Colour in Winter 2020

Walk developed by Kay Saunders, Kerry Moir, Pam Cooke, Glenys Bishop, August 2020

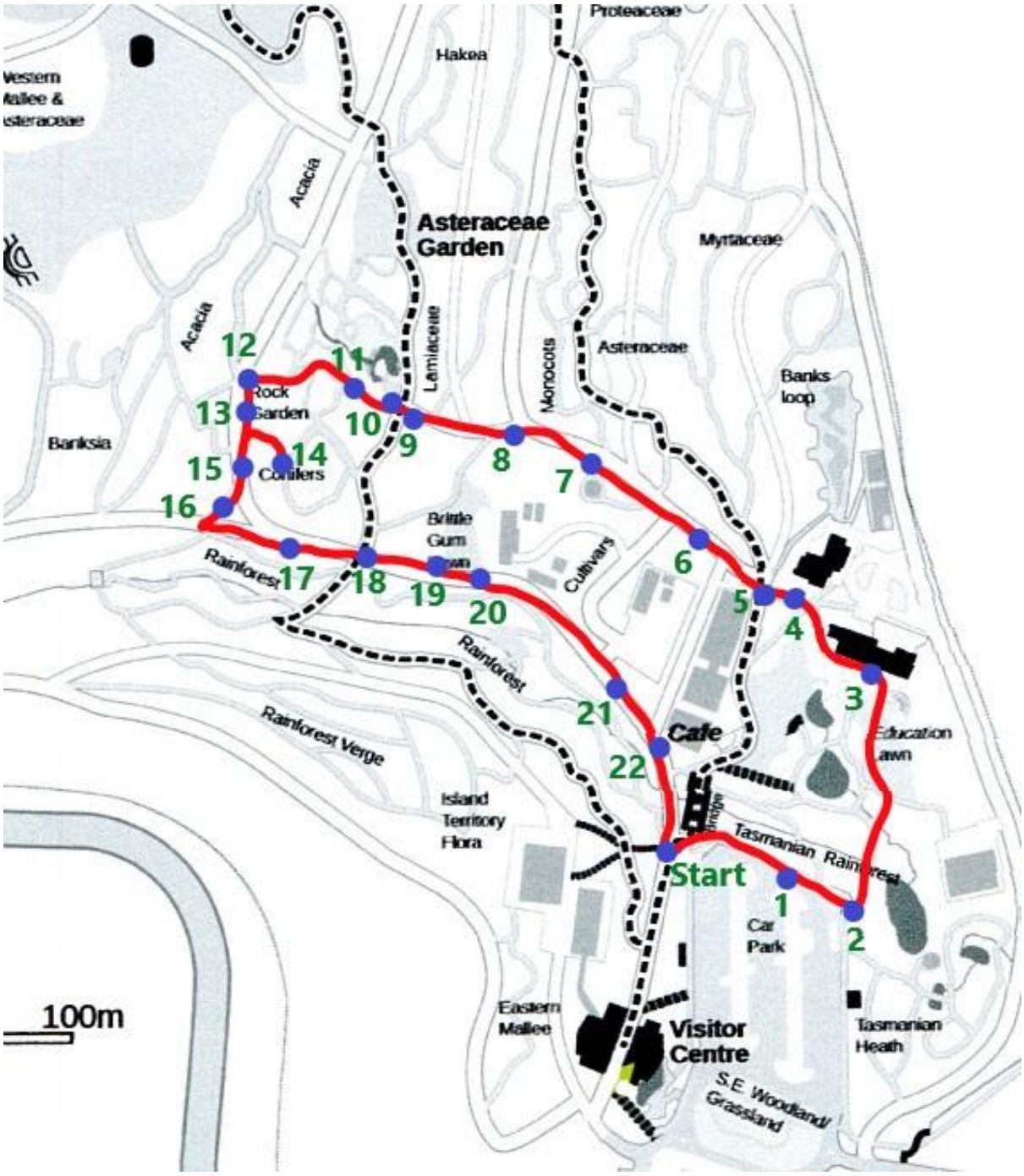
Theme: Generally people don't associate colour with gardens in winter, thinking of them as rather drab at this time. However, in this walk we can see all the colours of the rainbow plus a few others in these gardens.

We have selected a COVID-safe route following roads, avoiding the main path and stopping where there is ample room for visitors to stand apart.

The map shows the actual route with stop numbers. We have deliberately included a large number of stops and plants to give guides flexibility. All of the plants selected fit the theme of colour in winter, whether it be leaves, flowers, fruits or bark.

After the map is a list of plants that can be found at each stop and this is followed by useful, but not exhaustive, details about all of the plants listed. Remember also to look for birds.

Colour in Winter 2020 Route



List of numbered stops as shown on map, and featured plants

Stop	Species	Other plants nearby
1	*Hardenbergia violacea*	*Thryptomene saxicola*
2	*Allocasuarina torulosa*	
3	*Banksia '*Giant candles'	
4	*Alyogyne huegelii* 'Western gem'	*Phebalium squamulosum*
5	*Acacia alata*	
6	*Eustrephus latifolius*	*Melaleuca cuticularis*
7	*Anigozanthos* 'Bush diamond' *Brachychiton rupestris*	*Eremophila maculata* Blue water pipes
8	*Grevillea aspleniifolia*	
9	*Rhagodia spinescens*	
10	*Rhodanthe anthemoides*	
11	*Banksia integrifolia*	
12	*Epacris purpurascens*	*Homoranthus flavescens*
13	*Xerychrysum bracteantha*	
14	*Macrozamia communis*	
15	*Prostanthera rotundifolia*	
16	*Chamelaucium 'Cascade Brook'*	
17	*Thelychiton speciosus*	
18	*Stenocarpus sinuatus*	
19	*Plectranthus sp*	
20	*Indigofera australis*	
21	*Asplenium australasicum*	
22	*Doodia aspera*	

Details of Plants

Hardenbergia violacea (False Sarsaparilla, Purple Coral Pea, Happy Wanderer, Native Lilac, Waraburra)

Location: Stop 1, S169 in car park below clock.
Colour Theme: deep purple flowers
Distribution and habitat: A widespread species occurring in Queensland, New South Wales, Victoria, Tasmania and South Australia. It occurs in a variety of habitats from coast to mountains, usually in open forest or woodland and sometimes in heath.
Of Interest: The name for the genus honours Franziska Countess von Hardenberg, sister of the Baron Karl von Hugel, a 19th century Austrian patron of botany who collected plants while on an expedition to Australia in 1833. The common name Waraburra comes from an indigenous language.
Uses: D'harawal Senior and botanist Aunty Fran Bodkin, says the leaves were boiled and the liquid was strained and sweetened, mainly with native bee honey, and taken to treat stomach cramps. Unofficially, she reports that '*if my grandmother ever caught me wagging school, she would take me home, take the Hardenbergia bush and boil it and then make me drink the water without any sweetening.*' Imagine unsweetened sarsparilla! [Waraburra Nura Garden, UTS]

Thryptomene saxicola (Rock Thryptomene)

Location: Stop 1, S169 in car park below clock.
Colour Theme: 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.
Uses: It can be used for cut flowers as severe pruning has no detrimental effect on its vigour or shape.

Allocasuarina torulosa(Forest oak or Forest sheoak)

Location: Stop 2, at the top of the steps leading down to the Education Lawn from the bottom of the northern carpark.
Colour Theme: rust-coloured pollen-covered male flowers
Distribution and habitat: It is widespread in mainland eastern Australia, from the south coast of NSW, north to Cape York, generally east of the Great Dividing Range on hilly terrain, but may extend to subcoastal plains.
Of interest: These trees are dioecious, i.e. male and female flowers on separate trees. The male tree is still in flower although the female one is not but woody fruits from previous seasons are present on the female tree. The fruit is a woody, oval structure superficially resembling a conifer cone, made up of numerous carpels (female reproductive organs), each containing a single seed with a small wing. Note the size of the 'cones'. This is the type species of the genus Allocasuarina.
Uses: The timber is dense, and attractively figured wood and has been used for flooring, parquetry, cabinetwork, turnery, veneer and roof shingles. The trees fix nitrogen, good windbreak, shade for stock.

Banksia 'Giant Candles'

Location: Stop 3, outside the Crosbie-Morrison building

Colour Theme: golden flowers with red or black hooks
Distribution and habitat: This cultivar is a spontaneous hybrid between *B. ericifolia* and a variety of *Banksia spinulosa* that arose in cultivation in the garden of Ms Sylvia E Peach of Sunnybank Hills, Queensland.
Of Interest: While the flowers remain yellow, the styles that have a hooked end and protrude from the flower head, change colour from red to black as the flower matures. The leaves are approximately 4.5cm long and are intermediate between the two parents, being whorled around the stem as in *B. ericifolia* and with the rolled under margins of *B. spinulosa*. It is well known for its extremely large flower heads, which easily can become 40cm long. They have a habit of drooping or bending occasionally. Individual flowers are a bronzy-orange and 2–2.6mm long and are showy from late autumn through winter.
Uses: The flowers have a high nectar content and are a major food resource for many birds and mammals. Popular garden plant.

Alyogyne huegelii 'West Coast Gem'

Location: Stop 4, Turn left at the corner of Crosbie Morrison Building and Banksia Centre – plant visible on right of path.
Colour Theme: purple flowers
Distribution and habitat: 'West Coast gem' is a cultivar of *A. huegelii* (blue hibiscus, or native hibiscus). *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 Alyogynes 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]

Phebalium squamulosum (Forest phebalium, Scaly phebalium)

Location: Stop 4, S240 between Ellis Rowan and Crosbie Morrison buildings on the opposite side to Banksia garden
Colour Theme: White flowers in clusters
Distribution and habitat: Widespread in eastern Australia from north-east Queensland to Wilsons Promontory in Victoria. Open forests and woodlands from the coast to the mountains
Of Interest: Variable species with about 10 subspecies. Belongs to the Rutaceae family which includes citrus and boronias. Foliage is very aromatic. Flowers are cream to yellow star-shaped and small but occur in clusters so are quite showy. Small to medium shrubs with bright green to grey/green foliage which is sometimes silvery on the underside.
Uses: Attractive and reliable in gardens in temperate and sub-tropical climates. Flowering usually occurs in early spring.

Acacia alata (winged wattle)

Location: Stop 5, at the corner where the path past the Ellis Rowan meets the path from the Banks Centre.

Colour Theme: Cream flowers
Distribution and habitat: grows from north of Geraldton down as far as Albany in a variety of habitats including near water, rocky hills, breakaways, salt pans, clay flats.
Of interest: It was widely cultivated in Europe in 19th century. Phyllodes (modified leaf stems which become flattened and widened) are almost reduced to cladodes (flattened stems), giving the appearance of winged stems. Each phyllode is extended into a spine. NB Phyllodes and cladodes perform photosynthesis in place of the leaves which may be non-existent or reduced.

Eustrephus latifolius (wombat berries)

Location: Stop 6, on corner of service road behind Ellis Rowan building.
Colour Theme: orange fruits
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 with thin crisp, white arils which were eaten by Indigenous people (seeds and skin discarded). The roots swell into small earthen coloured tubers 1-3 cm long, which taste sweet and juicy. Aborigines ate them either raw or roasted but they are not easy to dig from hard soil.
The vine-stems of *Eustrephus latifolius* stripped of leaves were also used to tie objects which including their use in food preparation. [Dengarden, ANPSA, Plant Net]

Melaleuca cuticularis (Saltwater Paperbark)

Location: Stop 6, on right next to *melaleuca lanceolata*.
Colour Theme: Shades of pink bark
Distribution and habitat: occurs naturally in the Esperance, Albany and Stirling Range districts of Western Australia. It grows on saline soils around estuaries and salt lakes.
Of Interest: small tree some 2.5 - 4 m tall which is fairly dense. The branches of the plant are rigid and tortuous and the leaves linear to oblong, up to 1cm long and dark green in colour. Stems and trunk are clad in a pale papery bark which contrasts well with the foliage.
Uses: can be used as a tall, informal hedge or as a specimen plant for damper areas. The paper-like bark is used traditionally by Indigneous people for making coolamons, shelter, wrapping baked food and lining ground ovens. The papery bark of Melaleucas is believed to protect the tree from fire, even though the outside burns.

Anigozanthos 'bush diamond' (Kangaroo Paw – hybrid)

Location: Stop 7, S339 on left of path outside toilets.

Colour Theme: white and pale pink buds and stems
Distribution and habitat: Anigozanthos occur naturally only in the southwest of Western Australia. They occur in a variety of habitats and soil types but do best in well-drained soils in a sunny position. Many hybrid varieties now available including frost tolerant plants such as this one.
Of Interest: The overall colour of the flowers is influenced by fine coloured hairs which cover the flowers and, sometimes, part of the stalk. One plant may produce up to ten stems, with total flower production reaching up to 350 per plant. A major disease of kangaroo paws, particularly in moist cool climates, is a fungus which causes ink disease, which appears as large black blotches on the leaves.
Uses: Kangaroo paws are also very good cut flowers. They are exported to many parts of the globe and are grown commercially in the USA, Israel and Japan.

Brachychiton rupestris (Queensland bottle tree, Narrow-leaved bottle tree)

Location: Stop 7, On side of road opposite the blue water pipes.
Colour Theme: mottled green bark
Distribution and habitat: The species is endemic to a limited area from Central Queensland through to northern New South Wales. It grows in medium to heavy clay, silt, sand and volcanic rocks
Of Interest: The common name 'bottle tree' refers to the characteristic trunk of the tree, which can reach a 2 m diameter. The height of the tree is less impressive, with a maximum height of 18-20m; the canopy spans 5-12 m in diameter. Deciduous - the tree will drop its leaves before the flowering period between October and December. It can continue to photosynthesise through the green bark after its leaves have dropped. Flowers are creamy-yellow with red markings, and boat-shaped, woody fruit are produced. Each plant has distinct male and female flowers.
Uses: There is a significant amount of water stored between the inner bark and the trunk. Aboriginals historically carved holes into the soft bark to create reservoir-like structures. The seeds, roots, stems, and bark have all traditionally been a source of food for people and animals alike. Another use has been made of the fibrous inner bark to make twine or rope and even woven together to make fishing nets.
The leaves have also been used for stock feed, and Queensland farmers often leave bottle trees as a potential food source when land is cleared. During drought conditions, whole trees have been felled to feed stock. The soft edible pulp inside the trunk is exposed by removing the bark.

Eremophila maculata subsp maculata(Spotted emu bush, spotted fuchsia bush)

Location: Stop 7, just before Bottle tree.
Colour Theme: yellow flowers
Distribution and habitat: Inland areas of all mainland states and the Northern Territory.
Of Interest: This is probably the most common of the 214 Eremophila species both in the wild and in cultivation. Flowers are tubular in shape to about 25 mm long and the colour may be pink, mauve, red, orange or yellow, often with a pale, spotted throat. This example is yellow.
Eremophilas which have long tubular segments are often coloured red, orange, yellow, brown or green, which is within that part of the spectrum mainly used by birds in their detection of suitable food sources, chiefly nectar. The single upper 'lip' which is often four lobed, and the usually narrow lower 'lips' are strongly recurved. The sepals are often large and brightly coloured, which allows for the flowers to be seen by the birds at a distance. Nectaries are generally at the basal end of the tube, and in their effort to extract the rich sugary nectar from them, birds disturb pollen from the strategically located stamens, leaving with a dusting on their napes. The longer stamens brush

nectar onto the birds head as the bird's beak reaches down the floral tube toward the nectar. [ANPSA, also see Guides Web]
Uses: Widely cultivated as a garden plant, particularly in dry areas. It makes a useful hedge or windbreak. Indigenous peoples sucked the Eremophila flowers for nectar. The SA Country Fire Service rates this as a fire retardant plant. [Botanic Gardens of SA plant selector]

Blue Water Pipes

Location: Stop 7.
Colour Theme: painted blue
The ANBG is allocated 180ML (mega litres) of lake water annually; 1 ML per night during summer. The 'big blue pipes', installed in 2010, are a backflow prevention system to stop lake water getting into the potable water supply. These also allow potable water to be pumped through the purple taps, if necessary. The pipes need to be prominent and visible to allow emergency services easy access; this is why they are painted blue and set up high.
If the lake water drops down to 2m below the spillway (Scrivener Dam), the ANBG must stop using lake water.
The pump house is located 150m into Lake Burley Griffin, and is positioned at a level that ensures good quality water.
The irrigation is usually turned off through winter and at other times when there is rain.
Mains water is used in the nursery for hygiene reasons. Potable water is also used in the toilets and the bubblers. [Notes from June 2016 Guides meeting.]

Grevillea aspleniifolia (Fern-leaf Grevillea)

Location: Stop 8, adjacent to the road up from blue water pipes on the left.
Colour Theme: pink toothbrush flowers
Distribution and habitat: Spreading shrub 1–5 m high. Grows on open rocky or moist sites in eucalypt woodland, on sandstone or shale, in Warragamba Dam and Woronora R. catchments, and near Bungonia Caves.
Of Interest: Attractive fast growing grevillea with spreading horizontal branches, army green leaves, white underneath and maroon/burgundy toothbrush flowers in spring-summer.
Interestingly, this plant has leaves of varying shapes on a single plant. While they are generally quite long and thin, they may have intact edges or be toothed, sometimes irregularly. The undersides are covered in short dense hairs.

Rhagodia spinescens (thorny saltbush, spiny saltbush, berry saltbush, creeping saltbush, hedge saltbush)

Location: Stop 9, S110 at corner of main path and road
Colour Theme: grey foliage
Distribution and habitat: endemic to Australia, found in inland parts of all states and territories except Tasmania. Occurs on sandplains, alluvial plains, intermittent sandy watercourses, on sandy edges of salt lakes, and rarely on gravelly hillslopes. Also on heavy, saline or subsaline soils at the edges of lakes, on flats, and in dune swales. Usually in association with other low shrubs, or as an understory in numerous woodland communities. Multi-stemmed dense shrub to 2m high, with branches often ending in spines. Leaves are grey green to almost whitish from their covering of hairs. Male and female flowers are usually on different plants. The ripe fruit are red and succulent.

Of Interest: Foliage can smell of stale fish. The dense foliage makes good shelter for small creatures like lizards and smaller birds, as it can be thorny, so it is a great habitat plant. It can also provide food for stock in semi-arid areas.
The appearance of **grey foliage** is due to the leaves being covered in fine hair. They act as an insulation layer for the leaf, like a windbreak, reducing water loss from the leaf and helping to reflect the harsh sunlight and keep it cool in hot weather.
Uses: The Aranda tribe in central Australia used the fruits to make a red face paint.

Rhodanthe anthemoides (Chamomile sunray)

Location: Stop 10, on right at base of lower steps in Rock garden
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.

Banksia integrifolia (Coast Banksia)

Location: Stop 11, Rock garden, halfway up the lower steps on the southern side.
Colour Theme: green and silver leaves, flower heads green to pale yellow
Distribution and habitat: Extends along much of the coast and adjacent hills of eastern Australia.
Of Interest: Joseph Banks and Daniel Solander collected four species of Banksias at Botany Bay in 1770. *B. serrata*, *B. ericifolia, B. integrifolia* and *B.robur*. The leaves are glossy and green on top and rough and white on the underside. On this plant, it is usually possible to find flower heads in several different stages of development, including very new buds, closed flowers, open flowers, spent flowers and woody fruit. This is a prostrate form of *B. integrifolia.*
Uses: Banksia flowers are rich in nectar. Such flowers were a good source of sweetness for Aboriginals. They could suck the nectar from flowers, shake it onto the hand and lick or dunk the flowers in water to produce a 'cool drink'. Nectar collecting is an early morning activity, before the flowers have become dry by the sun's heat or been drained by nectar loving birds.
The old flower heads could be used as strainers for water and to carry fire when Aboriginal people were on the move. [Cook and the Pacific Plant Walks Guides Web]

Epacris purpurascens var purpurascens (Port Jackson Heath)

Location: Stop 12, Rock garden on southern side section 15d.
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]

Homoranthus flavescens

Location: Stop 12, Rock garden s15a, on left near top of upper steps before the road.
Colour Theme: silver to blue-grey leaves with a reddish tinge, and red buds
Distribution and habitat: is found in northern New South Wales from the coast to the western plains. Appears to grow best in situations of diffuse light for the most attractive plants are found in semi-shaded locations.
Of Interest: The foliage of this plant is unusual and distinctive. Silver to blue-grey leaves are crowded on the upper side of the spreading horizontal branches. Some forms also have an attractive reddish tinge to the foliage.
Uses: Interesting effects can be created in group plantings, since the view is equally attractive from the side or above the plant.

Xerychrysum bracteantha (golden everlasting) (formerly Helichrysum)

Location: Stop 13, turn left at top of upper steps on southern side of Rock Garden, plant on left before unpaved path.
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 *Xerychrysum bracteantha* (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.]

Macrozamia communis (Burrawang)

Location: Stop 14, take the unpaved path from the bitumen road beyond the rockgarden steps into the gymnosperms.
Colour Theme: bright orange seeds
Distribution and habitat: This is the most southerly cycad in the world and grows on the NSW coast.
Of Interest: Burrawang is the aboriginal name (Dharuk language) for this species and has subsequently been misapplied to other macrozamias. 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. 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. [See Bush tucker walks plant details on Guides Web.]

Pollination in this cycad is a fascinating process. There is a small maroon-coloured weevil that lives in the male cones of this cycad. When the female is ready to be fertilised, it releases a pheromone that reaches the male plants. In response, through a process called thermogenesis, the male cone heats up. It can become up to 12C above the ambient air temperature. The weevils are forced to leave the male cones and fly en masse in the late evening across to the female cycad cones carrying pollen from the male plants. The female cones are fertilised but as the seeds develop, they become toxic and so the weevils cannot live in the female cone, thus preserving the seeds. (Wallenius, Thomas; Peakall, Rod; Wanjura, Wolf; Chyb, Sylwek; Oberprieler, Rolf: Proceedings of Cycads 2008)

Uses: The seeds 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. In Western Australia, only the outer red part was eaten, after treatment by washing and burying.

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]

Chamelaucium 'Cascade Brook' (Geraldton Wax)

Location: Stop 16, section 17 (triangular garden)

Colour Theme: pink to mauve flowers

Distribution and habitat: A cultivar of *Chamelaucium uncinatium* 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 culivated 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. [See Botanic Gardens and Parks Authority WA]

Thelychiton speciosus (formerly *Dendrobium speciosum*) (Rock Orchid, Rock Lily)

Location: Stop 17, edge of rainforest at corner of triangle garden and opposite Gondwanan Plants.
Colour Theme: yellow stems
Distribution and habitat: Thelychiton is a genus of orchids with 26 species, characterised by their striking colours and floral fragrance.
Thelychiton speciosus, commonly known as rock orchid or cane orchid, 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 rocks). 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 as a lithophyte on sandstone or granite in damper sclerophyll forest or occasionally rainforest or growing as an epiphyte. 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: Yellow Stem – but not a stem. 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 since this species often has to survive periods of no rain and, as an epiphyte, has no functioning roots to collect water from the soil.
Orchids have the smallest seeds in the world. And vanilla pods, which are the seed pod of an orchid, are one of the most used culinary items in the world.

Stenocarpus sinuatus (Firewheel tree, White Beefwood, Tulip Flower, White Oak, White Silky Oak)

Location: Stop 18, S114 on edge of rainforest, across road from research cottage
Colour Theme: red flowers
Distribution and habitat: Various rainforest types from the Nambucca River in New South Wales to the Atherton Tableland in tropical Queensland. A medium to large tree, up to 40m tall and 75cm in trunk diameter. The base of the cylindrical trunk is flanged. Boat-shaped seed pods, 12 – 20cm long.
Of Interest: brilliant display of red flowers produced in wheel-like clusters.
Uses: 'one of Australia's most spectacular trees'. Often grown as ornamental street or garden tree in Australia and other countries. Flowers often appear in art and are the subject of some of Margaret Preston's (Australian painter and printmaker who is regarded as one of Australia's leading modern artists of the early 20th century) most popular prints.

Plectranthus sp (Silver spurflower)

Location: Stop 19, on the side of the rainforest. Both *P. argentatus* and *P. torrenticola* are growing near here.
Colour Theme: blue flowers and grey foliage
Distribution and habitat: P. argentatus is native to rocky outcrops and rainforest in the border region of Queensland and New South Wales. Prefers partial shade. Tolerates poor drainage and light frosts. Drought tolerant. **P. torrenticola** is limited to eight locations in the Sunshine Coast hinterland of south-eastern Queensland. It grows at altitudes of 250–450 m above sea level, in open heathland on rock outcrops; in eucalypt open forest close to margins of rainforest; and often along creek lines.
Of Interest: P. argentatus is a vigorous, spreading, flowering shrub with a rounded habit and attractive, silvery, plush-velvet, leaves. Small mauve to white flowers are presented above the foliage on sage-like spires. ***P. torrenticola*** is an endangered species. One of the main threats is invasive weeds. They are related to coleus – ornamental indoor plant.

Uses: Useful for a border; edging; container or understorey.

Indigofera australis (Wild indigo)

Location: Stop 20, side of rainforest

Colour Theme: pink flowers

Distribution and habitat: slender shrub of the pea family found in all states. Common and widespread in southern Australia in open woodland and eucalypt forest but also occurs in desert and rainforest margins. Varies in size, habit and colour which is not surprising as it occurs over such a wide area. It is generally upright, to 2 m high, with flexible stems tending to arch one way, but in harsh conditions it is often straggly and leaning with few main stems. It grows in a range of well-drained acid soil types in semi-shaded situations.

Of Interest: Typical pea flowers with 4 petals; the 'standard', the 'keel' and two 'wings'. Flowering occurs in late winter and spring. Soft purple to pinkish flowers in long clusters, contrast with beautiful blue-green, velvety smooth, pinnate leaves: (of a compound leaf, having leaflets arranged on either side of the stem, typically in pairs opposite each other). Flowering followed by shiny, bright-green pods ripening to produce squarish, hard seed. The seeds are hard and need heat from a bushfire, or soaking in hot water, before the seed can germinate. After fire, regeneration from seed is prolific but it can also regrow and sucker from rootstocks and lateral roots. The flowers are a pollen and nectar source for many native insects, including bees and wasps.

Uses: crushed by Aborigines and put into pools to kill or stun fish or eels so they could be easily caught. Produces a range of colours as a dye, depending on the process - deep blue, green and brown; beautiful yellows to beige, mushroom, and deep pink-browns; blues, pinks and mauves. [See ACT Koori Bush Tucker Garden book]

Asplenium australasicum (Birds Nest fern)

Location: Stop 21, there are several on edge of rainforest,

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.

Doodia aspera (Prickly rasp fern)

Location: Stop 22, S246 on side of road at the end of Bass St, next to the café.

Colour Theme: new leaves pinkish red against the dark green background of older leaves

Distribution and habitat: Widespread and common in a variety of habitats such as rainforests, rainforest margins and tall open forests. It occurs in Queensland, eastern NSW, eastern Victoria and Norfolk Island. Particularly common in the Blue Mountains. A terrestrial fern up to 35cm high producing short-creeping rhizomes and erect fronds. Underground rhizomes spread easily to form

colonies. Fronds are rough to touch – hence the name. The rough texture comes from small bumps that cover the fronds. It grows on sandstone and igneous (granite and basalt) substrates, in sand- or gravelly soils. It grows in both sunny and shaded areas and is tolerant of short dry periods.
Of Interest: The new growth fronds are bright pinkish-red and age to dark green. Also native to New Zealand but now thought to be extinct https://www.nzpcn.org.nz/flora/species/doodia-aspera/. The first Australian fern brought to Kew Garden, UK.
Uses: Attractive as a groundcover in shady conditions.