

A Guide to Wallace Trail at Dairy Farm Nature Park



Set in a rustic environment with trails for hiking and mountain biking, the 63-hectare Dairy Farm Nature Park was developed in 2009 by National Parks Board (NParks) to provide an alternative recreational venue to Bukit Timah Nature Reserve. As an important green buffer, it reduces visitorship pressure on the Reserve. The park features special amenities such as the Wallace Education Centre, which houses Wallace Environmental Learning Lab, Singapore's first field study centre for schools and an interpretative centre; a nature trail where visitors can learn about the flora and fauna of the park through the eyes of English naturalist Alfred Russel Wallace; and a former quarry (now known as Singapore Quarry) which has been transformed into a wetland habitat with a viewing platform for visitors to appreciate Singapore's freshwater flora and fauna.

Before you begin on your journey, do remember: "Take nothing but photographs, leave nothing but footprints."

History of Dairy Farm area

In the 1800s, the foothills of Bukit Timah, where the current Dairy Farm Nature Park is situated, were cleared to make way for gambier and pepper plantations and settlements. In the 1930s, Fred Heron, then Managing Director of Cold Storage, established the world's first tropical dairy farm on a 60-acre patch of jungle land because at that time, the only fresh milk available was from a number of small dairies here and the quality of the milk

Who was Wallace?

A contemporary of Charles Darwin, Alfred Russel Wallace is the other "father" behind the theory of evolution. In 1858, Wallace hit upon the idea of evolution by natural selection, and promptly sent his theory off to Darwin. It was the same theory Darwin had dabbled with for some time, but he had yet to publish it. Wallace's letter spurred him into action and two months later, Darwin presented a paper on the subject, acknowledging Wallace's contribution in it.



Wallace is a renowned naturalist. During his journeys to the Malay Archipelago, he made several stopovers in Singapore in 1854 and collected about 700 species of beetles in the vicinity of the Dairy Farm site. One of the trails, Wallace Trail, celebrates the contributions of Alfred Wallace.

was considered inferior. The farm was to meet the need for high-quality pasteurised milk for children of expatriates in Singapore. Starting from 24 Friesian cows imported from Holland and Australia, the farm flourished.

At that time, as the only dairy farm that successfully reared Friesian cows within the equatorial region, it attracted worldwide attention, drawing foreign scientists and farming experts here to view its success. This



Photo by Tee Swee Ping



Photo by Tee Swee Ping



Photo by Tee Swee Ping



Photo by Vanessa Chang



was how Dairy Farm Road and subsequently, Dairy Farm Nature Park, got their names.

The dairy farm ceased operations in the 1970s, and the area was then used for vegetable farming and subsequently other horticulture-related operations. In 2002, the Dairy Farm Quarry area was identified as a nature park under the Urban Redevelopment Authority's Parks & Waterbodies Plan.

Wallace Education Centre

Before you start on the trail, head first towards the Wallace Education Centre which also serves as an exhibition and learning facility for nature enthusiasts to meet and share their knowledge. Here, you can also learn about the history of Dairy Farm Nature Park and Bukit Timah Nature Reserve.

The Centre is converted from an old cowshed, a great example of architectural conservation and adaptive re-use. One half of Wallace Education Centre consists of an exhibition

hall and the other half houses the Wallace Environmental Learning Lab (WELL) with a holistic programme for students to discover Singapore's natural heritage through interesting hands-on activities and field studies. WELL was established by NParks and Raffles Girls' Secondary School and sponsored by GlaxoSmithKline and Economic Development Board. For more information regarding WELL, please refer to www.well.sg.

It is important to note that when bringing groups of 30 and above to the nature reserves and their buffer areas like Dairy Farm Nature Park, do remember to apply for a permit via the NParks website, www.nparks.gov.sg, at least a month in advance.

Distance: 1km

Estimated walking time: 30 – 45 minutes

Level of difficulty: Easy to moderate



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How to get to Dairy Farm Nature Park

By Car:

Take the Bukit Timah Expressway (towards Woodlands) and turn left at Exit 2. Travel along Dairy Farm Road and look out for the sign that says "Dairy Farm Nature Park". Turn left into Carpark B.

From Bukit Timah Road, keep left onto Upper Bukit Timah Road. After about 3km, turn right into Dairy Farm Road. Make a U-turn at the Bukit Timah Expressway junction and turn left into Carpark B.

Amenities near the carpark include open, landscaped toilets, a pavilion with some benches for resting and a vending machine for cold drinks.

It is better to wear covered walking shoes and long, comfortable pants and tops. You may want to spray on some insect repellent before you start on the trail. Take along a backpack with a water bottle.

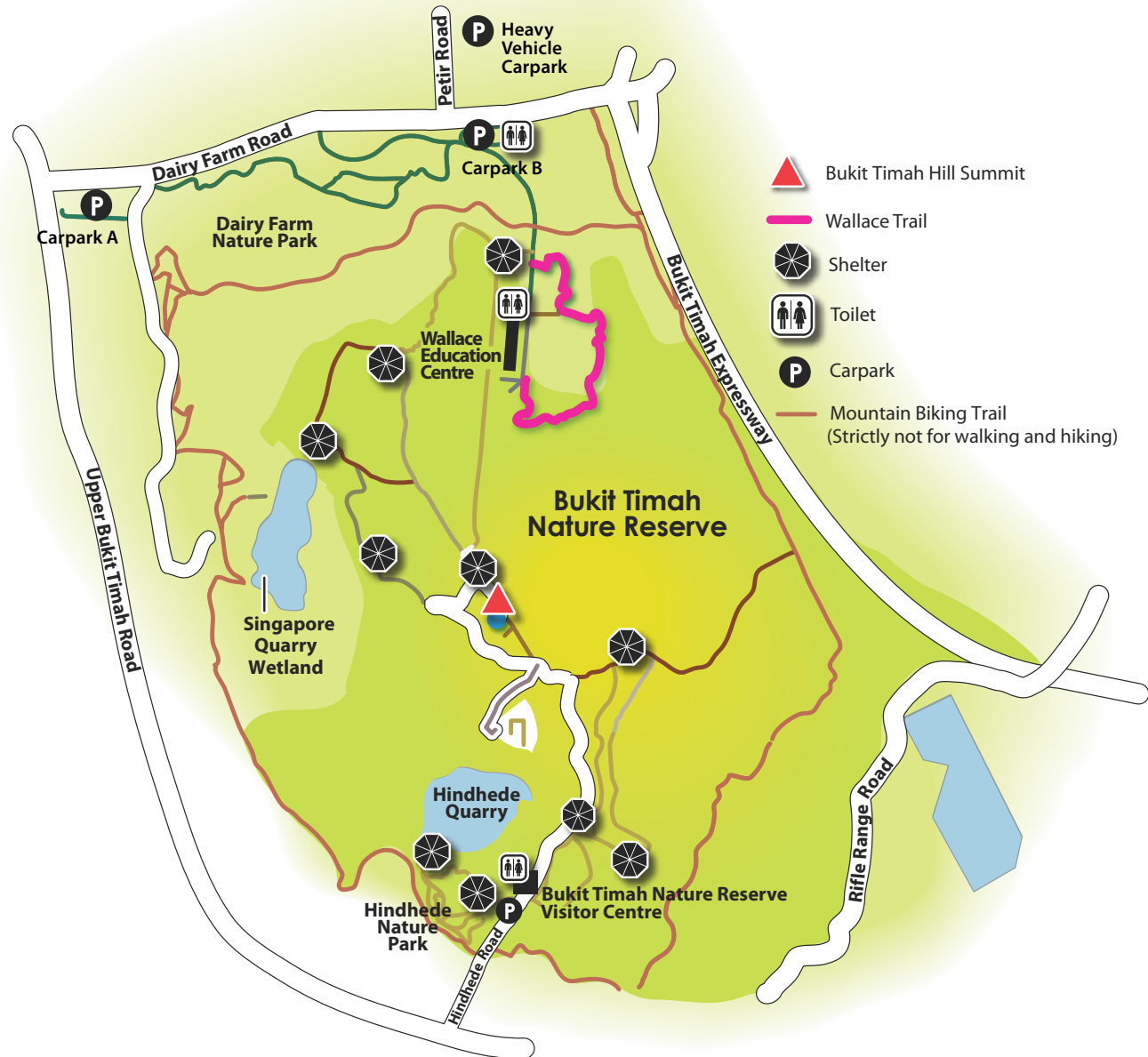
By Bus:

SMRT 700, 700A, 966.

Alight at the bus stop along Petir Road between Chestnut Avenue and Dairy Farm Road.

Highlights:

- A beautiful walk in a serene setting
- A rustic ramble through an old *kampung*
- Close look at fruit trees, butterflies, birds, and meandering streams



- Bukit Timah Hill Summit
- Wallace Trail
- Shelter
- Toilet
- Carpark
- Mountain Biking Trail (Strictly not for walking and hiking)



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What you can see on this trail

There are signs that point to the start of this trail on either side of the Wallace Education Centre. You can take the short loop, which is about 1km. Alternatively opt to head back into the forest when you emerge after 1km, for a longer route that is around 2km.

→ 1

Past Civilisation

The walk takes you through a dense forested area which used to house a *kampung* community. Look closely and you can still see signs of past 'civilisation' – remnants of walls of houses, and wells.

Along the way, you will notice some ornamental plants like arrowheads and heliconias. These could be the legacy of the nurseries that used to populate this area. The many fruit trees you see along the way could have been planted by villagers.

You will come across a number of little meandering streams with crystal clear water. Imagine the days gone by when villagers would use the water for washing and bathing. Do try and spot the pond skaters skipping on the surface. You are likely to spot monkeys here. These creatures are quite unused to people and will shy away.

→ 2

Chempedak Tree (*Artocarpus integer*)

Just a few metres into the trail, look out for the **Chempedak Tree**. This is not of the edible species though. Long before Velcro was invented, nature already had its own Velcro in the leaves of this

tree. Pick one of these leaves and stick the 'hairy' underside to your clothes and see how they stick to your clothes. Remember to return the leaves back into the forest as they will become a source of nutrients for the rest of the plants.

→ 3

Fruit Trees

You may be surprised that there are some Durian Trees on this trail. You cannot miss them as there is a sign right in front of a durian tree, highlighting an amusing anecdote of how much Wallace liked the King of Fruits, which may be repulsive to many non-Singaporeans. How can you spot a durian tree? Look for leaves with coppery or golden undersides.

You can also spot coconut trees and wild yams, a common sight in *kampungs* of old.

Look out the **Betel** plant (*Piper betle*), a cultivated woody climber. The leaves are aromatic and have a hot taste. In some cultures, the leaves are used to wrap around sliced betel nut seeds, which come from the Betel-nut Palm (*Areca catechu*). Other ingredients are added to this wrap to make a betel quid, which is then chewed.

→ 4

"Apples" and Bracket Fungus

As you walk on, you will see the green fruits of the native Sea Apple tree, which look like small apples with tough rinds. Before the fruits form, you can



spot the white powder-puff-like flowers on the tree which attract sunbirds and other species of birds. Its fruits are attractive to bats, monkeys and birds.

If you happen to visit after the rain, you will see many snails and slugs. This place has lots of **bracket fungus** as well. These are the decomposers of the forest as they help to break up dead leaves,

logs and even huge trees which have fallen.

Keep a lookout for a pretty bulb – the Rojak flower, also commonly known as **Torch Ginger** (*Etilingera elatior*). This is actually the bulb of the red ginger plant. It is an indispensable ingredient in *rojak* and in many *nonya* dishes.

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→ 5

Common Mormon (*Papilio polytes romulus*)

This is a great place for spotting butterflies as well. Look for the **Common Mormon** male with its large whitish-yellow spots running across the hindwing, forming a band. The female has a black body and red spots on the hindwings.

→ 6

Squirrels

Squirrels can be seen here too, either the **Plantain Squirrel** (*Callosciurus notatus*) with its black and white stripes and long bushy tail or the smaller grayish **Slender Squirrel** (*Sundasciurus tenuis*). These are native animals, which live mainly on trees. The former is common in many of our parks while the latter is sighted only in Bukit Timah and Central Catchment Nature Reserves and Singapore Botanic Gardens.

→ 7

Figs

Along the trail, you will come across many interesting plants, like the Fig Trees. You can recognise them from the small round green fruits growing in bunches on the tree trunks. In Chinese, they call this “*wu hua guo*” – flowerless fruit – which is in fact, a misnomer. The fig “fruit” is actually a tiny bouquet of flowers turned inside out, such that the reproductive parts are enclosed in a fruit-like case. Figs are a very important food source for animals since they are widely distributed. There are 900 species of figs in the tropical regions of which the majority are found

in the Southeast Asian region. In Singapore alone, we have 48 species of native figs. Easily found along Wallace Trail are four common species: **Weeping Fig** (*Ficus benjamina*), **Malayan Banyan Fig** (*Ficus microcarpa*), **Common Yellow-stem Fig** (*Ficus fistulosa*) and **Common Red-stem Fig** (*Ficus varigata*).

Figs have a symbiotic relationship with fig wasps, which are their pollinators. This is why we need to be careful where we spray insect repellent when visiting the nature reserves and parks. Be sure to spray it before entering these places because the repellent may cause the fig wasps to die out. Then, the fig trees will not be pollinated, which may limit the food supply for many forest animals.

→ 8

Common Mahang (*Macaranga bancana*)

Keep an eye out for the **Ant Plant** or **Common Mahang**, a home for ants. This plant and the ant have a symbiotic relationship. The ant depends on it for food while the plant is protected by the resident ant from being eaten by other insects. There are lots of **Bird's Nest Ferns** (*Asplenium nidus*) too.

→ 9

Birds

You may be able to spot the **Crimson Sunbird** (*Aethopyga siparaja*), the **Olive-winged Bulbul** (*Pycnonotus plumosus*), besides the **Greater Racket-tailed Drongo** (*Dicrurus paradiseus*) and **Asian Glossy Starling** (*Aplonis panayensis*)! The Crimson Sunbird is only four inches long, but the male's bright red plumage and electric



Common Mormon
(Photo by Mark Wong)



Plantain Squirrel
(Photo by Johnny Wee)



Common Yellow-stem Fig



Common Mahang



Olive-winged Bulbul



Crimson Sunbird



Greater Racket-tailed Drongo
(Photo by Lin Yangchen)

blue markings make it instantly noticeable, no matter how small it may be. This species is found in forests throughout Southeast Asia. The Drongo is distinctive in having elongated outer tail feathers. They are often perched in the open and make a range of loud calls. It takes a bit of a trained eye to see these birds.

However, do not be anxious if you cannot see these birds all in one go. This is a natural habitat and not a zoo. If you go on these

trails often enough, you will be ‘sensitised’ to the many creatures of the forest and will eventually be able to spot them easily.

We hope you have enjoyed your walk on this trail. For another intimate encounter with flora and fauna, embark on the trail at Bukit Timah Nature Reserve. To obtain another DIY trail-guide on a walking trail in one of Singapore's parks, visit www.nparks.gov.sg/eguides.