Sembauang

NATURE GUIDEBOOK









White-headed Munia (*Lonchura maja*) Photo credit: Bilbao Aaron Gregg De Vera

Introduction

Singapore is progressing into a City in Nature that allows residents to enjoy immersive experiences in nature for better health and mental well-being. This guidebook is produced to help residents and visitors learn about the unique amenities such as Sembawang Hot Spring Park and Sembawang Park as well as the interesting flora and fauna as they explore the Sembawang Area.

Learn more about the City in Nature vision here: www.nparks.gov.sg/about-us/city-in-nature



Photo credit: Sembawang Town Council

Nature Trail

Sembawang Park



Photo credit: NParks

Nature Trail



Sembawang Hot Spring Park



Located along Gambas Avenue, Sembawang Hot Spring Park features cascading pools, a water collection point, an egg cooking station as well as a floral walk, which features common plants, fruit trees and flowers that was commonly seen back in the 1960s and 1990s. Visitors can either bring their own bucket and eggs or buy them from the onsite Café.

Photo credit: NParks

Sembawang Hot Spring Park is the only natural hot spring on mainland Singapore and is open to the public from 7 am to 7 pm daily. The source of the spring is still unknown to this day but has been theorised by local geologists to be around Bukit Timah.

It was first discovered in 1909 where the owner of the land confirmed the water was safe to consume and commercialised the spring. A well was also built near the village which became known as Kampong Ayer Panas or Village of Hot Water. In 1921, F&N acquired the land, bottling the water under brands like Seletaris, Zom and Vichy Water. It was then taken by the Japanese during the Occupation as baths for their soldiers. A bomb by Allied forces unfortunately damaged the springs, disrupting the water flow. It was restored in the early 1960s.

The community banded together to bring back the Hot Spring Park for local use when the Ministry of Defense acquired the land in 1985. The land was returned to National Parks Board (NParks) in 2016 and was closed for enhancement in 2018. Sembawang Hot Spring Park was reopened in 2020 with enhanced features incorporated from the public consultation that ended in 2017.



Photo credit: NParks

Hot Spring Park Amenities



In this four-tiered cascading pool, water emerges at 70°C in the top pool and is gradually cooled to 40°C in the final pool. The optimum temperature in the final pool allows visitors to dip their feet and enjoy the warm water. This cascading design also mimics the hot spring in its natural state, where overflowing pools of hot water form after emerging from the ground.

Photo credit: NParks

The park also has features for enhanced accessibility with pipes of varying heights at the water collection point and wheelchairfriendly ramps. At the water collection point, you can collect hot spring water in your own buckets and enjoy it at surrounding rest areas.



Photo credit: NParks



The educational zone offers cooler water for little ones to play and enjoy. They can also learn about the hot spring park and its geology. Do note that eggs should not be cooked here.

Photo credit: NParks

Hot Spring Park Amenities



Photo credit: NParks

To enjoy this station, you must bring your own eggs, container, cutlery and condiments. Eggs should be cooked under running hot water for at least 20 minutes to maintain the optimum temperature. It is also dependent on the tools you use, so bring extra eggs for trial and error!

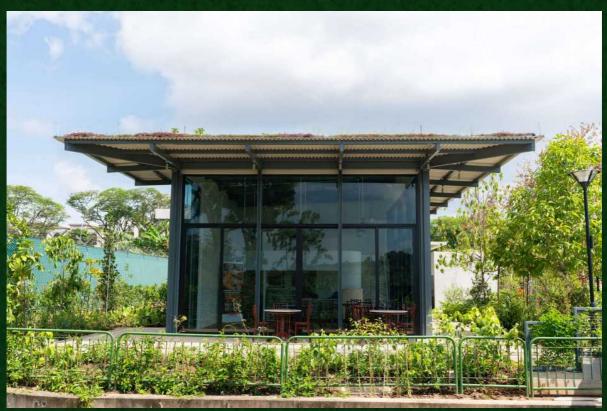


Photo credit: NParks

One can find a small café which sells old school favorites like kaya toast with soft boiled eggs and Nasi Lemak among other things. Eating a nice filling meal is the perfect way to end your adventure at Hot Spring Park so be sure to drop by for some lunch or dinner!

Hot Spring Park Amenities



Photo credit: NParks

This heritage trail features a Floral Walk in which one can see fruit trees and other edible plants and flowers which was common in the kampung days (1960s-1990s). Along the path there is also an interpretative sign which explains the heritage of the park. For those who enjoy short walks and history this has to be one of the coolest things about the park. There is also a naturalised stream and unpaved paths to add to the rustic environment!



Photo credit: Loke Xin Yi



Photo credit: Loke Xin Yi

Sembawang Park

Located along Sembawang Road, Sembawang Park has a beautiful beach, and amenities such as a maritime-themed playground, shelters, barbecue pits and a dog run making it a perfect place to escape city life for a weekend of familyfriendly activities!

Sembawang Park was originally a British Naval Base from 1939 to 1968. This is evident from the street names within the



Photo credit: NParks

area that are naval-themed or linked to the British occupation. For example, Deptford Road was named after the first Royal Navy Dockyard, while Admiralty Road was named after the Rear Admiral of the British Navy who took residence in the area.

The Sembawang Naval Base was built to defend Singapore against threats in the Far East, Japan being one of the major ones. During that time, it was the largest dry dock in the world. After the war, the whole naval base was handed over to the Singapore Government where it was used as a commercial shipyard. Part of the naval base was also converted into Sembawang Park which opened in 1979.



Aerial View of Sembawang Naval Base Photo credit: Australian War Memorial

Park Amenities



Photo credit: NParks

There are a total of nine barbecue pits available for visitors to book online via the NParks website at www.nparks.gov.sg/activities/fun-and-recreation/barbecuing. Please note that all barbecue activities should stop by 10.30 pm and visitors should prepare their own materials for the barbecue.



Built with reference to Sembawang Park's history as a naval base and situated in the middle of the sand pit, the maritime-themed playground is a highlight amongst the young. It is shaped like a battleship with gun turrets, propellers, rudder and an upper deck. From the upper deck, one will be able to imagine playing on a ship! This playground has various activities such as a rope ladder, rock wall, a swing and a sandpit for children to engage in associative play.

Photo credit: NParks

Park Amenities



need to bring water for their dogs.

Photo credit: Loke Xin Yi



Photo credit: Loke Xin Yi

The dog run features an enclosed area where dogs can roam around freely. Tables and benches are available in the enclosed area for owners to hang out while their fur friends run around and play with one another. There are also plenty of trees to provide natural shade in the afternoon!



Photo credit: Loke Xin Yi For everyone's safety, visitors should take note of the instructions on the dog run signboard before entering. Also, do note that the dog run does not have a water tap so owners will

Park Amenities

The Sembawang Jetty is located directly opposite the Johor Straits and is a popular fishing spot with an amazing view of the sunset. Many visitors enjoy swimming beside the jetty, so please be careful when casting your fishing lines. Close to the jetty, visitors can also exercise at the nearby fitness corner or watch as large ships head towards the Sembawang shipyard.





Photo credit: Loke Xin Yi

Photo credit: Loke Xin Yi

Aptly named the Beaulieu House which means 'beautiful place' in French, this monochrome house was originally built in the 1960s and once was the residence of a British engineer who helped with construction of the Sembawang Naval Base. Now a popular restaurant facing the Straits of Johor, it is perfect spot for dinner before ending the night with a stroll on the beach with family and friends.



Photo credit: Loke Xin Yi

Walk towards the Butterfly Garden and you will see a beautiful archway made with bamboo plants at the entrance. In this garden, one will find various brightly-coloured flowers that attract different species of butterflies and bees. Located at one corner of the park, this is a quiet and nice spot for visitors to enjoy and relax in activities such as photography and walking on the foot reflexology path.

Marine Life

Halfbeak (Hemiramphidae)

- Also known as spine fish, it has distinctive jaw; its lower jaw is much longer and upper jaw is short and triangular.
- It inhibits in warm surface sea waters.
- It feeds on insects, smaller fishes and crustaceans.



Photo credit: Ria Tan



Powder Blue-Clawed Swimming Crab (*Thalamita crenata*)

- This crab is found locally in mangroves, seagrass and reef habitats.
- It can be distinguished by its powder blue pincers with dark red tips
- It forages at night on clams, mussels and slow-moving crustaceans.

Photo credit: Ria Tan

Coastal Horseshoe Crab (Tachypleus gigas)

- This crab lives in marine and brackish water.
- It is not a true crab and is more closely related to spiders and scorpions.
- It is often seen in pairs, with the smaller male on top of the larger female.



Photo credit: Ria Tan

Butterflies

Silver Forget-Me-Not (Catochrysops panormus exiguus)

- A small butterfly which was thought to be extinct but was rediscovered in the late 1990s during NParks biodiversity surveys.
- It is greyish white featuring an orange crowned black spot on the underside of its wings.
- It can be found flying around low-lying flowering shrubs in open areas.



Photo credit: Ong Jun Xiang Lumin



Common Mormon (Papilio polytes romulus)

- This large butterfly is a regular visitor to parks, gardens and urban areas.
- The male is black with a band of large whitish yellow spots running across its hindwing as shown in the photo on the left. The female has reddish-pink spots that mimics the Common Rose butterfly.
- It is attracted to host plants such as lime, pomelo and the Indian Curry Leaf (*Murraya koenigii*).

Photo credit: Ong Jun Xiang Lumin

Striped Albatross (Appias libythea olferna)

- This butterfly is a fast flyer which frequents nectar of flowers on hot sunny days.
- The male is mostly white while the female is mostly greyish yellow on both the upper and undersides of the hindwings as shown on the left.
- Its host plant is the Fringed Spiderflower (Sieruela rutidosperma).



Dragonflies & Bees

Crimson Dropwing (Trithemis aurora)

- It is common and widespread in Singapore's freshwater bodies.
- The male has red eyes and with an almost luminous pink thorax and abdomen. The female is golden yellow with black markings on the sides of the abdomen.
- This dragonfly is featured in the 1985 Singapore Stamps for Insects Definitive Series.



Photo credit: Ong Jun Xiang Lumin



Common Parasol (Neurothemis fluctuans)

- Also known as Red Grasshawk for its most striking reddish colouration.
- The male has brownish-red thorax and abdomen with wings that are almost entirely brownish red. The female is duller in colour and has clear wings.
- Like all dragonflies, they feed on insects such as mosquitoes.

Photo credit: Ong Jun Xiang Lumin

Sunda Blue-banded Digger Bee (Amegilla andrewsi)

- This bee has stripes with alternating brilliant blue and black bands in its abdomen and orange brown hair covering its thorax.
- It nests by burrowing into the ground and mortar between bricks and concrete in man-made surfaces.
- It carries out buzz pollination by vibrating its wings at a specific frequency which releases the pollen of flowers.



Birds

Malaysian Pied Fantail (Rhipidura javanica)

- A small, bold and adaptable songbird with dark upperparts, black chest band, a white-tipped black tail, white eyebrows and throat.
- It is usually found in pairs or mixed flocks in understorey searching for insects.
- It builds a small conical shaped nest on a thin branch at eye level.
- The bird is also known as Murai Gila, meaning 'mad thrush' due to its disjointed song and frantic feeding behaviour.





Photo credit: Bilbao Aaron Gregg De Vera

White-headed Munia (Lonchura maja)

- This striking, small songbird has a pale head, rich brown body and grey bill.
- It feeds on rice and grass seeds.
- It forages in mixed flocks with other munias such as the Chestnut and Scaly-breasted Munia.

Photo credit: Bilbao Aaron Gregg De Vera

Scarlet-backed Flowerpecker (Dicaeum cruentatum)

- A small and fast moving bird, it is difficult to spot as it is fond of foraging amongst fruiting plants such as mistletoe.
- It has a short, sharp chirp or metallic ticking call.
- The female is predominantly brown while the male is brightlycoloured with a bright red crown, nape and back.
- It usually feeds on flowers and figs.



Photo credit: Bilbao Aaron Gregg De Vera

Flora



Rose Myrtle (Rhodomyrtus tomentosa)

Its fruits are eaten by many bird species. It is also the food plant for the caterpillars of the moths, Nolid Moth (*Carea varipes*) and Lappet Moth (*Trabala vishnou*).

The flowers of Rose Myrtle resemble cherry blossoms.

Simpoh Air (Dillenia suffruticosa)

Each flower develops into a pink star-shaped fruit which splits open when ripe, revealing seeds that are covered by a fleshy red aril.

Its large showy flowers and fruits attract birds such as Yellow-vented Bulbul.

The large leaves are used to wrap food and they are also shaped into a cone to contain food such as 'rojak'.

Photo credits: Ong Jun Xiang Lumin Singapore Rhododendron (Melastoma malabathricum)

The plant has other common names such as Common Sendudok and Malabar Gooseberry.

It has medicinal and phytoremediation properties.

It also attracts birds for the fruits, butterflies and bees for the flowers.

Flora





Photo credit: Ong Jun Xiang Lumin Elephant Apple (*Dillenia indica*)

The seeds of large, edible fruits are dispersed by elephants.

The fruit pulp is sour and is used in Indian cuisine such as curries, jam and jellies. It is also used as a hair wash.

Its white large flowers open at night and fade by noon.

Tembusu (Cyrtophyllum fragrans)

Its bark is deeply fissured and the wood is very durable for timber.

Its flowers are cream-white turning yellow and fragrant, attracting butterflies and moths.

The back of the Singapore 5-dollar note features a Tembusu tree.

Sembawang Tree (Kayea ferruginea)

Sembawang Town is named after this tree.

Its white creamy flowers are pollinated by insects.

The fruits are enveloped in four leathery and fleshy sepals.

Aroid Garden



Photo credit: NParks

The Aroid Garden is located at the entrance of Sembawang Park of carpark 2. It houses plants from the Araceae family such as taros, cocoyams and plants like the Anthurium and Aglaonema. Palms and trees are also planted to complement the Garden's surroundings.



Fishtail Palm (Caryota mitis)

- Leaves are shaped like tails of fishes which give its name. This palm is native to Singapore.
- Its fruits are eaten by birds, bats, squirrels and civets.
- The plant contains calcium oxalate crystals which can cause irritations to skin and mucous membranes when in contact.

Photo credit: Ong Jun Xiang Lumin

Elephant Foot Yam (Amorphophallus paeoniifolius)

- The leaves and stems are sometimes cooked and eaten as green vegetables.
- It is also called 'Corpse Flower' due to the large and showy flower which emits foul decaying odour that attracts flies.



Aroid Garden

Swiss Cheese Plant (Monstera deliciosa)

- The scientific name literally means "delicious monster", a description given to its fruit's taste but yet it can burn one's throat upon eating it.
- The fruits are edible and taste like a combination of banana and pineapple.
- A popular household plant that gives it another common name as 'Window Plant'.



Photo credit: Ong Jun Xiang Lumin

Giant Taro (Alocasia macrorrhizos)

- Its large and wide leaves give it the common name 'Elephant's Ear'.
- The leaves are also used as umbrellas when raining in tropical areas.
- Its stems are peeled and used as ingredients in stews.

Photo credit: Ong Jun Xiang Lumin

Queen of Hearts (Homalomena rubescens)

- It was named after its heart-shaped leaves that sprout from their red petioles.
- Its flowers are also red and it is a popular indoor plant.



Canberra-Sembawang PCN

Red Lip (Syzygium myrtifolium)

- A common roadside tree that is used as hedge borders.
- Its small, white flowers look fluffy and produce a nice fragrance.
- Its flowers are pollinated by insects such as butterflies and bees.



Photo credit: Ong Jun Xiang Lumin

Scrambled Egg Bush (Senna surattensis)

- The bright yellow flowers give the tree its name.
- It is planted as a roadside tree and in butterfly gardens.
- It is the host plant of the Orange Emigrant (*Catopsilia scylla cornelia*).

Photo credit: Ong Jun Xiang Lumin

Rose of Venezuela (Brownea rosa-de-monte)

- Its beautifully red flowers are arranged into a balllike shape that is popular with insects such as bees.
- When the flowers start to die off, the ground is littered with the red petals.
- It is a butterfly and bird attracting plant.



Canberra-Sembawang PCN

Shanghai Beauty (Jatropha integerrima)

- The plant sap can cause irritations and the whole plant is poisonous if ingested.
- It is a popular plant in gardens and roadsides due to its bright red flowers that attract butterflies.



Photo credit: Ong Jun Xiang Lumin

Fish-Poison Tree (Barringtonia racemosa)

- This plant is native to Singapore and is critically endangered.
- A toxin called saponin is mainly concentrated in the seeds and other plant parts were used as fish poison, hence its name was given.
- It is one of the host plants for the Atlas Moth (*Attacus atlas*).

Photo credit: Ong Jun Xiang Lumin

Pink Kopsia (Kopsia fruticosa)

- It is an ornamental shrub that produces lovely pink flowers throughout the year. Its name "fruticosa" is derived from the Latin word for bushy that refers to its growth rate.
- It is commonly planted along roadsides, park connectors and butterfly gardens to brighten up the landscape.



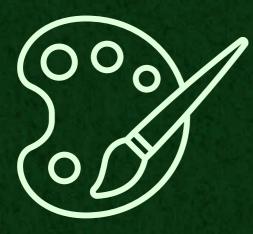
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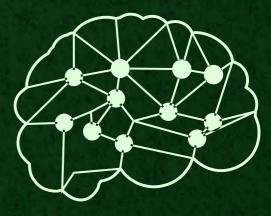


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Online resources:

(n.d.). Wikipedia. 31 August, 2022, from www.wikipedia.org.
Singapore Geographic. 24 March 2022, from www.singaporegeographic.com
Flora Fauna Web. National Parks Board, 25 August 2021, from www.nparks.gov.sg



Lime Butterfly (*Papilio demoleus malayanus*) Photo credit: Bilbao Aaron Gregg De Vera