

Living with NATURE

As we restore more greenery to our urban spaces, people are brought closer to nature and wildlife. Learn more about our fascinating and diverse fauna and how we can co-exist as we build our City in Nature!

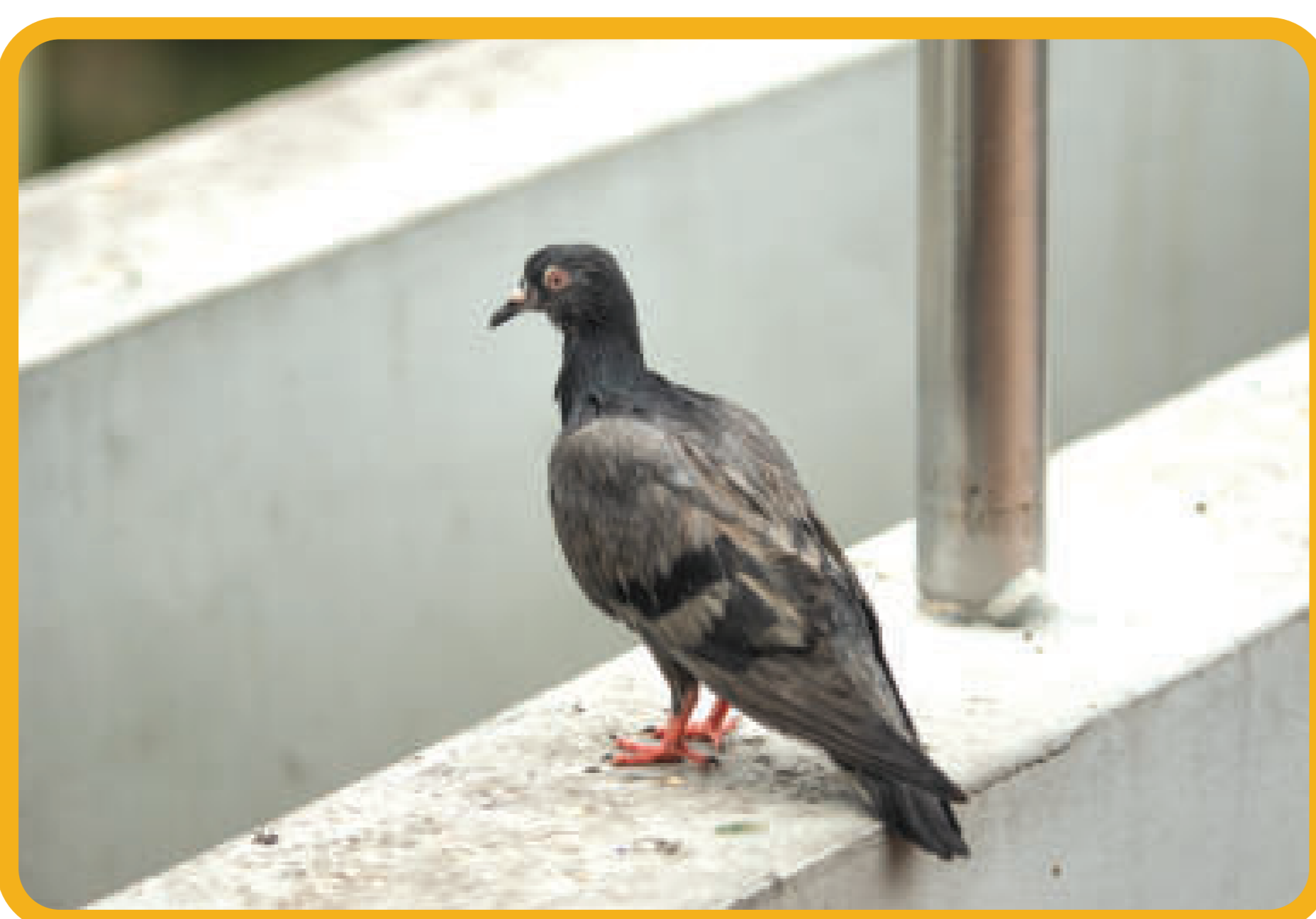
WHY ARE WILDLIFE IN URBAN ENVIRONMENTS



Common Palm Civet (*Paradoxurus musangus*)
Photo credit: Bryan Lim

- **REVEGETATION OF URBAN ENVIRONMENTS & GREEN INFRASTRUCTURE**

Increasing green pockets in Singapore's urban areas will bring nature and people closer together.



Rock Pigeon (*Columba livia*)
Photo credit: Bryan Lim

- **ILLEGAL WILDLIFE FEEDING AND IMPROPER DISPOSAL OF FOOD WASTE**

Animals generally go for the easiest food source available. Thus, opportunistic wildlife have adapted to consuming human food and waste, which can lead to certain undesirable behaviour.



Long-tailed Macaque (*Macaca fascicularis*)
Photo credit: Jayasri Lakshminarayanan

- **DISPERSAL & EXPLORATION OF NEW TERRITORY**

Wildlife move around to forage for food and explore new territories. Many of our wildlife, such as macaques, travel through urban environments between their forest habitats in search of food.



Reticulated Python (*Malayopython reticulatus*)
Photo credit: Jonathan Lam

- **ADAPTABLE TO URBAN ENVIRONMENTS**

Some wildlife are highly adaptable to man-made environments through fulfilling specific urban niches, such as feeding on pest animals like rodents.



Javan Myna (*Acridotheres javanicus*)
Photo credit: Francis Yap

- **HUMAN INTERVENTION**

Some non-native species, such as the Javan Myna and Red-eared Slider, were introduced to our urban environments through human intervention, or by escaping captivity.

Living with NATURE

Wildlife play very important roles in the ecosystem, occupying different trophic levels and ecological niches. Let's find out what their roles are!

POLLINATORS

Pollinators allow flowering plants to produce the fruits that animals and humans enjoy.



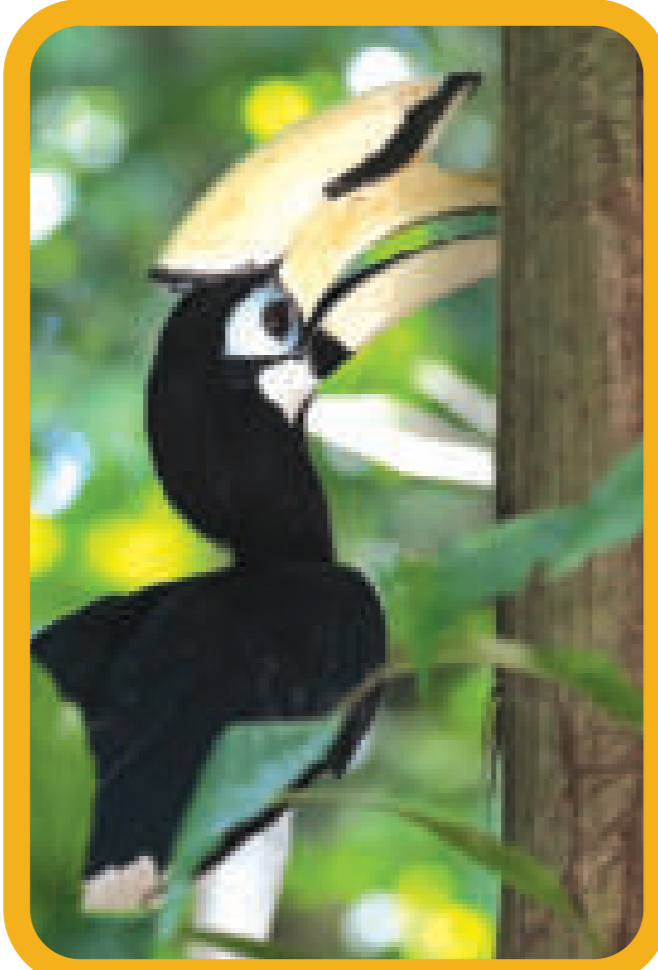
Cave Nectar Bat (*Eonycteris spelaea*)
Photo credit: Nick Baker



Scarlet-backed Flowerpecker (*Dicaeum cruentatum*)
Photo credit: Saranya Dhanabalan



Black-veined Tiger (*Danaus melanippus*)
Photo credit: Eunice Koh



Oriental Pied Hornbill (*Anthracoceros albirostris*)
Photo credit: Foo Zhi Jie



Lesser Dog-faced Fruit Bats (*Cynopterus brachyotis*)
Photo credit: Foo Zhi Jie

DISPERSERS

Frugivores help plants disperse seeds through their droppings, aiding in reforestation.

APEX PREDATORS

Apex predators keep prey populations in check and help to maintain balance in the ecosystem.



King Cobra (*Ophiophagus hannah*)
Photo credit: Foo Zhi Jie



Smooth-coated Otter (*Lutrogale perspicillata*) eating fish
Photo credit: Max Khoo



Reticulated Python (*Malayopython reticulatus*)
Photo credit: Jonathan Lam

PEST CONTROL

Some wildlife adapt to urban environments by feeding on pests such as cockroaches and rodents, keeping the pest population down.

REPTILES

spotted in Singapore

These are a few of our scaly friends that you may have seen or heard. How many do you recognise?



Reptiles are generally shy by nature. If you encounter them, observe them from a safe distance and allow them the space to retreat.

Oriental Whip Snake
(*Ahaetulla prasina*)



Clouded Monitor
(*Varanus nebulosus*)

REPTILE FACTSHEET

- Vertebrates with scaly skin
- Mostly egg-laying
- Cold-blooded
- Closely related to birds
- Includes snakes, lizards, turtles and so many more!

Did you Know?

Singapore has more than **110** reptile species!

Reticulated Python
(*Malayopython reticulatus*)

DID YOU KNOW?

- Growing to as long as 9 metres, the Reticulated Python is the world's longest snake. It is non-venomous, instead using constriction to trap its prey!
- You can sometimes find it in our urban environment, due to the abundance of prey like rodents.

Black Spitting Cobra
(*Naja sumatrana*)

Malayan Water Monitor
(*Varanus salvator*)

Estuarine Crocodile
(*Crocodylus porosus*)

BIRDS

spotted in Singapore

These are a few of our local birds commonly sighted in urban environments. How many do you recognise?



It is illegal to feed wildlife, including birds. There is enough food in their natural environment and human feeding disrupts their natural behaviour.

This can cause artificial population increases, which may bring about disamenities.

Olive-backed Sunbird

(*Cinnyris jugularis*)
Left : Female, Right : Male



Asian Glossy Starling

(*Aplonis panayensis*)



Collared Kingfisher

(*Todiramphus chloris*)



Black-naped Oriole

(*Oriolus chinensis*)



Asian Koel

(*Eudynamis scolopaceus*)
Left : Male, Right : Female

BIRD FACTSHEET

- Vertebrates with feathers
- Egg-laying
- Warm-blooded
- Includes songbirds, doves, birds of prey, shorebirds and so many more!

Did you Know?

Singapore has more than **400** bird species!

Yellow-vented Bulbul

(*Pycnonotus goiavier*)



Zebra Dove

(*Geopelia striata*)



Eurasian Tree Sparrow

(*Passer montanus*)



Spotted Dove

(*Spilopelia chinensis*)



Oriental Pied Hornbill

(*Anthracoceros albirostris*)



Pink-necked Green Pigeon

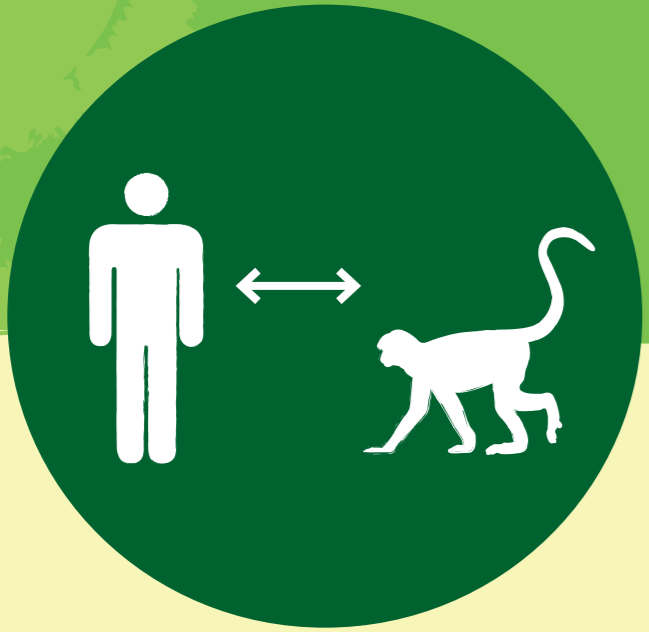
(*Treron vernans*)
Left : Male, Right : Female



MAMMALS

spotted in Singapore

These are a few of our most notable mammals sighted in urban environments. Some of our friends can be a little shy, try to spot them all!



While foraging for food, some of these mammals may enter your household. In such situations, keep your distance and stay calm. Leave them an exit and move to a safe space. If you need further assistance, call our Animal Response Centre at **1800-476-1600**.



Plantain Squirrel
(*Callosciurus notatus*)

Malayan Colugo
(*Galeopterus variegatus*)



Cave Nectar Bat
(*Eonycteris spelaea*)



Lesser Dog-faced Fruit Bat
(*Cynopterus brachyotis*)



Sumatran Palm Civet
(*Paradoxurus musangus*)



Long-tailed Macaque
(*Macaca fascicularis*)



MAMMAL FACTSHEET

- Vertebrates with hair
- Mostly give birth to live young
- Warm-blooded
- Includes primates, hooved animals, bats and so many more!

Sunda Pangolin
(*Manis javanica*)



Smooth-coated Otter
(*Lutrogale perspicillata*)



Wild Boar
(*Sus scrofa*)



Did you Know?

Singapore has about **65** mammal species!

LONG-TAILED MACAQUES

Macaca fascicularis

The Long-tailed Macaque is one of our most commonly encountered urban wildlife. Let's learn more about them and how we can better co-exist alongside them!

Photo credit: Bryan Lim



However, intentional human feeding can lead to a change in the macaques' behaviour. Feeding will cause them to associate humans with food and might cause them to become bolder.

Long-tailed Macaques are forest-fringe dwellers. Their activity is mostly concentrated along the edges of forests. They are highly sociable and use a variety of facial expressions for communication.

As generalist foragers, they are ecologically important to our forests and have a wide-ranging diet consisting of fruits, leaves and small invertebrates. As they forage and move about, the macaques excrete fruit seeds and disperse them.



Photo credit: Chanelle Lim

MACAQUE FACIAL EXPRESSIONS

Learning about different macaque expressions can help us understand them!



Photo credit: Jayasri Lakshminarayanan

A tired macaque would yawn with closed eyes and an open mouth.



Photo credit: Sabrina Jabbar

The open-mouthed stare is an aggressive gesture.



Photo credit: Jayasri Lakshminarayanan

Grimaced or bared teeth indicates fear.

WILD BOAR

Sus scrofa

Photo credit: Max Khoo



Wild Boars are typically social animals. Females stick together in a sounder alongside their young, while males remain solitary upon leaving their mothers. Sows can give birth to up to eight piglets at once!



As omnivorous animals, boars consume both plants and animals, ranging from roots and shoots to small animals.



With an acute sense of smell, boars dig up tubers and seeds, dispersing seeds in the forest through excrement.



Their natural foraging behaviour tends to lead them into parks and gardens while exploring.



When you encounter boars, observe them from a safe distance and do not approach.



Human feeding and improper waste disposal can disrupt the boars' natural foraging habits. The reliance on human food can lead to an artificial increase in population and alter their natural behaviour. They might start approaching people for food and even turn aggressive.



Wild boar feeding
Photo credit: Robert Teo

FUN FACTS

- One of our largest mammals, second only to the Sambar deer
- Females live in groups called sounders
- Newborns have black stripes which make them look like watermelons!

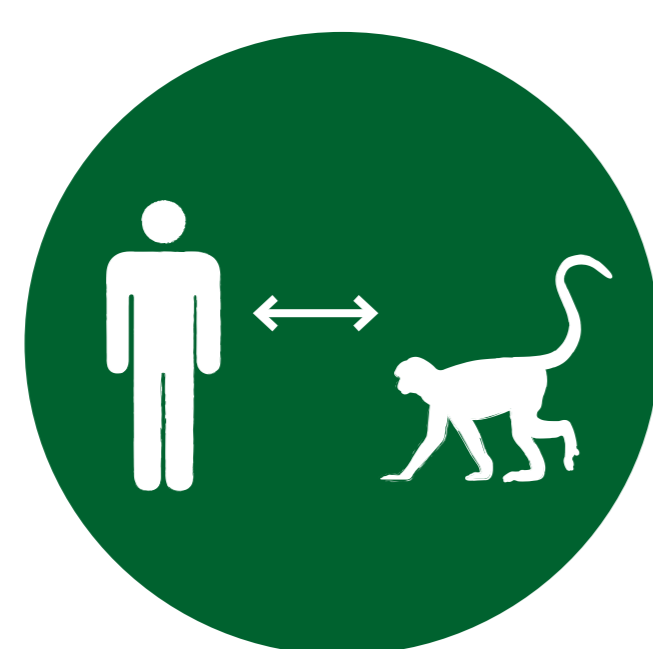
Photo credit: Robert Teo



Living with NATURE

The DOs and DON'Ts When Encountering Wildlife

DOs



KEEP YOUR DISTANCE

Wildlife are shy and would rather avoid humans. Please give them ample space and observe them from a safe distance. Mothers can be especially protective of their offspring.



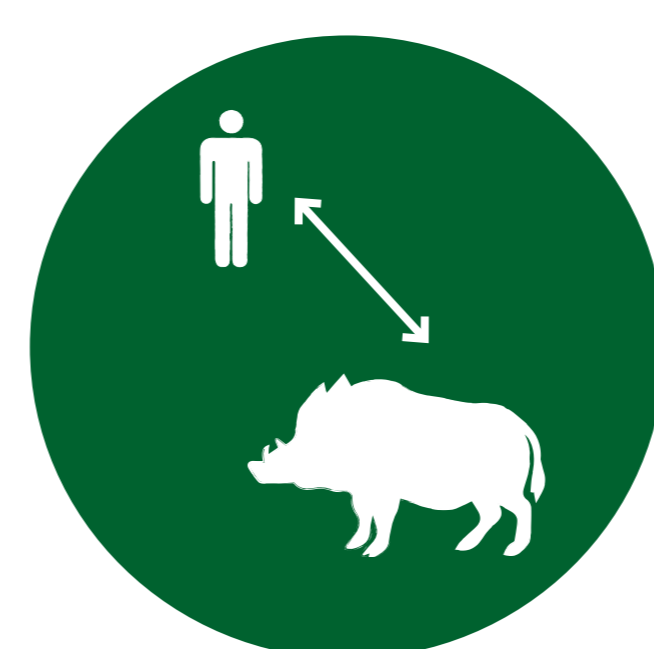
TAKE PHOTOS WITHOUT FLASH

Seeing animals out and about can be fascinating, but please remember to turn off the flash when snapping a photo, so as to not startle or affect the wildlife.



CALL NPARKS FOR WILDLIFE-RELATED MATTERS

If you require assistance with wildlife or come across an injured animal, please call our 24-hr Animal Response Centre helpline at **1800-476-1600**.



REMAIN CALM AND BACK AWAY SLOWLY

If any wildlife approaches you, keep calm and do not be alarmed.

DON'Ts



DO NOT FEED ANY WILDLIFE

Wildlife have enough food sources in the natural environment. They play important roles in maintaining the balance in the ecosystem such as dispersing seeds. Feeding can lead to undesirable behaviour, ecological instability, or even cause death to the fed animals. Feeding carries a fine of up to \$10,000 under the Wildlife Act.

Responsible Human-Wildlife Encounters

NParks hosts a wide variety of programmes and activities which allow for responsible human-wildlife encounters and conservation of Singapore's biodiversity.

COMMUNITY IN NATURE CITIZEN SCIENCE PROGRAMMES

- Various Biodiversity Watches (Garden Birds, Butterfly, Dragonflies and Herons)
- Seagrass and Reef Monitoring
- Nationwide BioBlitz

YOUTH PROGRAMMES

- Green Friends Forum
- Biodiversity Friends Forum
- Youth Stewards for Nature



Heron Watch
Photo credit: Cheryl Chia



Biodiversity Friends Forum

Find out more by scanning the QR codes below!



Community in Nature
Citizen Science
Programmes



BioBlitz



Youth@
SGNature



Biodiversity
Friends
Forum



Youth
Stewards for
Nature