

MT LOFTY BOTANIC GARDENS

MARCH 2023 walk from the LOWER CAR PARK



To help keep visitors COVID-19 safe we provide a copy on the Noticeboard at the Garden that may be photographed to take with you or there is a downloadable version on our website (<https://www.friendsbgadelaide.com/guided-walks>)

In summer there is no better place to visit than the cool and shady Fern Gully, reached by a stroll along the lower road to the left of the main lake and taking the first corner up the sealed road past the pond. At the entrance to Fern Gully, pause at the next small pond and listen to the gurgling water and maybe the serenading of the frogs. From the lush growth and tall tree ferns you may be surprised that this area, included in landscape architect, Allan Correy's 1960s original Master Plan, was not developed until after the Ash Wednesday bushfires that ravaged the garden in 1983.



Take the path to the right. At your feet by the pond edge is a **maidenhair fern, *Adiantum venustum*** while a few steps further is a small **walking stick palm, *Linospadix monostachya***, often referred to as Harry Lauder's walking stick. Many thousands were harvested during and after the first World War for use by injured servicemen. On this specimen there are both old and new flower spikes emerging from a long, dark brown sheath.

New Zealand man fern, *Cyathea medullaris* with black stems with distinct white dashes is a distinctive tree fern. Also note the new unrolling fronds – the process is called 'circinnate vernation.' You may also notice another very tall tree fern here, though you will need to look to the sky to see its silhouetted umbrella-like fronds. This is also a member of the *Cyathea* genus of tree fern, of which there are many in this part of the Garden.

A little further along, the distinctive, peeling, chestnut bark of the **hoop pine, *Araucaria cunninghamii*** is eye-catching. Notice how the bark peels horizontally around the trunk. Hoop pine produces a high-quality timber and this has led to the depletion of natural stands in NE NSW and east-central Qld. There is also a variety found in New Guinea ***Araucaria cunninghamii* var. *papuana***, one of which can be found near the main lake close to other members of the conifer family.



The path is lined with more *Cyathea* species of Australian tree fern, including the **rough tree fern, *Cyathea australis*** with its rough trunks made up of the bases of broken fronds. There is also the **scaly or coin spot tree fern, *Cyathea cooperi*** whose fronds drop cleanly, leaving only 'coin spots' on the trunks. Continue following the path, where you will find a collection of plants which had their origins in the ancient supercontinent Gondwana. This includes **blueberry ash, *Eleocarpus reticulatus***, with dark coloured fruit, **black wattle, *Callicoma serratifolia*** with serrated leaf edges and pom-pom flowers, an **old man banksia, *Banksia serrata*** with popcorn-like bark and old cones; and **forest oak, *Allocasuarina torulosa*** with finely flaked bark.

A distinctive strong sweet smell may be noticeable if the **bolwarra tree, *Eupomatia laurina*** is still flowering. Commonly known as the copper laurel or native guava this native evergreen tree from eastern Australia and New Guinea is a primitive legacy of the first flowering plants of Gondwana. The heavily scented flowers open in summer and are followed by edible yellow berries.

Further along in this area are several **Wollemi pines, *Wollemia nobilis*** doing well in their favoured situation. Also on the right with its huge leaves overhanging the path are two **Australian fan palms, *Livistona australis*** - be careful of thorns on the stems.

Up further on the left are both plain and crested forms of the **male fern, *Dryopteris***. A careful examination of the underside of this fern will reveal two rows of brown spore cases. You may already know that ferns do

not flower. They are distinguished from flowering plants by the fact that their method of reproduction is by spores not by seeds, which arise from of pollinated flowers. Many ferns have their spore cases clustered on the underside of their fronds, some with and some without a flap of tissue which protects them during development. When the spores are ripe, the spore cases expand and explode, pushing aside the protective flap, and in the process expel the spores to drift on air currents before settling and germinating in suitable new site.

Before you cross the road, stop to look at the **Tasmanian pepperberry**, *Tasmannia lanceolata* growing on the right. This evergreen shrub is native to woodlands and cool temperate rainforests of SE Australia. At present the black 2-lobed berries are plentiful. Both the leaf and berry are used as a spice.



Cross the road and continue up the hill, enjoying the greenery of many ferns, the variety of their growth forms, and their varied countries of origin. Ferns range from minute ground covers to tall tree ferns reaching 20m, and everything between. Ferns were on earth before the dinosaurs and still inhabit every continent except Antarctica. On reaching the small path follow it to the left which is overhung on both sides with the luxuriant growth of the **royal fern**, *Osmunda regalis*.

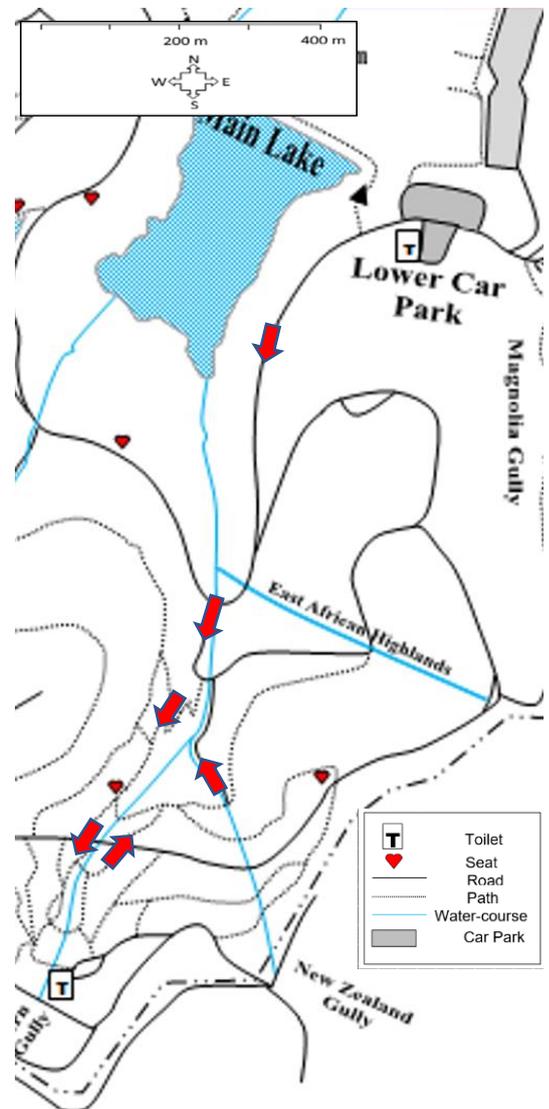
Cross back over the road and take the few steps down. Just over the new boardwalk a small group of **sandpaper fig**, *Ficus coronata* borders both sides of the path. A touch of the leaves will reveal why it is called the sandpaper fig. Look carefully for the small fruit and their little "coronets".

A group of three **dwarf woolly tree fern**, *Cyathea tomentosissima*, is on the corner of an intersecting path. It is native to New Guinea and found in cool mountain cloud forests and high elevation grasslands. It is one of the smaller tree ferns, growing to about 2.5 metres. Note the new fronds emerging from the trunk and their covering of dense pale brown hairs. Whilst many tree ferns are hairy, this is particularly so, and recognised in the species name "tomentosissima" meaning very hairy.



Turn right here and follow the path back through a collection of New Zealand plants, descending left down the paved NZ Gully path. Near the bottom of the path is a group of small **rasp fern**, *Doodia cordata* showing attractive red new growth. These are found in both Australia and New Zealand You may notice other ferns near here, including a **birds nest fern** *Asplenium sp.* and an **elkhorn fern**, *Platycerium bifurcatum* growing on a tree. This is known as a bracket epiphyte which can live off the nutrients from the air and water from their surrounds. This is yet another form of fern, a truly fascinating and diverse part of the earth's flora.

JH, RH and NF, 3/23



This leaflet has been prepared by the Garden Guides funded by the Friends of the Botanic Gardens of Adelaide Inc. For information about the Friends and/or guided walks, please telephone 8222 9367

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