

# 'Must See' in February in the Royal Botanic Garden, Sydney, as recommended by our Volunteer Guides

Welcome to our Garden. We hope you enjoy this walk, please follow the 'Must See' route using the map overleaf.

This is a cool and shady walk for summer.

## (1) The Palm Grove

This is the second oldest part of the Botanic Garden set up in the first half of the 1800s. It showcases palms and conifers from Australia and from around the world. Cliveas border the paths and bring vibrant colour to this area in spring. The Cabbage Tree Palm (*Livistona australis*) provided food for the early settlers, and also fronds for a cabbage-tree hat industry in the early days of European settlement. Look for it at the intersection of paths after the bridge. Nearby is the tallest tree in the Garden, the Queensland Kauri (*Agathis robusta*) at 33 metres. You can also see a Dragon Blood Tree (*Dracaena draco*) from the Canary Islands leaning over the path in this area.

## Plant Highlight

### (2) Cycads

Many cycads grow in the Palm Grove. There are examples of the tall Australian cycad (*Lepidozamia peroffskyana*) on the way to the Fernery, and there are also South African cycads in this area of the Garden. Cycads, a reminder of Gondwanan links between Australia, Africa and South America, are traditionally called living fossils or dinosaur plants. However, Trust research scientist Dr Nathalie Nagalingum has released findings which prove this to be false. This study shows that modern cycads did not co-exist with dinosaurs, and are only 10 million years old. They should therefore no longer be described as living fossils. Their findings are published in *Science*.

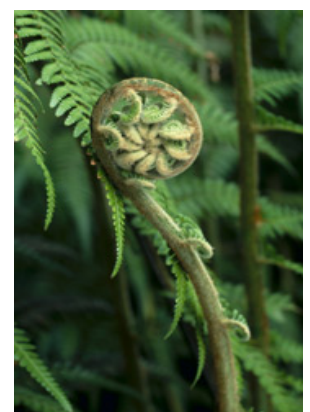
For more information go to: <http://www.abc.net.au/science/articles/2011/10/21/3344101.htm>



### (3) The Fernery

The Fernery was built in 1994 and is a collection of ferns and their allies. Ferns do not produce flowers, fruits or seeds, but reproduce by means of spores. Look at the underside of the fronds to discover these spores.

Overhead are Australian ferns in hanging baskets – for example 'Hare's Foot' fern. Native tree-ferns and various terrestrial ferns can be seen. As you follow the circular path you will see several King Ferns (*Angiopteris evecta*). These very large ferns need water pressure to maintain their structure. Unfurling new fern fronds are called 'croziers' – see picture (right). Epiphytes, such as the Staghorn Fern, cling to the trunks of trees. These dramatic plants have 'nest leaves' to help the plant support itself on its host, and catch water and falling leaf matter. Two large fertile fronds, with spores, hang down like a stag's horns, giving the plant its common name.



### (4) Convict Bricks

Sandstone blocks in the wall at the far end of the Fernery display 'banker's marks'. These bricks were discovered when a Governor's bath-house was dismantled along the sea wall in the Garden. Signage explains how convicts were paid for their labour, and that these marks were the means of identifying each person's work.

## (5) The Rainforest Path

A rainforest is a collection of plants living together in a closed environment. The Garden's temperate rainforest is composed of taller rainforest trees forming a canopy, with an understory of palms, shrubs and groundcovers. There are many vines scrambling to the top of the canopy. In an attempt to reach the light, rainforest plants have evolved to have leaves of different sizes and shapes. There is life on every level, with ferns and orchids occupying niches in the trees. The forest floor is rich with decaying plant matter which provides nutrients for this community. At a bend in the path look for the Atherton Fig, *Ficus leptoclada*, (pictured) found in northern Queensland. It has striking green figs on its trunk and boughs.



## Plant with a Story

### (6) Ribbonwood (*Idiospermum australiense*)

This tree is one of the rarest trees on earth. It is the only species in its genus, and there is only one genus in its family. It dates from about 120 million years ago and is endemic to the Daintree Rainforest, northern Queensland.

Ribbonwood was discovered in 1902, then thought to be extinct, and then rediscovered in 1971 when cattle wandered into the area and ate the very large and toxic seeds from this tree. It has attractive primitive flowers, and the unusual patterning on its trunk gives it its common name. The large and unusual seeds are only dispersed by gravity. It is thought that they may have been a food source for extinct Australian megafauna.

There is a young Ribbonwood tree on the edge of the Rainforest, and to see a mature specimen follow the path from the Tropical Centre towards the Morshead Fountain Gates (see map).



## Guided Walks

Learn about the plants of the Royal Botanic Garden, Sydney, and the history of the site, by joining a free guided walk. The walks are offered at 10.30 am every day (1½ hours), and also 1 pm Monday to Friday (1 hour) in the months March to November. Join these walks at the Information Booth by the Garden Shop.

[www.rbgsyd.nsw.gov.au](http://www.rbgsyd.nsw.gov.au)

