

# A Guide to Chemperai Trail at the MacRitchie Boardwalks



Surrounded by more than 500ha of primary and secondary forests in the Catchment Nature Reserve, MacRitchie Reservoir is Singapore's oldest reservoir.

Chemperai Trail is an easy and relaxing walk as it is mostly on boardwalk from start to finish, skirting the edge of the reservoir. It starts at the side of one of the many charming and elegant historic pavilions on the waters of the reservoir. This area is part of the original MacRitchie Reservoir that was constructed in 1867.

To get to the trail from the amenities centre, head towards your left and get on the footpath that runs along the edge of the reservoir. Follow this footpath until you reach point A (see map). A short path cutting through the forested area leads you to the start of the trail.

Tread softly. Talk quietly. Look out for the occasional Clouded Monitor Lizard or Green crested lizard, camouflaged against the gnarled trunks of trees or scurrying across your path. Try to spot dragonflies above the water and resident birds like the Collared Kingfisher and White-throated Kingfisher near the water's edges. Amidst the tree canopies, you might be able to catch glimpses of the Greater Racket-tailed Drongo, Pink-necked Green Pigeon and even a Banded Woodpecker.

As you walk on this trail, you will notice a thick carpet of fallen leaves, flowers, fruits, twigs and even a fallen or chopped down log or two. In time, these will disintegrate and be broken down, and their nutrients recycled and reused by other forest plants. Fungi and tiny insects, like the termites, help in this process. This ongoing cycle is dependant on every twig, branch and dead leaf. It is important that we do not remove anything from this forest, as this will upset the continuous nutrient flow within the rainforest.



## MacRitchie's rainforests

Most of MacRitchie is covered with secondary forest tree species but it still nurtures some of the last precious patches of primary rainforests in Singapore. Native species, like Gaharu (*Aquilaria malaccensis*) and *Sterculia* species, are part of this lush habitat. The presence of non-native tree species like rubber trees and Jambu Ayer – signs of past disturbance – in no way detracts from the majesty of the pristine forest ecosystem that once covered the whole island of Singapore in the 1800s.

The rainforests today house precious habitats for a vast array of flora and fauna. Human activities, such as poaching and pollution, upset the balance and wellbeing of these habitats. Let's do our part to minimize disturbances to the rainforests by avoiding such activities. In doing so, we are helping to conserve this rich biodiversity, our ecological heritage, for future generations.

Distance : 1.5km  
Walking time : About 1/2 hour



Twin barred Tree Snake



Greater Racket-tailed Drongo



Long-tailed Macaque



Banded Woodpecker



Ixora congesta



White-bellied Fish Eagle



White-throated Kingfisher



Buttress

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## Highlights

- An easy walk skirting the edge of the reservoir – suitable for families with young children
- Easy spotting of thriving dragonfly and damselfly communities
- A close encounter with interesting trees and plants along the trail
- Panoramic views of the reservoir against the backdrop of dense rainforest

## How to get to MacRitchie Park

**By Bus:**  
Take bus no. 52, 74, 93, 130, 132, 156, 157, 162, 165, 166, 167, 852, 855 or 980. Alight along Lornie Road at the bus-stop in front of MacRitchie Reservoir Park.

**By car:**  
The entrance to the MacRitchie Reservoir Park car park is along Lornie Road.



Ranger Station



Shelter



Refreshment



Toilet



Public Phone



Fitness Corner



Fishing Area



Car Park



Bus Stop



Boardwalk



No Entry



Mapboard

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## What you can see on this trail

### → 1 Dragonflies and damselflies

You will notice them flitting above the waters. How do you tell the difference? Dragonflies are usually larger and fly well away from the water surface. They have huge eyes. When at rest, they hold their wings outstretched, often at right angles to their bodies. You can see that their forewings and hindwings are shaped differently.

Damselflies are smaller and stay near the water surface. They hold their wings close to their slim bodies when they are at rest.

Dragonflies and damselflies are extremely sensitive to polluted water and are able to thrive only in clean water. At the same time, the dragonfly and damselfly nymphs feed on mosquito larvae in the water. To help conserve the survival of these insects, it is crucial that we avoid polluting the water with our litter or releasing animals into the water.

### → 2 Red leaves

Why are the leaves of some trees hanging over the water red? This is actually a sun shielding mechanism - the red pigments protect leaves from light damage by directly shielding the more delicate chlorophyll molecules. By acting as antioxidants, they protect the plant from permanent damage.

These non-green pigments serve a number of other functions. For one, they assist in the photosynthesis process. Studies also indicate that the red colour of young leaves in some tropical trees wards off animals that might eat them. Upon maturity, these leaves rapidly turn green.

### → 3 Butterfly Climber (*Bauhinia sembifida*)

You will notice a plant with pretty leaves hanging delicately over the water. This is the Butterfly Climber. Each half of the leaf of this plant is a mirror image of the other. By night, apparently, these leaves will close up to rest but as soon as dawn breaks, they will unfold once again to greet the morning sun.

### → 4 Sea Apple tree (*Syzygium grande*)

The leaning tree of Chemperai Trail is actually the Jambu Laut or Sea Apple tree. Originally a coastal tree of this region, it is now found commonly along the wayside. The tree may reach 30 metres and has an oblong to irregular crown. The flowers are white, in compact clusters, and have a strong sickly fragrance. This is a really pretty spot for a picture!



Pink-neck Pigeon

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→ 5

## Wild ixora (*Ixora congesta*)

The wild ixora attracts many butterflies. This plant, which blooms seasonally with clusters of bright orange-red flowers, adds splashes of colour to the greenery.

The Banded Imperial and Common Grass Yellow are two of the more common butterfly species you can find at this reservoir.

→ 6

## Chemperai tree (*Champereia manillana*)

The Chemperai tree or the Olive of the East is a small tree. It is not related to the Mediterranean olive but because there is a resemblance, it is often known as the False Olive or the Olive of the East.

→ 7

## Licuala palm (*Licuala ferruginea*)

This prominent fan palm stands out with its beautiful wedge-shaped fronds radiating from the ground on long stalks.

Given the strikingly beautiful neatly-pleated leaflets of the Licuala, many Licuala species from the tropics make beautiful ornamental plants at home.

→ 8

## Calophyllum tree (*Calophyllum lanigerum* var. *austrororiaceum*)

Nature had its own dispensary of medicines long before modern medicine was born. This Calophyllum tree has a compound from its dried fruits and twigs that form the basis of new pharmaceutical drugs and natural ingredients for cosmetics. This compound is also known to have anti-AIDS properties.

→ 9

## Buttress roots

Notice the roots of some large trees above the ground. These are buttress roots – thick roots that flare out from the base of tall or shallowly rooted trees. Typically they are found in rainforests where soils are poor so roots do not go very deep. These roots prevent the tree from falling over (hence the name buttress) and help to gather more nutrients. They are there to anchor the tree and soak minerals and nutrients from the ground.

**We hope you enjoyed your walk on this trail. For another intimate encounter with flora and fauna in MacRitchie's rainforests, embark on Prunus Trail at The MacRitchie Boardwalks.**



Common Sun Skink