



## BEE TRAIL IN HORTPARK

### **Highlights**

- Bee hotels and three different bee habitats
- A wide range of flowering plants and elements that provide food and shelter for docile, native bees
- Opportunity to spot up to 30 different bee species

Walking time: 40 minutes





# Tips for a safe and enjoyable trip

- · Dress comfortably and put on suitable footwear
- Wear a hat and apply sunscreen
- · Bring along bottled water to stay hydrated
- Take nothing but photos, leave nothing but footprints
- Smoking is not allowed

#### HortPark opening hours

6 am – 11 pm daily

#### HortPark address

33 Hyderabad Road (off Alexandra Road), Singapore 119578

Tel: 64715601

Email: NPARKS\_HortPark@nparks.gov.sg

Website: www.nparks.gov.sg/hortpark

### How to get to HortPark

#### By MRT and Bus

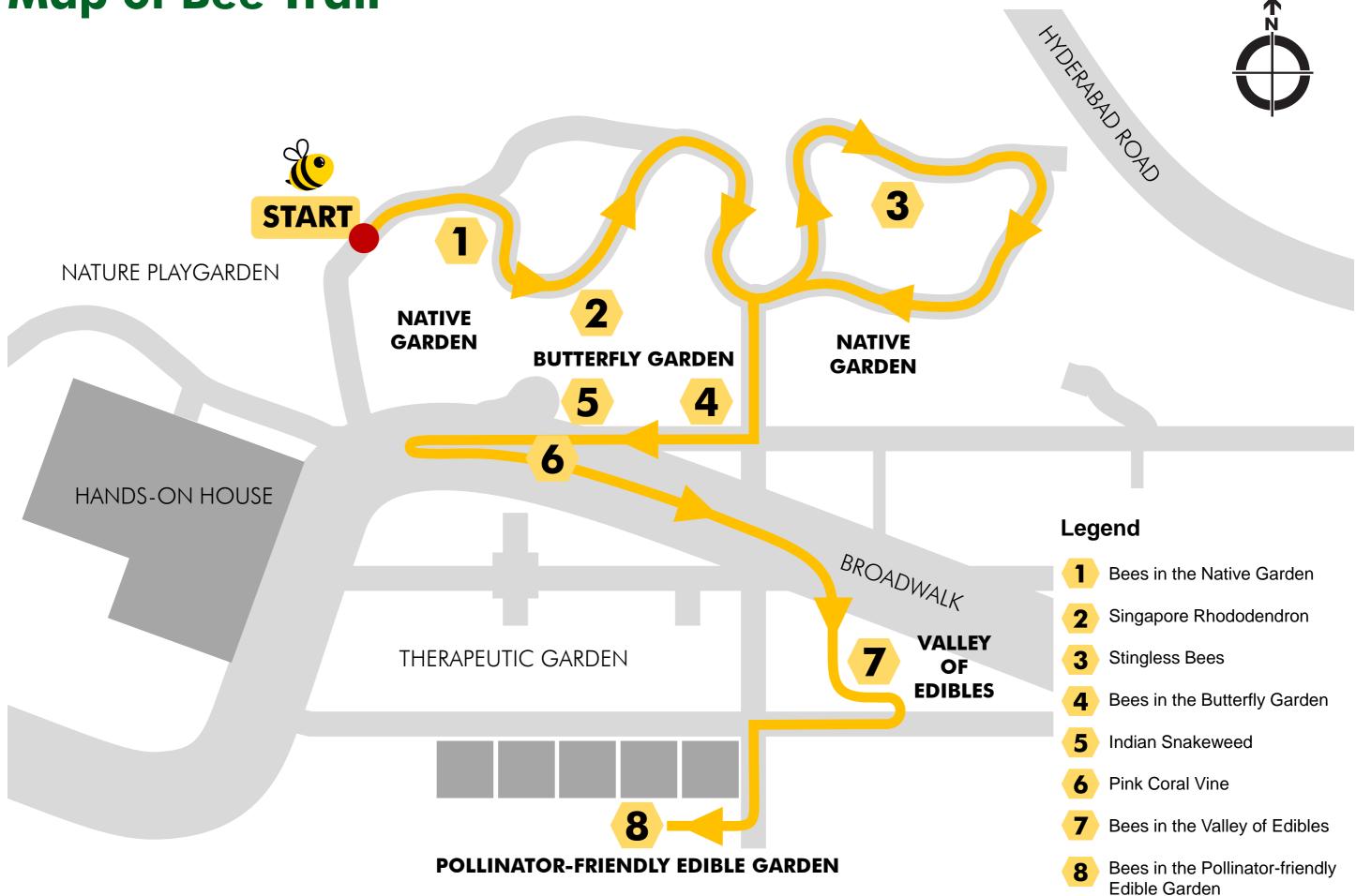
From MRT Station	Buses Available to HortPark
Labrador Park Station (CC27)	51, 61, 93, 97, 100, 166, 963
HarbourFront Station (NE1 / CC29)	61, 93, 97, 100, 166, 963
Queenstown Station (EW19)	51
Bugis Station (EW12 / DT14)	51
Commonwealth Station (EW20)	100

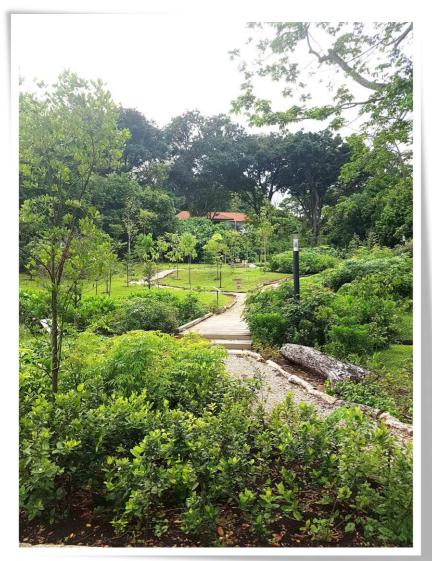
#### By Car

151 carpark lots are available at HortPark (wheelchair-friendly lots are also available).

Park opening hours are from 6 am to 11 pm.

### **Map of Bee Trail**









Bee hotels along the trail

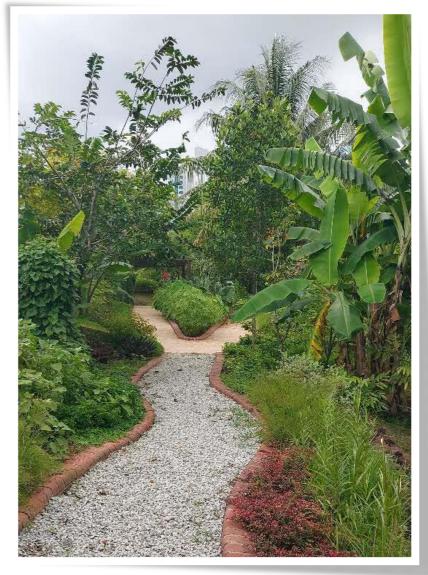


Valley of Edibles

## **Enjoying the Trail**

The Bee Garden Trail is dedicated to the conservation and education of bees. It features bee hotels and three distinct bee habitats in Singapore. Over 40 bee species have been recorded along the trail.

- Follow the signs to learn about the roles that bees play in different habitats.
- Spot wild bees foraging amongst the flowers or nesting in the bee hotels.
   Many kinds of bees are smaller than the size of a 5-cent coin, so a keen eye is required! <u>Download</u> Garden Bees of Singapore brochure to learn more about them.
- Refrain from touching the bee hotels, as this may disturb the bees.
- Bee watching is best on sunny mornings, as this is when bees are most active.



Pollinator-friendly Edible Garden



Himalayan Cloak-and-dagger Bee (*Thyreus himalayensis*)

### **Plants and Bees**

There is a wide diversity of flowering plants grown along the Bee Garden Trail that supports the bees. There are native plants, ornamentals and edible plants with varied shapes, sizes, and colours. Different plants are visited by different species of bees, with some species of bees adapted to feeding on and pollinating specific species of plants. These flowering plants have lots of pollen and nectar to feed the bees, as well as other pollinators like butterflies and nectivorous birds. Pollinators help to keep ecosystems and plant populations healthy, as pollination allows plants to form fruit and seeds, thus completing their reproductive cycle. Having more pollinators around also means that fruiting crops like tomatoes, eggplants and cucumbers will bear more fruit, which is also important for food production!

There are more than 130 species of bees in Singapore! They differ in size, colour and preference when it comes to food and nesting resources. See if you can spot them along this trail!



A bee hotel

### **Bee Hotels**

There are eight specially constructed habitat enhancement structures for bees along the trail called bee hotels. Just as a bird house is for birds, a bee hotel is a structure that provides a sheltered space for bees to nest in. The bees do not usually live in the hotel but use it solely to raise their young.

Bees that use bee hotels include leafcutter bees and resin bees of the family Megachilidae. These bees are solitary and naturally nest within small, pre-existing cavities in the environment, such as those provided in the bee hotel. These bees are docile and are not aggressive.

The leaf-cutter bees cut leaves while resin bees gather plant resin to be placed within the holes in the bee hotel as nesting material. If you are lucky, you might see these insects busily flying in and out to stock up on pollen and nesting material for their larvae.



Broad-headed
Leafcutter Bee
(Megachile laticeps)
cutting a part of the
leaf and transporting a
leaf to the bee hotel





Orange-winged Resin Bee (Megachile fulvipennis)

## Bees in the Native Garden

Bees are an essential part of our natural ecosystem. One key role they play is pollinating native plants, thereby helping them to reproduce and maintain their populations. Bees also support other local biodiversity by pollinating native plants which produce fruits that are food for native mammals and birds. To spot bee activity, look out for these native flowering plants.

#### Bee-friendly native plants and their bee visitors



Red Tree-Vine (Leea rubra)

- Honey Bees
- Small Carpenter Bees
- Reed Bees
- Pearly-banded Bees



**Singapore Rhododendron** (*Melastoma malabathricum*)

- Large Carpenter Bees
- Pearly-banded Bees
- Digger Bees



Seashore Ardisia (Ardisia elliptica)

- Pearly-banded Bees
- Digger Bees
- Striped Nomia



Simpoh Air (Dillenia suffruticosa)

- Large Carpenter Bees
- Pearly-banded Bees



Rose Myrtle (Rhodomyrtus tomentosa)

- Large Carpenter Bees
- Pearly-banded Bees
- Reed Bees



Blue Strawberry Flower (Memecylon coeruleum)

- Leaf-cutter Bees
- Digger Bees



Indian Camphorweed (Pluchea indica)

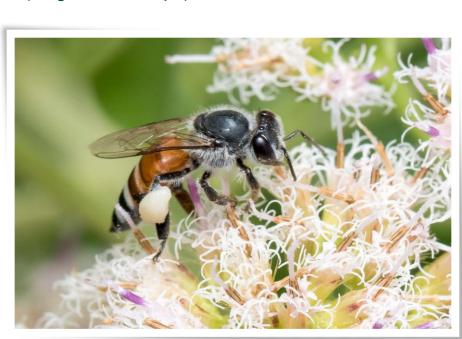
- Honey Bees
- Pearly-banded Bees

## Bees in the Native Garden

#### **Common Bees found in the Native Garden**



**Broad-headed Leafcutter Bee** (*Megachile laticeps*)



Red Dwarf Honey Bee (Apis florea)



**Broad-footed Carpenter Bee** (*Xylocopa latipes*)



Striped Nomia (Nomia strigata)



Small Carpenter Bee (Ceratina collusor)



Blue-banded Digger Bee (Amegilla andrewsi)

# Bees in the Butterfly Garden

The Butterfly Garden is designed to attract butterflies with its range of host plants for caterpillars and nectar plants for the adults. Many of these plants also support native bees, making the Butterfly Garden one of the best places to spot a wide variety of bee species.

Plants that attract both butterflies and bees include the Indian Snakeweed (*Stachytarpheta indica*), Golden Dew-Drop (*Duranta erecta*), and False Heather (*Cuphea hyssopifolia*).

#### **Bee-friendly plants**



Indian Snakeweed (Stachytarpheta indica)

- Cloak-and-Dagger Bees
- Digger Bees
- Reed Bees
- Resin Bees



Mexican Coral Vine (Antigonon leptopus)

- Honey Bees
- Nomias
- Reed Bees
- Small Carpenter Bees



Common Tree-Vine (Leea indica)

- Honey Bees
- Pearly-banded Bees
- Small Carpenter Bees
- Nomias



False Heather (Cuphea hyssopifolia)

- Honey Bees
- Sweat Bees
- Small Carpenter Bees
- Leafcutter Bees

# Bees in the Butterfly Garden

#### **Common Bees found in the Butterfly Garden**



Striped Nomia (Nomia strigata)



Blue-banded Digger Bee (Amegilla andrewsi)



Asian Honey Bee (Apis cerana)



White-cheeked Carpenter Bee (*Xylocopa aestuans*)



Himalayan Cloak-and-Dagger Bee (Thyreus himalayensis)



Hewitt's Reed Bee (Braunsapis hewitti)

## Bees in the Valley of Edibles

Bees are hardworking pollinators and many of them can be seen foraging among the flowers in the Valley of Edibles during the day. The benefits of bees are especially clear when it comes to edibles, with all the cultivated fruiting plants in the Valley of Edibles pollinated by bees. These include many familiar favourites like the eggplant, chilli, tomato, watermelon, pumpkin, gourd, and more.

#### Bee-friendly edible plants and their bee visitors



- Nomias
- Digger Bees



- (Ocimum basilicum)
- Leaf-cutter bees
- Reed Bees
- Sweat Bees
- Small Carpenter Bees



- Leaf-cutter Bees
- Resin Bees
- Blue-banded Digger Bees



Ulam Raja (Cosmos caudatus)

- Honey Bees
- Blue-banded Digger Bees
- Himalayan Cloak-and-Dagger Bee



Jewels-of-Opar (Talinum paniculatum)

- Leaf-cutter Bees
- Reed Bees
- Sweat Bees
- Shoulder-pad Bees



False Heather (Cuphea hyssopifolia)

- Honey Bees
- Stingless Bees
- Almost all other bee species in Singapore

### Bees in the Pollinatorfriendly Edible Garden

A pollinator-friendly garden attracts bees, moths, butterflies and other animals that transfer pollen from flower to flower. On sunny days, bees can be observed foraging among the wide variety of flowers in the garden.

Bees thrive and flourish here because this is a pesticide-free garden.

Can you spot these bees busy at work?

#### Common Bees found in the Pollinator-friendly Edible Garden



Himalayan Cloak-and-Dagger Bee (*Thyreus himalayensis*)



**Sweat Bee** (Lasioglossum albescens)



Striped Nomia (Nomia strigata)



**Epaulette-Nomia** (*Pseudapis siamensis*)



Asian Honey Bee (Apis cerana)



Stingless Bee (Tetragonula valdezi)