



Department of Biodiversity,
Conservation and Attractions



The tingle forest

The tingle forest

An ancient forest

Much of the plant life in the tingle forest is unique to the south-west of Western Australia. These trees only occur in this small area and provide a window to the past.

Some of the plants have origins that can be traced back 65 million years to the super continent Gondwana when Australia was joined with what is now Africa, India, Antarctica and South America. Approximately 50 million years ago, this land mass drifted apart to form separate continents in similar positions to those they occupy today, although they are still slowly moving.

Since Gondwanan times Australia has experienced significant climatic change. However, here in the south-west of Western Australia, much less change has occurred. This region has an annual rainfall of between 1000 to 1200mm, well-drained gravelly soil, low nutrient content, hilly terrain and minor seasonal change.

It is this combination that has allowed species, such as relict spiders and snails from Gondwanan times, to survive in the tingle forest.

The canopy, ranging between 30–80m in height includes the red tingle (*Eucalyptus jacksonii*), yellow tingle (*E. guilfoylei*), marri (*Corymbia calophylla*) and karri (*E. diversicolor*). Jarrah (*E. marginata*) does not grow in the vicinity of the Tree Top Walk as the soils are not suitable.

The tingle forest holds an abundance of food sources for native animals including nuts, seeds, nectar, fungi, fruit and insects.

Red tingle

The red tingle (*E. jacksonii*) is the star of the show at the Valley of the Giants. It can be identified by its rough fibrous bark of a grey-red colour and can have a base circumference of up to 20m. This makes it the largest buttressing eucalypt. This tree has an extremely restricted range and can only be found in the area between the Deep River in the west, the Bow River to the east and within 10km of the coast.



Red tingle

The flowering cycle starts after 30 years of age when the tree produces small white flowers once every four years in the late summer and early autumn. This can continue for the life of the red tingle, which can be more than 400 years. Trees can reach a height of 75m.

The distinctive feature of the red tingle is its large, hollowed-out base. The hollows have been created over a long period of time by fire, fungal and insect attack.

Unlike other eucalypts, red tingles do not have a taproot. They have a shallow root system that spreads as they grow older, causing the trees to buttress. This gives them more stability and also allows them to absorb more moisture and nutrients from the shallow soils.

Its shallow root system and reliance on surface humus for nutrients makes the tingle vulnerable to compaction by people walking close to the base. The Tree Top Walk has been built to allow visitors to enjoy the forest without causing an adverse impact on the trees, and a unique opportunity to view the forest from canopy level.



Yellow tingle

Other trees of the tingle forest

Yellow tingles (*E. guilfoylei*) can be found at the Valley of the Giants. Several are visible from the Ancient Empire walk. They grow to a height of about 35m and do not buttress like the red tingle. The timber is a rich yellow colour.

Karri (*E. diversicolor*) is WA's tallest tree and the third tallest tree in the world. It can reach heights of up to 90m and has a long straight trunk with bark in varying shades of pink, orange, yellow, white and grey. You will see a few karris along the Ancient Empire walk, however, Swarbrick, Mount Frankland and Shannon National Park are great places to go to immerse yourself in the karri forest.



Karri



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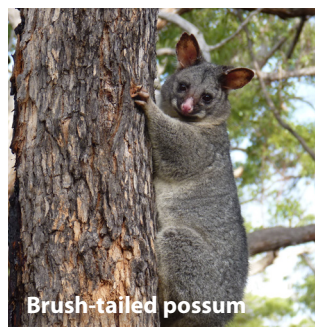
Marri (*C. callophylla*) is one of the most common trees in the south-west forests. It can grow up to 60m in height and has rough, greyish-brown fibrous bark. Marri belongs to a group of eucalypts known as bloodwoods because their trunks exude a dark red gum. You can also recognise marri by its large fruits or 'honkey nuts'.



Marri



Motorbike frog



Brush-tailed possum

Animals and birds of the tingle forest

Many different species of birds and animals inhabit the tingle forest however many of them are secretive or only come out at night. At the Valley of the Giants, find a quiet seat along the Ancient Empire and you may be lucky enough to see red-winged fairy-wren flitting across the forest floor or a white-tailed black-cockatoo screeching overhead.

The animals and birds listed below are found in the tingle forest.

Animals

- brush-tailed phascogale
- quokka
- quenda
- brush-tailed possum
- mardo
- pygmy possum
- honey possum
- chuditch
- brush wallaby
- ring-tailed possum
- southern forest bat
- motorbike frog
- slender tree frog
- bush rat

Birds

- white-tailed black-cockatoo
- western rosella
- red winged fairy-wren
- black-faced cuckoo-shrike
- golden whistler
- white breasted robin
- scarlet robin
- spotted pardalote
- white-browed scrub wren
- ringneck parrot
- red-eared firetail finch
- purple-crowned lorikeet
- cuckoo shrike
- owlet nightjar



Western rosella

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