

# PRIMARY & SECONDARY EDUCATIONAL PROGRAMMES

SINGAPORE BOTANIC GARDENS



# LEARNING AREAS

Keywords	Student Curriculum Levels	Relevant Syllabus & Areas	Themes & Topics
<b>Nature Appreciation</b>	Lower Primary	Nature Appreciation	Use senses to explore and nurture an interest in living things and the natural world. Show respect and care for biodiversity and the environment. Learn the importance of being responsible for our environment.
<b>Social Studies</b>	Primary 1, 2 & 6	MOE, Primary Social Studies Syllabus (Field-based Learning)	<p><b>Primary 1:</b> Knowing Myself, Others and My Surroundings (Learning Focus: to develop an appreciation for the places around them)</p> <p><b>Primary 2:</b> Coming Together as a Nation (Learning Focus: to learn about our national symbols)</p> <p><b>Primary 6:</b> Discovering Southeast Asia (Learning Focus: to learn about the heritage of Singapore Botanic Gardens and its contribution to the economic, social and scientific development of the region)</p>
<b>Diversity</b>	Primary & Secondary	MOE, Science Syllabus (Primary & Lower Secondary levels)	<p><b>Primary levels:</b> <i>Diversity:</i> Diversity of Living Things</p> <p><b>Secondary levels:</b> <i>Diversity:</i> Understand Diversity of Living Things</p>
<b>Plant Systems</b>	Primary	MOE, Science Syllabus (Primary levels)	<p><i>Systems:</i> Plant Systems (Plant parts and functions)</p>
<b>Cycles</b>	Primary	MOE, Science Syllabus (Primary levels)	<p><i>Cycles:</i> Cycles in Plants</p>
<b>Interactions in Nature</b>	Primary & Secondary	MOE, Science Syllabus (Primary & Lower Secondary levels)	<p><b>Primary levels:</b> <i>Interactions:</i> Interactions within the Environment</p> <p><b>Lower Secondary levels:</b> <i>Interactions:</i> Interactions within Ecosystems</p>
<b>Tropical Rainforest &amp; Deforestation</b>	Secondary	MOE, Geography Syllabus (Lower Secondary levels)	<p><i>Environment &amp; Resources:</i> Tropical Rainforest &amp; Deforestation</p>

# OVERVIEW OF PROGRAMMES

Programme Title (page number)	SBG Nature Appreciation	MOE Social Studies	MOE Science (Diversity)	MOE Science (Systems)	MOE Science (Cycles)	MOE Science (Interactions)	MOE Geography
Jacob Ballas Children's Garden Tour (pg 4)							
National Orchid Garden Tour (pg 5)							
Plants: The Basics (pg 6)							
Heritage Tour (pg 7)							
The Secret World of Pollinators (pg 8)							
Ethnobotany: Plants and their Many Uses (pg 9)							
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SBG: Our Heritage (pg 12)							
Friends of the Forest (pg 13)							

SBG: Singapore Botanic Gardens

# SINGAPORE BOTANIC GARDENS EDUCATIONAL PROGRAMMES



## Jacob Ballas Children's Garden Tour



**Age Group: P1 – P2 levels**

**Location: Jacob Ballas Children's Garden (Bukit Timah Core)**

Relevant areas to  
Primary School Syllabus

- Social Studies (Primary One: Knowing Myself, Others and My Surroundings)
- Nature Appreciation

Let us walk you through Asia's first Children's Garden! Hear about plants of many colours, shapes, sizes & textures in the Garden. Also growing here are plants used in drinks and dyes, as well as herbs & spices that add flavours to your favourite dishes! Have fun exploring the maze, suspension bridge and nature play areas. Walk along the stream & pond and climb into the treehouses. Observe how edible plants grow at the Farm House and pick up some gardening tips!

### Learning Outcomes

- Explore and be stimulated by the various attractions found in the Children's Gardens.
- Be introduced to a variety of interesting and useful plants that benefit us in our daily life.
- Learn to appreciate the people and places around them. Show care and appreciation for the environment.

All guided tours are 1.5hrs, at a rate of \$183.36 (Inclusive of GST) per group subjected to a maximum of 20 students, unless otherwise stated.



## National Orchid Garden Tour

**Age Group: P1 - P2 levels**

**Location: National Orchid Garden (Central Core)**

Tour fees exclude admission fee into the National Orchid Garden. Please click [here](#) for more details about the admission fee.

Relevant areas to  
Primary School Syllabus

- Social Studies (Primary Two: Coming Together as a Nation)
- Nature Appreciation



With its wonderful aroma and flavour, vanilla is possibly the most popular orchid in the culinary scene. What else do you know about this special group of plants? Join us for a tour at the National Orchid Garden and view its spectacular display of orchids. Discover the beauty of our rich collection of unusual montane plants in the Tropical Montane Orchidetum.

### Learning Outcomes

- Explore and be stimulated by the various attractions found in the National Orchid Garden.
- Be introduced to a variety of orchid flowers differing in their colours, shapes, sizes, and even aroma.
- Learn about the national symbolism in orchids, the National Flower of Singapore.



All guided tours are 1.5hrs, at a rate of \$183.36 (Inclusive of GST) per group subjected to a maximum of 20 students, unless otherwise stated.



## Plants: The Basics

**Age Group: P3 - P6 levels**

**Locations: Tanglin Core**

Relevant areas to  
Primary School Syllabus

- Plant Systems
- Cycles

Join this comprehensive study on selected examples from the living collection at the Singapore Botanic Gardens. Have fun while discovering different parts of a plant and learn how these different parts function together as a system. Learn about the life cycle of plants; how a plant begins as a small seed and gradually matures to become a tall tree! You will be fascinated by the important role which plants play in nature and in our daily life. Life on Earth Depends on Plants!

### Learning Outcomes

#### 1) Knowledge, Understanding & Applications:

- Discover and examine the different parts of plants (leaves, flowers, fruits, seeds, stem, roots).
- Explore the life cycles of plants grown from seeds.

#### 2) Skills & Processes:

- Observe and identify the different parts of plants to understand how these different plant parts interact and function as a system.
- Observe and compare the life cycles of different plants.

#### 3) Ethics & Attitudes:

- Understand the importance of plants which play a substantial role in nature and in our daily life. Take responsibility for our actions by caring about plants in our surroundings.

All guided tours are 1.5hrs, at a rate of \$183.36 (Inclusive of GST) per group subjected to a maximum of 20 students, unless otherwise stated.

## Heritage Tour

**Age Group: P3 – P6 levels**

**Location: Tanglin Core**

Relevant areas to  
Primary School Syllabus

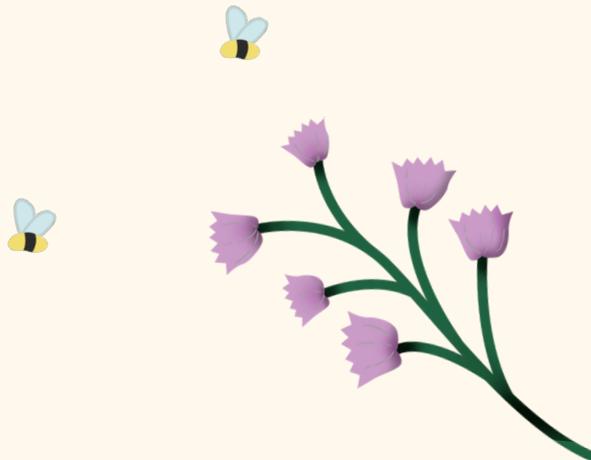
- Social Studies (Primary Six: Discovering Southeast Asia)
- Nature Appreciation

Established in 1859, the Singapore Botanic Gardens (SBG) has played an important part in the cultural and economic history of Singapore. As the birth place of the region's rubber and orchid industries, SBG played an integral historical role in the development of the economy of the Southeast Asian region. Students will be enthralled and enriched by the rich heritage of the Gardens, following its inscription as a UNESCO World Heritage Site in 2015, making it Singapore's first World Heritage Site.



### Learning Outcomes

- Discover the rich heritage of SBG and its contributions to the economic, social and scientific development of the region.
- Learn the value of heritage of SBG and its conservation effort to understand the significant role SBG plays in Singapore and the region.
- Understand the reasons leading to SBG's inscription as a UNESCO World Heritage Site.



All guided tours are 1.5hrs, at a rate of \$183.36 (Inclusive of GST) per group subjected to a maximum of 20 students, unless otherwise stated.



## The Secret World of Pollinators

**Age Group: P3 – P6 levels**

**Location: Jacob Ballas Children's Garden (Bukit Timah Core)**

Relevant areas to  
Primary School Syllabus

- Diversity
- Interactions in Nature
- Cycles

Discover the amazing world of pollination and the role that pollinators play in this process to allow plants to develop from flower to fruit. Go on this journey to learn about the relationship between plants, pollinators and humans. Students will get the opportunity to spot different plants and pollinators that make their home in the Gardens.

### Learning Outcomes

#### 1) Knowledge, Understanding & Applications:

- Discover the characteristics of flowering and non-flowering plants.
- Understand the importance of reproduction in plants to ensure continuity of their kind.
- Recognise processes in the sexual reproduction of flowering plants.
- Learn about pollinators and the role they play in allowing plants to develop from flower to fruit.
- Explore the concept of interdependence between pollinators and plants.
- Recognise that structural & behavioural adaptations of pollinators and plants enhance the survival of one another.

#### 2) Ethics & Attitudes:

- Understand the important role played by both pollinators and plants. Take responsibility for our actions in caring about plants and animals in our surroundings.

All guided tours are 1.5hrs, at a rate of \$183.36 (Inclusive of GST) per group subjected to a maximum of 20 students, unless otherwise stated.

## Ethnobotany: Plants and their Many Uses

**Age Group: P5 – Sec 5 levels**

**Location: Centre for Ethnobotany (Bukit Timah Core)**

Relevant area to  
Primary & Secondary  
School Syllabus

- Interactions in Nature

Discover the many uses of plants for food, clothing, medicine and craft, locally and in Southeast Asia. Appreciate the importance of plants in our daily lives! Gain awareness of how plants have shaped human culture and why it is necessary to preserve such knowledge for the future.



### Learning Outcomes

#### 1) Knowledge, Understanding & Applications:

- Discover and understand how humans have historically and culturally depended on plants in their daily life.
- Explore and identify interesting and useful plants in the Centre for Ethnobotany and the Ethnobotany Garden.
- Recognise that adaptations serve to enhance survival through human interactions with the environment. Hence, the importance of conserving our natural resources and habitats.

#### 2) Ethics & Attitudes:

- Be aware of how some cultures practise sustainable living through their interactions with the environment.



## Healing Garden Tour

**Age Group: Sec 1 – Sec 5 levels**

**Location: Healing Garden (Central Core)**

Relevant areas to  
Secondary School Syllabus

- Diversity
- Interactions in Nature



Spread over 2.5 hectares, SBG's Healing Garden is designed to be a tranquil retreat focusing on the more than 400 species of medicinal plants traditionally used in Southeast Asia. The Healing Garden is a reminder that plants are in fact chemical factories and the Gardens serves as a plant bank where many species continue to thrive as their natural environments dwindle. Come and explore the Healing Garden, and you will find out more about traditional healing plants and their uses.

### Learning Outcomes

#### 1) Knowledge, Understanding & Applications:

- Explore and identify interesting and useful plants in the Healing Garden.
- Discover the diverse uses of plant species historically & culturally and their benefits to humans in the provision of food resources.
- Recognise that adaptations serve to enhance survival through human interactions with the environment. Hence, the importance of conserving our natural resources and habitats.

#### 2) Ethics & Attitudes:

- Recognise the reasons for depletion and extinction of some plant species (e.g. over-harvesting, invasive species, changes to or destruction of habitat).
- Be aware of how some cultures practise sustainable living through their interactions with the environment.

All guided tours are 1.5hrs, at a rate of \$183.36 (Inclusive of GST) per group subjected to a maximum of 20 students, unless otherwise stated.



## Learning Forest Tour

**Age Group: P5 – Sec 5 levels**

**Location: Learning Forest (Tyersall-Gallop Core)**



Relevant area to  
Primary School Syllabus

- Interactions in Nature

Relevant areas to  
Secondary School Syllabus

- Diversity
- Interactions in Nature

This tour will bring you through the lowland rainforest and restored freshwater wetland habitats in the Learning Forest. This recent addition to the Gardens adds 9.8 hectares to the existing Nature Area. Walk through the different layers of a tropical rainforest, observe the collection of giants on a network of elevated boardwalks, and discover fascinating products of the forests. Learn more about the wetland, a restored freshwater habitat of native flora and fauna, once found in the Gardens back in the 19th century. Key features of the wetland include five of the eight freshwater vegetation belts described by the prominent botanist, E.J.H. Corner.

Please note that this programme is a comprehensive tour which includes both the SPH Walk of Giants and the Keppel Discovery Wetlands. Separate tours could be arranged to focus specifically on either the SPH Walk of Giants or the Keppel Discovery Wetlands.

### Learning Outcomes

#### 1) Knowledge, Understanding & Applications:

- Discover the variety of plant and animal species in the Learning Forest. Identify the physical characteristics of a forest and a wetland (temperature, light, water), availability of food, types of organisms (producers, consumers, decomposers) and the roles of various organisms (producers, consumers, predators, prey) and their interrelationships in a food chain and a food web.
- Explore and identify different habitats in the Learning Forest (trees, ponds, swamps, gardens).
- Understand the importance of biodiversity to the stability of the natural environment. Identify possible positive and negative impacts of human activities on the Learning Forest.

#### 2) Ethics & Attitudes:

- Show concern by being respectful and responsible towards different habitats and their inhabitants.

All guided tours are 1.5hrs, at a rate of \$183.36 (Inclusive of GST) per group subjected to a maximum of 20 students, unless otherwise stated.



## Seed Bank Tour

**Age Group: P5 – Sec 5 levels**

**Location: Singapore Botanic Gardens Seed Bank (Bukit Timah Core)**

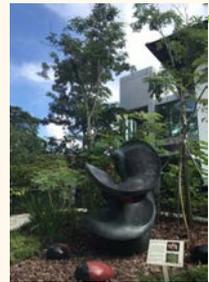
Relevant areas to  
Primary School Syllabus

- Cycles
- Interactions in Nature

Relevant area to  
Secondary School Syllabus

- Interactions in Nature

Go on a journey to be ‘wow’ed by the wild and fascinating world of seeds and discover the importance of saving them. Find out the various interesting methods of dispersal and how seeds play an integral role in our daily lives. Students will get a glimpse of the work that goes on in the Seed Bank; from how seeds start their journey in the forest to the seed-saving procedure in the laboratories. The tour will also include the Seed Dispersal Garden featuring plants and sculptures that demonstrate the four dispersal mechanisms – wind, water, animal and self-dispersal.



### Learning Outcomes

1) Knowledge, Understanding & Applications:

- Observe and compare the physical characteristics of different seeds.
- Identify different methods of seed dispersal.
- Recognise that the physical characteristics of seeds are structural adaptations which help fruits & seeds in their dispersal.
- Understand the importance of seeds as part of the process of the sexual reproductive cycle of flowering plants to ensure continuity of their kind.

2) Ethics & Attitudes:

- Recognise the importance of seed saving and the setup of seed banks in plant conservation.

All guided tours are 1.5hrs, at a rate of \$183.36 (Inclusive of GST) per group subjected to a maximum of 20 students, unless otherwise stated.

# ASSEMBLY TALKS FOR PRIMARY AND SECONDARY SCHOOLS



Online talks are available

## Singapore Botanic Gardens: Our Heritage

**Duration:** 30 minutes

**Age Group:** P1 – Sec 5 levels

**Charges:** Free of charge

**Location:** School premises

Relevant areas to  
Primary School Syllabus

- Social Studies (Primary Six: Discovering Southeast Asia)
- Nature Appreciation

Established in 1859, the Singapore Botanic Gardens has played an important part in the cultural and economic history of Singapore. As the birth place of the region's rubber and orchid industries, the Gardens played an integral role in the development of the economy of the Southeast Asian region. Our aim is for students to be enthralled and enriched by the rich heritage of the Gardens, following its inscription as Singapore's first UNESCO World Heritage Site.

### Learning Outcomes

- Discover the rich heritage of SBG and its contributions to the economic and scientific development of the Southeast Asian region.
- Learn about conservation efforts to understand the significant role SBG plays in Singapore and the region.
- Appreciate the reasons that led to SBG's inscription as a UNESCO World Heritage Site.
- Learn about the scientific achievements of the Gardens' pioneering directors and reflect on the values of life-long learning and scientific inquiry that they exemplified.



# Friends of the Forest

**Duration: 30 minutes**

**Age Group: P1 – Sec 5 levels**

**Charges: Free of charge**

**Location: School premises**

Relevant area to  
Primary School Syllabus

- Diversity

Relevant areas to  
Secondary School Syllabus

- Nature Appreciation
- Geography (Tropical Rainforest & Deforestation)
- Diversity

Did you know that the Singapore Botanic Gardens is home to both a primary and secondary rainforest? Discover the unique characteristics of our local rainforests and the fascinating flora and fauna which live within. Learn about Singapore's efforts in conserving our biodiversity and the important role that rainforests play in regulating our climate and providing us with essential resources. Students will also learn about how they can make a difference through adopting greener habits.

## Learning Outcomes

- Recognise that tropical rainforests can be broadly classified into two types - primary and secondary.
- Classify a forest into four structural layers, each with its different features.
- Explore the diverse species of plants and animals that call the rainforest their home.
- Identify the uses of tropical rainforests. Appreciate the importance of rainforests to the sustainability of global biodiversity.





# FREQUENTLY ASKED QUESTIONS

## How do I submit a request?

Kindly register your interest via our [online enquiry form](#). Please let us know the name of your organisation, contact person and email, programme that you wish to book, your preferred date and time and estimated number of students and accompanying adults.

## How do I know if my booking is confirmed?

We will send you a Booking Form along with our terms and conditions for your verification. Your booking is confirmed after we receive the signed Booking Form from you via email.

## What happens if it rains?

For safety reasons, all guided tours in the Gardens will be cancelled in the event of inclement weather on the scheduled day and/or time of the tour, or other reasons beyond the control of the National Parks Board. However, tours can continue if weather conditions permit eg. light drizzle.

Cancellation due to wet weather/ haze must be made **at least one and a half hours** before the commencement of the programme. Failure to do so will result in the levy of the total programme fee stated in the Booking Form.

## [Check out our website for more information!](#)

### Terms & Conditions

Information is accurate at the time of printing, but may be subject to change.

Slight variation to the content covered in each programme may occur due to class dynamics and environmental conditions.

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**Education Branch**  
Singapore Botanic Gardens  
National Parks Board  
1, Cluny Road  
Singapore 259569

**Email: [nparks\\_sbg\\_edu@nparks.gov.sg](mailto:nparks_sbg_edu@nparks.gov.sg)**  
(for enquiries & to register for our e-newsletters)

**Website: <https://www.nparks.gov.sg/sbg/education>**

