

## MEDIA FACTSHEET B

Pulau Ubin is home to more than 720 native plant species and over 300 species of mammals, birds, reptiles and amphibians, as well as 235 species of butterflies, dragonflies and damselflies. Some of these species are only found on the island and not on the mainland.

### Rare animals found on Pulau Ubin

Species	Attributes
<p>Ashy Roundleaf Bat (<i>Hipposideros cineraceus</i>)</p>  <p>Photo credit: National Parks Board</p>	<p>This critically endangered bat was recorded for Singapore only on 1 April 2014. Two colonies have been found in abandoned structures in Pulau Ubin. It is not known from anywhere else in Singapore. A forest-dwelling bat, it uses echolocation to detect insects on which it feeds. This bat is distributed from South Asia to South-east Asia.</p>
<p>Lesser False Vampire (<i>Megaderma spasma</i>)</p>  <p>Photo credit: National Parks Board</p>	<p>In Singapore, the Lesser False Vampire is only present on Pulau Ubin and Pulau Tekong. Recently, Pulau Ubin has proved to be a stronghold for this species as several colonies have been found in disused structures. It feeds primarily on insects but does not drink blood.</p>
<p>Oriental Small-clawed Otter (<i>Aonyx cinerea</i>)</p>	<p>This critically endangered otter inhabits mainly mangroves and mudflats. Often found in family groups, it is active both in the day and at night.</p>



Photo credit: Jerry Liew

It is threatened by habitat loss and human disturbance. There have been nine records of the Oriental Small-Clawed Otter on Pulau Ubin in the past 16 years, but no recent sightings on mainland Singapore.

Dwarf Crow (*Euploea tulliolus ledereri*)



Photo credit: Robert Teo, National Parks Board

The Dwarf Crow was believed to have been extirpated from Singapore, but was rediscovered on Pulau Ubin in 2002. The smallest of Crow butterflies, it is currently known only from Pulau Ubin. The Dwarf Crow flies slowly and is particularly drawn to the Indian Heliotrope (*Heliotropium indicum*), feeding on chemicals on the dried parts of the plant.

Common Jay (*Graphium doson evemonides*)



Photo credit: Horace Tan

Although common in neighbouring Malaysia, the Common Jay is restricted to Pulau Ubin in Singapore, save for a single sighting on the mainland in 2006. It was discovered on Pulau Ubin in 2005 and has been recorded on many occasions since. The Common Jay is constantly on the move and is active throughout the day, flying swiftly from one flower to another to feed on nectar. The male butterflies are often seen “puddling” in damp spots, sucking water from the ground to extract minerals and expelling the water from the other end.

<p>Greater mouse-deer (<i>Tragulus napu</i>)</p>	<p>The Greater Mousedeer or Napu is found in much of South-east Asia but was previously presumed to have been extirpated from Singapore. In 2006, there was a sighting of a mousedeer, but it was only in 2008 when the Greater Mousedeer was confirmed to be still holding out in Pulau Ubin through photographs. The last record before this rediscovery was also from Pulau Ubin, way back in 1921. Other than a single record on the mainland, all other recent records have been from Pulau Ubin, where there is a sizeable and well-distributed population. The Greater Mousedeer is not a true deer – males do not have antlers, but possess small "tusks", which are actually elongated canines in the upper jaws. It inhabits forested areas and is mainly active at night, foraging for fallen fruits, leaves, grasses and even aquatic plants.</p>
	
<p>Photo credit: Chan Kwok Wai</p>	

### Rare trees and orchids on Pulau Ubin

Species	Attributes
<p>Collared fig (<i>Ficus crassiramea</i>)</p>  <p>Photo credit: Ang Wee Foong, National Parks Board</p>	<p>This critically endangered tree occurs in Pulau Tekong and Pulau Ubin. There are a few specimens on Pulau Ubin, including one listed as a Heritage Tree near Ketam Mountain Bike Park. A strangling fig, it often begins life as a seed dispersed by animals like birds at the top of a tree. From here, it sends out roots downwards that eventually encircle the host tree's trunk. In many cases, the host tree is finally "strangled" to death after many years.</p>

Eye of the Crocodile (*Bruguiera hainesii*)



Photo credit: National Parks Board

The Eye of the Crocodile is a globally critically endangered mangrove plant and one of the rarest mangrove species in the world. There are about 200 mature individuals in the wild globally, 11 of which are found in Singapore including two on Pulau Ubin. In 2003, NParks staff discovered a tree on the southern coast of Pulau Ubin, and subsequently another tree along Noordin Beach in 2005. NParks has embarked on a species recovery programme to protect the Eye of the Crocodile and to collect and plant young seedlings to increase the population.

*Ficus stricta*

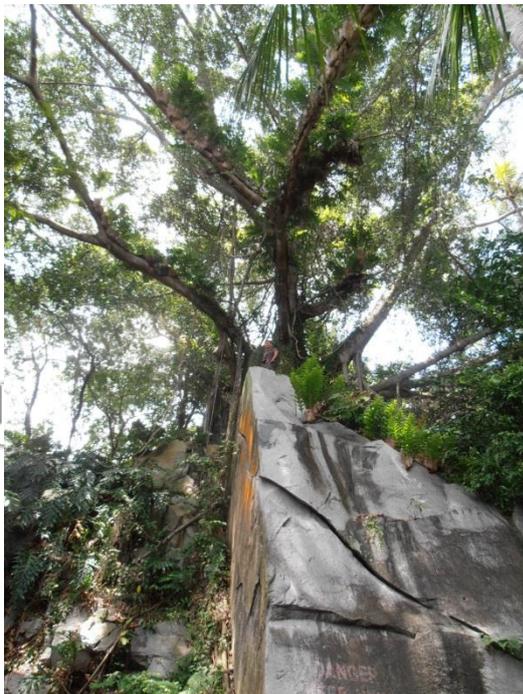


Photo credit: Joseph Lai, National Parks Board

This rare species of strangling fig was listed as native to Singapore only in 2012, with the first specimen described being discovered in Changi. It is only known from Changi and Pulau Ubin.

John Turnbull Thomson depicted a tree in 1850, which is likely to be the same individual as the one found near the mouth of Sungei Pulau Ubin, in 2002. This is one of the Heritage Trees on Pulau Ubin, and is thought to be more than 160 years old.

The tree seldom bears fruit, at times at intervals of more than six years. Oriental Pied Hornbills and Green Imperial Pigeons have been seen feeding on the figs.

Hybrid stilt mangrove-happy face (*Rhizophora X lamarckii*)



Photo credit: Joseph Lai, National Parks Board

This naturally-occurring mangrove hybrid was discovered in July 2011 by NParks staff, and was found to be a new record for Singapore. It is a natural hybrid of the *Rhizophora apiculata* and *Rhizophora stylosa*. Five trees have been found at the Sungei Jelutong and Jalan Noordin mangrove.

Marsh Pulai (*Alstonia pneumatophora*)



Photo credit: Joseph Lai, National Parks Board

This particular species is unique from other Pulai trees in that it has pneumatophores, or 'breathing' roots, and hence its scientific name.

It is found mainly in the central forests on the mainland, but a few trees occur on Pulau Ubin.

Jamba (*Neuwiedia veratrifolia*)



Photo credit: Yam Tim Wing, National Parks Board

This critically endangered orchid is found in lowland forests and produce long inflorescences which bear many yellow flowers. Most of the orchid species which have been reintroduced under the NParks Orchid Conservation Programme are epiphytic orchids, but Jamba is terrestrial orchid. Plantlets from one site have been transplanted to two other areas on Pulau Ubin.

*Pterospermum diversifolium*



Photo credit: Ang Wee Foong, National Parks Board

This species was first collected by Henry Ridley, former director of the Singapore Botanic Gardens, who listed Pulau Ubin as the sole locality for Singapore. The tree was presumed to have been extirpated from Singapore, until it was collected from Pulau Ubin in 2013. There are currently fewer than 50 mature individuals in Singapore.

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Sheath-covered Spathe *Robiquetia*  
(*Robiquetia spathulata*)



Photo credit: Yam Tim Wing, National Parks Board

The critically endangered orchid was recorded only once in Singapore by Henry Ridley, a former director of the Singapore Botanic Gardens, who collected it near the Gardens. It was only in 2006 that a single plant was rediscovered in Pulau Ubin. Through tissue culture, the species has been successfully propagated and reintroduced to other parts of Pulau Ubin, as well as mainland Singapore.

National Archives of Singapore

*Thrixspermum amplexicaule*



Photo credit: Yam Tim Wing, National Parks Board

The lower part of this semi-aquatic orchid is submerged in water. Its pale lilac flowers only last for a day. This critically endangered species is found naturally at a single location on Pulau Ubin, but it has been successfully propagated and reintroduced to other sites on the island since 2010.

*Utania nervosa*



Photo credit: Joseph Lai, National Parks Board

Discovered at Chek Jawa in 1997, this small tree was thought to be *Fagraea racemosa* (now called *Utania racemosa*). In 2014, it was described as *Utania nervosa*, a species new to science! Although restricted to south-east Johor, Pulau Ubin and Pulau Tekong, it is quite common in the last two locations. It has leaves with ten to 16 pairs of veins and inflorescences with very short stalks. The inflorescences bear white flowers that hang in droopy bunches underneath the large and leathery leaves.

National Archives of Singapore

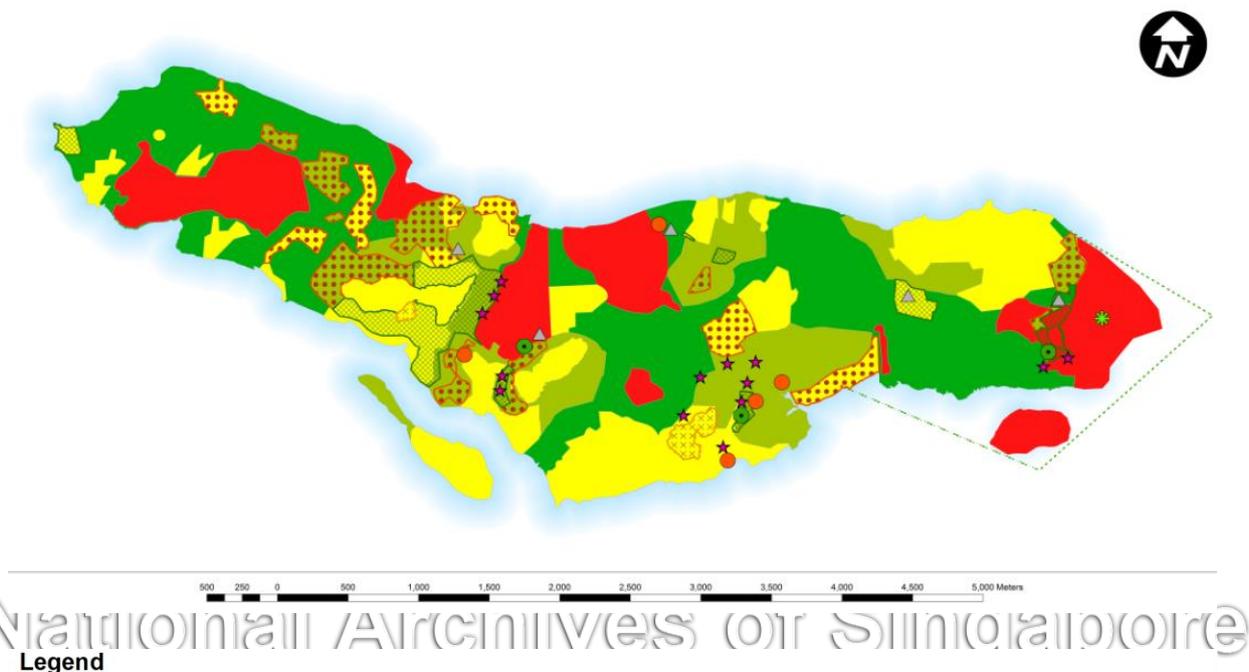
In consultation with FUN members, NParks has mapped the biodiversity of Pulau Ubin to facilitate habitat enhancement and species recovery plans indicated in the map below.

By analysing aerial photographs and satellite imagery, reviewing data collected through flora and fauna surveys, and ground truthing for validation, the island has been classified into four zones of biodiversity significance:

- Core Biodiversity Area: has pristine or stable habitats; harbour a wide range of plants and animals

- High Biodiversity Area: has maturing habitats; harbour a wide range of plants and animals
- Medium Biodiversity Area: has regenerating habitats; harbour a smaller range of plants and animals
- Lower Biodiversity Area: has highly impacted habitats; harbour a smaller range of plants and animals

The biodiversity map guides NParks to prioritise areas for habitat enhancement and to identify suitable sites for species recovery. For example, areas that improve linkage and continuity among core and high biodiversity areas are accorded higher priority for reforestation or mangrove restoration. For recovery of vulnerable species like the Eye of the Crocodile, *Bruguiera hainesii*, sites are located either in core and high biodiversity areas or areas that have been identified for mangrove restoration.



**Legend**

**Species Recovery Sites**

- ▲ Bat House
- Otter Holt
- Eye of Crocodile Species Recovery Site
- ★ Orchid Species Recovery Site
- ✱ Seagrass Species Recovery Site

**Habitat Enhancement Plan**

- ▨ Habitat Enhancement Site
- ▨ Species Recovery Site
- ▨ Proposed Habitat Enhancement Site

**Biodiversity Areas**

- Core Biodiversity Area
- High Biodiversity Area
- Medium Biodiversity Area
- Lower Biodiversity Area

*Map of Pulau Ubin showing biodiversity areas and plans (Credit: National Parks Board)*