Colour theme: Red berries

Distribution and habitat: common along rainforest verges from Qld down to Vic. Its range extends into SE Asia. There are several different varieties of this species.

Of interest: There are several native raspberries, all of which were widely eaten by Indigenous people and colonists. The Mountain Raspberry, *Rubus gunnianus*, is found only on Tasmanian mountains, while the Small-leaf Bramble, *Rubus parvifolius*, is widespread in drier forests. One source says they are a bit insipid for modern tastes, another that they are very tasty.

NB European raspberry is *Rubus idaeus*, North American black raspberry is *Rubus occidentalis*.

Reference: Bush Tucker Walks plant details on Guides Web/Special walks

[Rubus moluccanus \(ROSACEAE\) Molucca Raspberry - Save Our Waterways Now \(sown.com.au\)](http://sown.com.au)

Stop 8

Plant Name: *Thelychiton* sp (formerly *Dendrobium* sp) Rock Orchid, Rock Lily

Location: Just in the rainforest on the main path, on the right hand side as you walk in

Colour theme: Yellow/red 'stems'

Distribution and habitat: *Thelychiton* is a genus of orchids with 26 species. They characterized by its striking colour and floral fragrance.

Thelychiton speciosus, commonly known as rock orchids or cane orchids, is a species of highly variable Australian orchids. Its varieties can be found in a range of habitats as an epiphyte (on branches or trunks of trees) or a lithophyte (growing on a rock). It has a continuous distribution along the east coast of Australia and in distinct populations along the Tropic of Capricorn.

In nature *T. speciosus* is usually found growing on rocks on sandstone or granite in damper sclerophyll forest or occasionally rainforest or growing as an epiphyte (from the trunk or branches of another plants. Its intolerance to frost means its distribution is limited in Victoria to far East Gippsland and near to the coast in NSW. In QLD its distribution can venture further inland

Of interest: The yellow/red stem is not a stem at all. It is a modified stem that is really a pseudobulb, highly variable in length but broadest at the base, tapering to the apex. Its function is to store water for this species which is an epiphyte or lithophyte without an established root system. It often has to survive periods of no rain and as an epiphyte, it has no functioning roots to collect water from the soil.

Famed for their beautiful and fascinating flowers, with over 26,000 species worldwide, orchids are the largest of all flowering plant families. What's more, they also hold the world record for having the smallest seeds of all flowering plants. A typical orchid seed is merely the size of a speck of dust. [Orchid seeds: Nature's tiny treasures | Kew](#)

And vanilla pods, which are the seed pod of an orchid, are one of the most expensive culinary items in the world.

Stop 9

Plant Name: *Macrozamia lucida* (Pineapple Zamia)

Location: On the left on the edge of the rainforest before the triangular garden (section 17)

Habit and Distribution: Grows in coastal wet sclerophyll forest in SE Qld and far NE NSW.

This is one of the smaller *Macrozamia*s and has an arching, relatively sparse crown of leaves made up of relatively wide, slightly falcate leaflets. It is a slow growing plant and needs some protection from hot, dry sun. Plants do not tend to hold large numbers of leaves and therefore it is not one of the most ornamental of the larger *Macrozamia*s.

Although the cycad lineage is ancient, most existing species have evolved in the last 12 million years, though the foliage of existing species is considered little changed from that of the Jurassic. They can be found in poor light, full light, wet, dry, acid, alkaline, sandy or rich soil environments. This is evidence of their once broad range. Similar in appearance to palms & ferns but only distantly related to either.

Of interest: It is a **Gymnosperm (naked seeded)** i.e. unfertilized ovules are open to the air to be directly fertilized by pollinators. (Flowering plants have enclosed ovules) Grow very slowly – some specimens over 1000 years old. Unusual pollination (see below)

Uses: The seeds of these and other cycads are borne in a large cone on the female plant, have a red or orange outer coat and are large (3-8cm long) and starchy. They are poisonous, but the Aborigines knew how to treat them to remove the poison, and so take advantage of the large amount of food provided by a single plant. One of the ways was to cook the seed, break it up, and then soak it for up to three weeks in running water. Raw or cooked cycad seeds taste palatable but are very poisonous and during the era of Australian exploration several expeditions (including Cook, La Perouse, Flinders, Leichhardt, Stuart) were poisoned but not fatally. Aborigines could trigger seeding by use of fire and the abundant seed so produced sustained large social gatherings of hundreds for weeks or even months at a time.

Pollination

- On the male plant, the cones are home to generations of weevils.
- When a female cycad is ready to be fertilised, it emits a pheromone.
- The male cycads in the vicinity detect the smell and an interesting process occurs. The male cones heat up through a process called thermogenesis.
- The temperature increase can be up to 16°C. This makes the male cone very unpleasant for the weevils.
- So they leave, carrying a load of pollen. They also detect the female pheromone and visit the female cone and the pollen they are carrying fertilises the female ovules.
- Once fertilised, the female plant ceases to emit the pheromone and the nearby male plants begin to reduce the heat in their cones. However, the female plant now increases the temperature of its cones to deter the weevils so that they do not remain to eat the developing seeds. The weevils leave the female plant and return to the males.

Source : The Cycads by Lorna M. Whitelock

Stop: 10

Plant Name: *Chamelaucium* 'Cascade Brook' Geraldton Wax

Location: section 17 (triangular garden)

Colour Theme: pink to mauve flowers

Distribution and habitat: A cultivar of *Chamelaucium uncinatum* which grows in white, grey or yellow sand, over limestone, laterite in coastal areas, edges of swamps, hillsides, plains between Perth and Geraldton.

Of Interest: A cultivated variant has been widely planted and has escaped into many local bushlands. This can cause major structural changes to the plant communities that it invades. [Florabase] In SA, regulations state that it should not be planted closer than two metres to any sewer main or connection. [See Botanic Gardens of SA]

Belongs to family Myrtaceae and has the typical cup-shaped flowers with five petals.

Uses: Geraldton wax is one of Australia's most famous wildflowers and is widely used as a cut flower in Australia and overseas. The flowers last for well over a week when cut. As a result of plant development programs supporting the cut flower industry, there is a variety of colour forms available when these plants bloom, such as white, pink and purple, as well as a range of flower size.

A new edible Geraldton wax flower has been developed to add a uniquely Australian zest to sauces, stocks and botanical gin. The flavours include a distinct citrus tang. The leaf is used.

[See Botanic Gardens and Parks Authority WA and [Geraldton's iconic wax flower blossoms into native food, with 'unique Australian flavours' - ABC News](#)]

Stop 11

Plant Name: *Prostanthera rotundifolia* round-leafed mint bush, Native oregano

Location: Stop 15, on eastern side of the bitumen road that passes between the Rock Garden and the Acacias but south of the entrance to the Rock Garden.

Colour Theme: mauve flowers

Distribution and habitat: It grows wild in temperate regions of SA, NSW, Vic and Tas.

Uses: The dried and ground leaves can be used as a herb, especially with poultry, pork, lamb. It also goes well in desserts and cakes. It had aboriginal medicinal uses. [See Bush tucker walks plant details on Guides Web.]

Native Oregano is a superior native substitute for common oregano. It is less sweet in flavour with earthier tones and a slightly citric tang. Use it to add flavour in salads, savoury meat dishes, sauces, or steep in hot water to make a fragrant herbal tisane. [See Tuckerbush.com.au]

Stop: 12

Plant Name: *Grevillea lanigera* – Mt Tamboritha form – Woolly Grevillea

Location: At the intersection of the bitumen road and the top of the Rock Garden steps.

Colour theme: Pinkish/red/cream flowers in clusters, Soft dense dark green foliage

Distribution and Habitat: *Grevillea lanigera* occurs in an area that extends from Wilsons Promontory in Australia northwards to the south coast of New South Wales and nearby mountain ranges. Spreading low shrub – approx., 50cm in height to 1-2m wide Foliage can appear hairy – hence common name of woolly grevillea

Of Interest: Cultivar was introduced by Bill Cane –

William Lancashire "Bill" Cane (1911–1987) was an Australian plantsman who introduced many new native plant species, forms and hybrids into cultivation.

Cane was born in Carlton, Victoria in 1911. His father was killed in World War I and his mother died in 1919, leaving Cane and his three brothers to become wards of the state. They were sent to live with relatives near Sale in Gippsland, and Cane was enrolled at the school in Wurruk. At the age of 13 he attained his merit certificate and left school, later becoming an apiarist.

Cane established Clearview Nursery in 1947 on Brewer's Hill near Maffra. There he experimented with propagation techniques, finding success in areas deemed near impossible by others including successfully growing semi-parasitic *Exocarpos* species and propagating *Eucalyptus* species, *Personia chamaepeuce* and *Calectasia intermedia* (Blue Tinsel Lily) from cuttings.[2] Cane was a long time correspondent with George Althofer of Burrendong Arboretum in New South Wales. The arboretum suffered disastrous floods in 1947, and Cane propagated hundreds of plants which he sent there to aid with reestablishment.

During his time at the nursery he made numerous field trips, particularly to the remote high country of East Gippsland, and would consult with botanist Jean Galbraith regarding plant identification. He was the first to note that a form of *Banksia* found at higher altitudes may be a new species which was subsequently named in his honour - *Banksia canei*, based on plant material that he had collected.[3][4] He was involved in the establishment of the Society for Growing Australian Plants and was made an honorary life member in 1986.

Plants that he developed or introduced to cultivation included:

- *Callistemon* 'Father Christmas'
- *Correa* 'Clearview Giant'
- *Crowea* 'Cane's Hybrid'
- *Leptospermum* 'Clearview Fairy'
- *Grevillea* 'Clearview David'
- *Grevillea* 'Clearview John'
- *Grevillea* 'Clearview Robin'
- *Grevillea lanigera* (prostrate form)

Grevillea is a diverse genus of about 360 species of evergreen flowering plants in the family Proteaceae, native to rainforest and more open habitats in Australia, New Guinea, New Caledonia, Sulawesi and other Indonesian islands east of the Wallace Line. It was named in honour of Charles Francis Greville, an 18th-century patron of botany and co-founder of the Royal Horticultural Society. The species range from prostrate shrubs less than 50 cm (20 in) tall to trees 35 m (115 ft) tall.

Common names include grevillea, spider flower, silky oak and toothbrush plant. Closely related to the genus *Hakea*, the genus gives its name to the subfamily Grevilleoideae.

The brightly coloured, petal-less flowers consist of a calyx tube that splits into four lobes with long styles.

They are good bird-attracting plants. Honeyeaters in particular are common visitors. They are also used as food plants by the larvae of some Lepidoptera species, including the dryandra moth

Traditional Aboriginal use

Grevillea flowers were a traditional favourite among Aborigines for their sweet nectar. This could be shaken onto the hand to enjoy, or into a coolamon with a little water to make a sweet drink. They might be referred to as the original "bush lollies".

Drinking nectar direct from the flower is best avoided as some commonly cultivated grevillea species produce flowers containing toxic cyanide.

Colonial furniture

A grevillea wood veneer was used on a Pembroke table, a small table with two drawers and folding sides, made in the 1790s for Commissioner of the Royal Navy, Sir Andrew Snape Hamond. The timber from which the veneer was made, referred to as 'beef wood', was sent from Port Jackson by Surgeon-General John White, who arrived in the new penal colony of Australia with the First Fleet. This table is in the collection of the National Museum of Australia in Canberra.

References:

[Bill Cane Wiki \(everipedia.org\)](http://everipedia.org/wiki/Bill_Cane_Wiki)

[Grevillea lanigera Wiki \(everipedia.org\)](http://everipedia.org/wiki/Grevillea_lanigera_Wiki)

Stop: 13

Plant Name: *Xerochrysum bracteatum* (formerly *Helichrysum*) Golden Everlasting

Location: Continue along the main part of the Rock Garden and the Golden Everlasting is in various places including the stop marker number 13

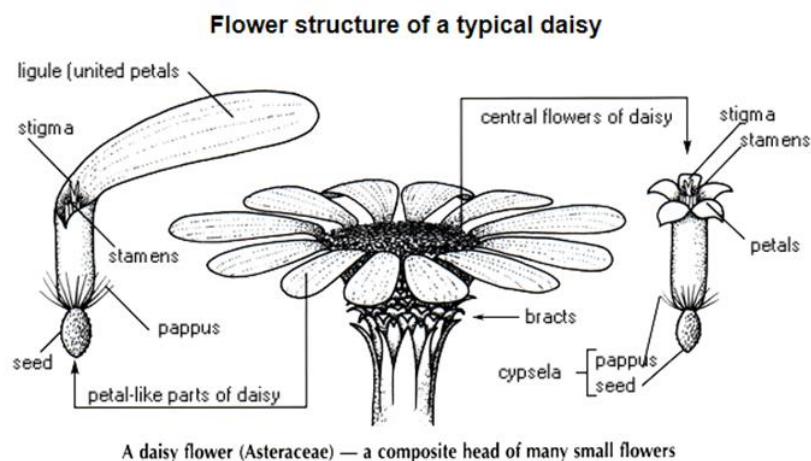
Colour Theme: golden flowers

Distribution and habitat: The species is widespread, across the country, from rainforest margins to deserts and subalpine areas.

Of interest: It is a woody or herbaceous perennial or annual shrub, with golden yellow or white flower heads from spring to autumn; their distinctive feature is the papery bracts (modified leaves) that resemble petals. Many cultivars have been developed and these may have cup-shaped bracts of different colours.

Napoleon was in power in France from 1804 to 1815, when the Napoleonic wars ceased. Ever since he was about 15 years old, Napoleon had wanted to come to Australia but that never happened. Nevertheless there were French expeditions to chart the Australian coastline and collect flora and fauna. Nicolas Baudin and Francis Peron, on their expedition to the Pacific in 1801-1804, collected Acacia, Melaleuca and Eucalyptus plants, which were later planted throughout France. Leschenault was the botanist with this expedition.

Napoleon's first wife Josephine's home about 12 km west of Paris, was Malmaison, which contained plants from many parts of the world, including 200 species of Australian plants; for example Acacias, Boronias, Callistemon of which *Callistemon pallidus* (lemon bottlebrush) and *Callistemon salignus* (willow bottlebrush) are in the ANBG, Casuarina, Grevilleas, Eucalypts (*E. globulus*, *E. diversifolia*), Melaleuca, *Chorizema ilicifolia*, and what is now called *Xerochrysum bracteatum* (Golden everlasting). It is interesting to note that these were among the plants that Napoleon requested be sent to him in exile on the isle of St Helena. They are still growing there to this day. [See Turned on Walk notes on Guides Web.]



From Colour in Winter walk 2020

Stop 14

Plant Name: *Hypocalymma xanthopetalum* Golden Myrtle

Location: Rock Garden Section 15j

Colour Theme: Yellow

Distribution and habitat: Open forest and woodland in the south-west of Western Australia.

Of interest: Derivation of name - *Hypocalymma* from Greek hypo, under and calymma, a veil, referring to features of the calyx of the flower - *xanthopetalum* from Latin xanthos, yellow, yellow-red and *petalum*, a petal (ie. having yellow flowers).

Hypocalymma is a small genus of about 29 species, all of which occur naturally only in south Western Australia. *H. angustifolium*, a well-known species where the flowers buds are dark pink but the mature flowers are white and *H. cordifolium* are the best known members of the genus and are widely cultivated.

Hypocalymma xanthopetalum was first formally described by Victorian Government Botanist Ferdinand von Mueller in *Fragmenta Phytographiae Australiae* in 1860.

It is now becoming reasonably well known and seems to be adapting well to cultivation. It is a small, spreading shrub from 0.5 to 1.5 metres high with small, oval-shaped leaves about 10 mm long. In late winter and spring the bright yellow flowers appear along the stems with 2 flowers together at each leaf axil. The flowers are about 10-12 mm in diameter.

This species is a very attractive garden plant and has been in limited cultivation for many years. It seems to becoming more readily available and is suitable for a range of climates including humid, east-coastal areas where other species from the south west are often difficult to maintain. The plant requires well drained conditions in full sun or dappled shade and it is tolerant of at least moderate frost. Annual pruning will help maintain a dense, bushy growth habit. It is a good species for use as cut flowers.

References:

Atlas of Living Australia
Australian Native Plant Society

Stop 15

Plant Name: *Hakea obtusa* or *Hakea corymbosa* Cauliflower Hakea (depending on which is flowering)

Location: Turn right into the Rock Garden before the Grass Trees and the two hakeas are the small trees in the bed on your right.

Colour theme: pinkish red for *H. obtusa* or creamy white for *H. corymbosa*

Distribution and habitat: Distribution *H. obtusa* Ravensthorpe and Fitzgerald River NP WA and *H. corymbosa* much wider area of SW WA. Neither is classified as threatened.

Of interest: *Hakea* is a genus of about 150 species of plants in the Family *Proteaceae* and are endemic to Australia. *Hakea* is one of the major groups in the *Proteaceae* family and were named for Baron von Hake, a German patron of botany. There are about 150 species, most in Western Australia, with around 40 species in the eastern states.

Hakea obtusa is an open, rounded, stiff shrub typically growing to a height of 1.5 to 3 metres (4.9 to 9.8 ft) and does not form a lignotuber. It blooms profusely from May to September and produces sweetly scented white and pink flowers with long creamy white styles which appear at the nodes on bare wood.

Hakeas range from small trees to small shrubs, mostly medium shrubs, with smooth bark, apart from the corkwoods, either upright or multi-stemmed. While their flowers appear similar to those of *Grevillea*, the plants are distinguished by their fruits which are woody and persistent whereas those of *Grevillea* are non-woody and non-persistent, except for *Grevillea glauca*. Usually, fruits remain on the plant until fire or damage causes them to split open and release the seeds though a few species shed their seed when it is ripe. Apart from their fruits, plant differences occur in leaves - where *Hakea* leaf surfaces appear similar, *grevilleas* differ between upper and lower surfaces and, in the ovary which, in the hakeas (except corkwoods) is sessile, in *grevilleas* is stipitate.

Some species can re-sprout from a lignotuber, suckering, or rarely epicormic shoots, otherwise the plants are killed by fire and rely on seeds for regeneration. The winged seeds are then dispersed to fresh sites for germination and seedling growth

Uses: *H. corymbosa* is recommended for attracting birds. It has very rigid thick waxy leaves (sclerophyllous), which are linear in shape with a very sharp needle like apex. The leaves, which vary in size, are alternate and can measure anywhere between 3-12 cm in length and 2.5-10 mm in width. The dense, spiky foliage provides an ideal refuge for small birds and other small animals but can also make an excellent natural hedge or barrier around the garden or pathway.

Sources [Hakeas \(anpsa.org.au\)](http://anpsa.org.au) and [Florabase—the Western Australian Flora \(dpaw.wa.gov.au\)](http://dpaw.wa.gov.au)

Stop 16

Plant Name: *Acacia tryconophylla*

Location: Rock Garden, Section 15r

Colour theme: Yellow flowers

Distribution and habitat: *Acacia tryconophylla* is a shrub belonging to the genus *Acacia*. It is native to Western Australia. It has a scattered distribution from the Mid-West, Wheatbelt, Peel and Great Southern regions. It is found as far north as Three Springs, south as Mount Barker and east as Lake Grace. It is found in swamps, on hill sides and among granite outcrops where it grows in sandy granitic or lateritic soils.



There has been some discussion about the natural distribution of this species of acacia. Most sources say that the natural range of *Acacia tryconophylla* is from the Geraldton Sandplains through to the Avon Wheatbelt and the Mallee regions and probably also the eastern Jarrah Forest Bioregion of Western Australia. However, extensive roadside and revegetation plantings has given this species an apparently much wider range to the west of its native habitats. The species is beginning to invade wetlands and banksia woodland on the Swan Coastal Plain from these plantings. This has major implications for planning of restoration projects since this species has the potential to become a weed in natural habitats outside its natural range.

Here in the ACT, we are aware with the example of the Cootamundra Wattle, *Acacia baileyana* of how easy it is for a species to be planted outside of its normal range and then quickly become a major invasive pest plant.

Of interest: The multi-branched pungent wattle is typically 1 to 2.5 metres in height with an erect habit. The green branchlets are angled from the stem. This plant produces yellow blossoms between August and November.

Despite the lovely yellow flowers, its most interesting features are the unusual shaped “leaves”. Like many acacias, they are not leaves but phyllodes, the stem that normally connects a leaf to a branch. Like many arid-adapted acacias, this plant no longer has true leaves but expanded phyllodes that look like leaves. If you look closely you will notice that the phyllodes are continuous with branchlets forming narrow triangular wings that are 1 to 6 centimetres long and 1 to 3 millimetres wide.

The species was first formally described by the botanist Carl Meissner in 1848 as part of Johann Georg Christian Lehmann's work *Leguminosae. Plantae Preissianae*. The type specimen was collected by James Drummond in 1844 in the Swan River Colony.

References :

Atlas of Living Australia

https://www.researchgate.net/publication/321874527_Weedy_and_natural_distribution_of_Acacia_trigonophylla_Fabaceae

Stop 17

Plant Name: *Thryptomene saxicola* (Rock Thryptomene)

Location: Rock Garden section 15r, adjacent to the Sundial

Colour theme: Pale pink flowers

Distribution and habitat: Confined to the Stirling and Eyre districts of south-western Western Australia. It grows among granite outcrops in these districts hence its common name Rock Thryptomene.

Of interest: Is a member of a purely Australian genus of thirty-five or forty species spread throughout all States of Australia, including Tasmania. The species is usually an erect shrub, 1 m high, but may often have rather pendulous branches. The prolific pink-hued flowers are axillary and are borne along the upper short lateral branches. Leaves are 5-10 mm long and obovate with a characteristic Myrtaceae smell when crushed.

Uses: It can be used for cut flowers as severe pruning has no detrimental effect on its vigour or shape.

Reference: [Thryptomene saxicola - Growing Native Plants \(anbg.gov.au\)](http://anbg.gov.au)

Stop 18

Plant Name: *Kunzea pulchella* Granite Kunzea

Location: Rock Garden section 15r

Colour theme: red flowers with gold

Distribution and habitat: *Kunzea pulchella* grows in sandy or clay soils, often near or over granite in open scrub. The species occurs at the granite outcrops of Western Australia. It may be found growing out of a crack in a large granite rock, seeming to survive miraculously on fresh air. Sometimes it may assume a bonsai appearance as the aging sole resident of a minor flaw on the face of a granite outcrop. It is one of the most common shrubs of those features in the more arid wheatbelt and goldfields areas of the southwest region. It is not considered to be at risk in the wild.



Of interest: *Kunzea* is a genus of plants in the family Myrtaceae and is endemic to Australasia. They are shrubs, sometimes small trees and usually have small, crowded, rather aromatic leaves. Most *Kunzeas* are endemic to Western Australia but a few occur in eastern Australia and in New Zealand. There is a local species that is relatively common

Kunzea is closely related to the genus *Callistemon* (the bottlebrushes) and also bears some similarity to *Melaleuca* and *Leptospermum*.

Kunzea pulchella is usually an erect or spreading shrub to about 1 – 3 metres in height with grey-green, ovoid-shaped leaves to about 15 mm long. The flower clusters are very profuse and conspicuous, usually bright red in colour with gold-tipped stamens. White and cream flowered forms are also known. Flowering occurs usually in late winter to spring. The flowers are followed by small 1-celled fruits which release numerous small seeds when ripe.

The species was first formally described in 1839 by John Lindley, and it was renamed by Alex George in 1966 to *Kunzea pulchella*. Named for Dr Gustave Kunze, a German scientist of the first part of the 19th Century and *pulchella* from the Latin *pulchellus*, pretty, referring to the appearance of the plant

Some of the main differences between *Kunzea* and its close relatives are:

The five sepals and petals are deciduous (persistent in *Callistemon*).

The stamens are longer than the petals (shorter in *Leptospermum*).

The stamens are free (united in five bundles in *Melaleuca*).

References:

Atlas of Living Australia

Stop 19

Plant Name: *Alyogyne huegelii* 'Native or Blue Hibiscus'

Location: to the right, just past the Kunzea.

Colour Theme: purple flowers

Distribution and habitat: *A. huegelii* is a medium-sized shrub reaching about 2.5 m tall and almost as wide. It is found naturally in sandy to sandy-gravel areas of South Australia and Western Australia.

Of Interest: There are four species of Alyogyne which were formerly classified as Hibiscus. The genus is distinguished from the Hibiscus by the undivided style and 'alyogyne' is derived from the Greek 'alytos' meaning united or undivided and 'gyne' woman or female. Huegelii in honour of the 19th century Austrian botanist, Baron Karl Alexander von Huegel. [See <http://www.malvaceae.info/Genera/Alyogyne/Alyogyne.html>]

The species belongs to the Malvaceae family and as such has one characteristic common to that family: the flowers open in the morning and last one day. Even so, the shrub is capable of producing hundreds of blooms per season. [ANBG]. NB the pronunciation is 'al-EE-o-GYNE-ee' [See Botany and how she is spoke <http://anpsa.org.au/APOL33/mar04-2.html>]

Stop 20

Plant Name: *Guichenotia ledifolia*

Location: Rock Garden opposite pond on the left of the path

Colour theme: blue-purple or pink flowers in winter and spring

Distribution and habitat: It is endemic to SW Western Australia. In a 2015 study, researchers suggested that the plant is the favourite food of the quokka, an endemic marsupial in southwestern Australia. *Guichenotia ledifolia* is a small shrub species in the family Malvaceae.

Of interest: The name honours Antoine Guichenot, gardener's boy on the 1801–1803 French scientific voyage to Australia under Nicolas Baudin. Guichenot was poorly educated, with poor literacy skills and little knowledge of plants, yet worked extremely hard, collecting more plant specimens than the officially appointed botanist, Baron Jean Baptiste Leschenault de la Tour, and, despite his poor literacy, labelling them with much more useful annotations.

Stop 21

Plant Name: *Rhodanthe anthemoides* (Chamomile sunray)

Location: Section 15, on right at base of lower steps in Rock garden next to the pond

Colour theme: maroon bracts around white flowers

Distribution and habitat: Perennial member of the Asteraceae (daisy) family. Endemic and widespread in Queensland, New South Wales, Victoria and Tasmania. It grows mainly in sandy soil in mountainous regions, but also grows in coastal areas. Abundant flowers and dark green foliage growing to between 15 and 30 cm tall. A central cluster of pale yellow flowers is surrounded by petal-like white, papery bracts.

Of Interest: Depending on locality, rose-pink buds will form during winter and stay dormant, opening in early spring to summer. Buds can brighten up a garden at this time of year.