

MEDIA FACTSHEET B

An interim update on the comprehensive survey of Bukit Timah Nature Reserve

NParks had announced a two year comprehensive biodiversity survey in March 2015, to better understand the conservation status and distribution of plants and animals in the 163-hectare Bukit Timah Nature Reserve. The last time a survey of similar scale, covering the entire nature reserve, was conducted was some 20 years ago between 1993 and 1997. Information gathered from this latest survey will help NParks to continue to sensitively manage this ASEAN Heritage Park, which was first established as a Nature Reserve in 1883.

In addition to taxonomic groups that were surveyed previously, the current survey includes various terrestrial and aquatic invertebrates, fish, amphibians and reptiles. Physical geography studies are also being carried out. When the survey concludes in 2017, the data will be analysed and used to tailor strategies for the systematic long-term monitoring and management of the reserve.

To date, several rare and presumed extinct flora species have already been found. Species potentially new to science have also been discovered. Some examples are listed below.

Flora

Scindapsus lucens



This slender, herbaceous climber was originally described from cultivated plants and later discovered in the wild from Western Sumatra and later in 2010 from Peninsular Malaysia. It is a new record in Singapore's native plant list. NParks plans to propagate this aroid to be used as an ornamental plant in parks and gardens.

Photo credit: Lua Hock Keong, National Parks Board

<i>Dapania racemosa</i>  Photo credit: Lua Hock Keong, National Parks Board	This liana is a large woody climber with leathery leaves and crimson flowers. It was last collected in 1953 by the then Curator of the Herbarium at the Singapore Botanic Gardens, James Sinclair, and was rediscovered during the survey.
<i>Codonoboea platypus</i>  Photo credit: National Parks Board	This robust herb is found deep in the forest in shade, often near the edges of streams or other wet areas. It has white flowers with slightly purple-tinged lobes. Its name means “broadly-footed”, which could be referring to the shape of its leaves. It used to be found in several localities in Singapore, but is now restricted to only Bukit Timah Hill and MacRitchie Forest and in very localised spots.
<i>Soejatmia ridleyi</i>  Photo credit: National Parks Board	This very rare small bamboo is the only clambering bamboo native to Singapore. It was first discovered by the former Director of the Singapore Botanic Gardens, Henry Nicholas Ridley, and his specimen collected from Bukit Timah Hill was designated as the type specimen from which the species was first described. It clammers over other vegetation in small forest gaps by developing long branches from the main stem that entangle adjacent vegetation.

Fauna

A possible new species of <i>Lamania</i>  Photo credit: Joseph K.H. Koh	Tetrablemids are armour-plated spiders with characteristic pitted carapace (top part of the front body) and concertina-like abdominal grooves. These structures are easily visible in this undescribed male <i>Lamania</i> specimen which was found in the Bukit Timah Nature Reserve. Tetrablemids are usually found hiding in very humid retreats, buried among deep leaf litter in the rainforest. They may venture out of the retreat at night and construct a flimsy sheet-like web.
A possible new species of <i>Aetius</i>  Photo credit: David J Court	<i>Aetius</i> is the name given to ant-mimicking armoured sac spiders with a unique carapace (top part of the front body). It has a sand-paper texture and is broadly convex in front but abruptly narrowed into a wedge-like structure at the back, overhanging the tubular pedicel (waist). There are only two described species of <i>Aetius</i> in the world; neither has the unusual scissor-like or swallow-like tail found in this specimen from the nature reserve.
Yellow-striped Caecilian (<i>Ichthyophis paucisulcus</i>)  Photo credit: Noel Thomas, National Parks Board	This very rare and poorly known snake-like amphibian species is known from Bukit Timah and Central Catchment Nature Reserves. It is adapted to living underground and has only been recorded a few times locally. Prior to this recent sighting, it was last sighted in 1989.
Horsfield's Flying Squirrel (<i>Iomys horsfieldii</i>)  Photo credit: Holly Siow, National Parks Board	This squirrel is nocturnal and spends the day sleeping in tree cavities. It emerges after dark to feed on a variety of fruits. As its name suggests, it is capable of gliding from tree to tree with the help of a gliding membrane. In Singapore, it is locally common in the nature reserves and surrounding buffer parks. It often betrays its presence by its distinctive, far-carrying call that sounds like a barking dog.

Red-crowned Barbet
(*Psilopogon rafflesii*)



Photo credit: Cai Yixiong

This colourful bird is the only forest-dwelling barbet in Singapore. It inhabits the forest canopy, feeding primarily on fruits. In Singapore, it is confined to the Bukit Timah and Central Catchment Nature Reserves, where it serves as an important seed disperser by consuming the fruits of forest trees too big to be eaten by smaller birds.

Brown-chested Jungle Flycatcher
(*Cyornis brunneatus*)



Photo credit: Francis Yap

This unobtrusive bird, no bigger than the human hand, undertakes an amazing journey every year from its breeding grounds in central China to the forests of Sumatra to spend the winter. Along the way, it stops at forested areas such as Bukit Timah Nature Reserve to rest and refuel. This species is globally threatened as a result of habitat loss and our nature reserves are critical for ensuring their survival during their annual migration.

Malayan Horned Frog
(*Megophrys nasuta*)



Photo credit: Prathini Selveindran

The Malayan Horned Frog (*Megophrys nasuta*) is Singapore's only species of horned frogs. While common in some parts of Southeast Asia, in Singapore, this frog is confined to patches within the Bukit Timah and Central Catchment Nature Reserves. This charismatic species is an excellent ambush predator, blending into its surroundings through its body shape and colouration, which highly resembles dried leaves. Its call, which sounds like a loud, metallic honk, can be heard at dusk, especially after it rains.

Dusky Fruit Bat (<i>Penthetor lucasi</i>)  Photo credit: Holly Siow, National Parks Board	This bat is a frugivore that inhabits caves and rocky shelters. In Singapore, this bat is rare, and known only from Bukit Timah Nature Reserve. Elsewhere, it occurs in the Malay Peninsula, the Riau Islands, and Borneo. Like all fruit bats, the Dusky Fruit Bat serves as a pollinator and seed-dispersing agent for some species of trees. However, it faces threats of habitat loss and disturbance of its roosting sites.
Singapore bent-toed gecko (<i>Cryptodactylus majulah</i>)  Photo credit: Noel Thomas, National Parks Board	Recently described from Singapore in 2012, the Singapore bent-toed gecko is known to inhabit waterlogged forest habitats. They are often seen clinging onto low vegetation above forest streams but have also been observed swimming underwater when attempting to flee. While this species is mainly known from the Nee Soon Swamp Forest in Singapore, it was recently recorded for the first time in Bukit Timah Nature Reserve during the survey.
Straw-headed Bulbul (<i>Pycnonotus zeylanicus</i>)  Photo credit: Francis Yap	This species is the largest of the Southeast Asian bulbuls and like most of its related species, is arboreal and omnivorous. It inhabits habitats along the interface between land and water such as riverine and coastal forest. Their rich, melodious songs make them popular in the cage-bird trade and trapping has wiped out many populations throughout its range.

Malayan Porcupine
(*Hystrix brachyura*)



Photo credit: Jayasri Lakshminarayanan, National Parks Board

The Malayan Porcupine was thought to be extinct in Singapore until it was photographed on Pulau Tekong in late 2005. It has since been recorded in the Central Catchment Nature Reserve, Pulau Ubin and recently, at Bukit Timah Nature Reserve. This species is nocturnal and forages on the forest floor in search of plant matter such as fallen fruit and tubers. When threatened, the Malayan Porcupine adopts a defensive stance, raising its spines and moves backwards towards would-be predators.

Slender Walking Catfish
(*Clarias nieuhofii*)



Photo credit: National Parks Board

This walking catfish is the rarest of the three native walking catfishes in Singapore. It inhabits forest streams and is nocturnal in habits, emerging after dark to feed on a range of prey including crustaceans and small fish. This catfish has the ability to breathe air, allowing it to “walk” between forest pools during dry periods. In Singapore, it was believed to be largely confined to the Central Catchment Nature Reserve and Pulau Tekong until the current survey in Bukit Timah Nature Reserve proved otherwise.

Sunda Slow Loris
(*Nycticebus coucang*)



Photo credit: National Parks Board

This critically endangered native species is one of the few mammals whose bite is known to be venomous.

It is nocturnal and arboreal in habits, moving through the canopy in search of a variety of prey ranging from insects to fruits and tree sap. Its movement is not necessarily slow despite its name. In Singapore, it is largely restricted to the Bukit Timah and Central Catchment Nature Reserves as well as offshore islands like Pulau Tekong.