



# FLYING FOXES

living under one sky



## REMEMBER: DO NOT TOUCH BATS!

If you see a fallen or injured bat, please do not touch it. Contact FNQ Wildlife Rescue on 4053 4467 for assistance. If you are concerned about flying-foxes at your property contact Council on 1300 692 247



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## WHAT ARE FLYING-FOXES?

The common name “flying-fox” refers to a group of bats belonging to the genus, *Pteropus*, living in some tropical areas of Australia, Africa, Asia, and the South Pacific Islands. Their resemblance to foxes gave rise to their common name. They have large eyes because they do not use echolocation. Instead, they depend on vision and their keen sense of smell to find ripe fruit. There are 65 species of flying-foxes in the world.

Flying-foxes are hard-working little Aussies. They are FIFO workers on the night shift – flying out from their camps at dusk to feed on flowering or fruiting plants and trees. When their crucial work is done, they head back to camp before dawn to sleep through the day, ready for their next shift.

Flying-foxes help the ecosystems in which they live by pollinating many flowers and spreading seeds to new locations, especially aiding in rainforest regeneration. Their contribution to the health of our native forests cannot be overstated.

**SPECIES:** Black, Little Red, Grey-headed and Spectacled are the names of the four mainland species of flying-foxes in Australia. Queensland is the only state with all four species. The main species seen in the Cairns region are the endangered Spectacled Flying-fox and the Little Red Flying-fox. Spectacled Flying-foxes are only found in the Wet Tropics, so they are endemic to this part of Australia.

## HOW MANY SPECIES OF BATS ARE THERE?

There are over 1,400 different species of bats in the world, living on every continent except Antarctica. They can be divided into two groups based on use of echolocation. Echolocation is a technique used by most bats to determine the location of objects using reflected sound.

Echolocating bats are generally smaller bats (microbats) and while they mostly feed on insects, they do have a diverse diet. Species include the carnivorous ghost bat, fishing bats with their big feet, golden-tipped bats that only eat spiders, vampire bats that drink blood and even microbats that eat fruit and nectar. Non-echolocating bats are generally larger bats (megabats) that feed on nectar, pollen and fruit. All the megabats have big eyes, good eyesight and a good sense of smell.

## WHAT'S THE NOISE ALL ABOUT?

Flying-foxes have a complex social system and spend their day in communal roosts/camps in trees using over 40 vocalisations to communicate with one another. When at a roost or feeding, flying-foxes can sometimes vocalise loudly. The unique mixture of sounds, including screeches, is their way of communicating and allows them to establish their personal roost sites or feeding territories, ward off rivals, stay in touch with their offspring, and warn others of possible threats. They are mainly noisy at dawn and dusk when they arrive at or prepare to leave their camp.

## WHERE DO FLYING-FOXES LIVE?

Flying-foxes are social animals that live together in roosts (also known as camps) — some roosts may be as small as a dozen animals, but others can number in the tens or hundreds of thousands. A temporary roost of Little Red Flying-foxes can include as many as one million individuals, with roost trees bending and breaking under their weight. Flying-foxes sleep during the day in roosts. They hang upside down to sleep but must turn up the other way to go to the toilet. Roosts are at their largest during the flying-fox breeding season.

## WHEN DO FLYING-FOXES BREED?

Spectacled Flying-foxes mate in March/April and give birth to a single young between October and December. Young bats are carried by their mother for three or four weeks, fed on milk, and then crèched at the roost. Pups begin to fly at around two to three months old but don't fly out to forage until some time later. They are weaned at five to six months of age by which time males are marking territories for mating again. Little Red Flying-foxes mate in November/December and give birth to a single young in April/May. This species forms enormous breeding camps of up to a million individuals in late spring and early summer. The Little Red Flying-fox is highly nomadic, moving camp every one or two months to feed on new patches of flowering trees.

## WHAT IS THAT SMELL?

Flying-foxes have unique odours (bat cologne!) that helps them identify each other. This scent is not from droppings or urine, which are odourless, but from scent glands that male flying-foxes use to mark their territories and attract females. While this may be offensive in odour, it does not represent a risk to human health.

# FLYING-FOXES IN CAIRNS

Cairns is home to 44 known Spectacled Flying-fox roost sites, however less than half of these are occupied at any one time. Spectacled Flying-foxes play a crucial role in the Australian ecosystem by being one of the most efficient pollinators and seed dispersers of native Australian forest trees. They travel great distances each night in search of food. Spectacled Flying-fox roosts are mainly seasonal with numbers and composition of the camps changing constantly. Like all native wildlife, flying-foxes are a protected species in Queensland under the Nature Conservation Act. The Spectacled Flying-fox is listed as “endangered” under the Commonwealth Environment Protection and Biodiversity Conservation Act and Queensland threatened species legislation. The Spectacled Flying-fox is also listed as endangered by the International Union for Conservation of Nature.



## DID YOU KNOW FLYING-FOXES:

Have very large wingspans up to 1.6 metres and have average wing beats of 120 per minute.



Are frugivores and nectivores, meaning their diet consists largely of fruit, nectar and pollen.

Have the ability to cross-pollinate over great distances and carry fruit and seeds far away from parent trees, making them critical for the ability of our forests to adapt to climate change.

Wrap their large wings (around 1.5 metre wingspan) around themselves when they sleep or rest. During the hottest part of the day they gently flap their wings to keep cool.

Are vital to the continued survival of the World Heritage Listed Wet Tropics and are the main pollinators and seed dispersers of many native Australian trees.

Have superb vision and an excellent sense of smell. Unlike smaller insectivorous bats they do not use echolocation.

Are very clean animals and constantly groom their fur and wing membrane.

Can fly around 40kmh and forage up to 100km a night (average distance 30km).

Have a complex social system and spend their day in communal camps in trees using over 40 vocalisations to communicate with one another.

Have males guarding the boundaries of the camp keeping a look-out for predators such as birds of prey and pythons.

# FLYING-FOXES & YOU

Flying-foxes in Australia are known to carry two infections that can pose a serious risk to human health: Australian bat lyssavirus and Hendra virus. It is rare for humans to be infected with these viruses. Infections generally only occur if you have direct contact with flying-foxes.

**IF YOU SEE A FLYING-FOX OR ANY BAT, DO NOT TOUCH IT. CONTACT FNQ WILDLIFE RESCUE ON 4053 4467 WHO WILL REMOVE THE BAT.**

## Australian Bat Lyssavirus (ABLV)

Australian bat lyssavirus is only transmitted to humans when infected bat saliva comes into contact with human tissue through an open wound or mucus membrane e.g. eyes, nose and mouth. You can not contract Australia bat lyssavirus from bat urine or droppings. Flying-foxes flying overhead or roosting in gardens and public spaces pose no risk to humans provided you do not touch them.

## Hendra Virus

Outbreaks of Hendra virus are rare. To date, a small number of horses have become infected with Hendra virus, apparently after contact with flying-foxes or their body fluids. There is no indication that humans can catch the virus directly from flying-foxes and there are no known cases of direct transmission of infection from flying-foxes to people.

## NO TOUCH, NO RISK

Bats and flying-foxes may carry bacteria and viruses which can be harmful to humans but the risk of infection is low. If you do not touch flying-foxes or other bats, there is no risk.

Australian Bat Lyssavirus is rare but when infected the bat soon dies. You will not be exposed to Lyssavirus when flying-foxes fly overhead, when they roost or feed in trees, or even if the droppings or spats are touched or any other behaviour flying-foxes engage in at their camp. Lyssavirus can only be transmitted through deep tissue bites or scratches from infected bats.



## WHAT SHOULD I DO IF I AM BITTEN OR SCRATCHED BY ANY BAT, INCLUDING FLYING-FOXES?

Bats, including flying-foxes, pose no major health risks to humans – unless you are bitten or scratched by one. If you are accidentally bitten or scratched by any bat, including flying-foxes, immediately:

- Wash the wound thoroughly with soap and water for at least five minutes – proper cleansing of the wound reduces the risk of infection
- Apply an antiseptic (e.g. povidone, iodine or another iodine preparation or ethanol alcohol) and cover the wound.
- Seek medical advice immediately to care for the wound and to assess whether you are at risk of infection.
- If your pets or other animals come into contact with a bat and you would like expert advice, contact the Emergency Animal Disease hotline on 1800 675 888.

## WHAT DO I DO IF I FIND A SICK, INJURED OR DEAD BAT?

If you find a sick, injured or dead flying-fox or bat, do not touch it, call Wildlife Carers FNQ on 4281 6869. They should be handled by approved vaccinated carers only. Where there is no direct handling or contact with any bat, the risk of disease transmission is negligible. If you find a dead flying-fox in a public area (e.g. on a road or in a park), call Council on 1300 69 2247 and ask them to dispose of it.

## WHAT IF FLYING-FOXES COME INTO MY PROPERTY?

If you see or hear flying-foxes in trees near your home at night, it's more than likely they're only there temporarily to feed. Flying-foxes are nocturnal animals that fly out from their camp at sunset and move around the region at night searching for food. They return to a camp for rest in the daytime, but they might not use the same camp every day. If you are concerned about flying-foxes at your property contact Council immediately on 1300 69 22 47.

## HOW DO I PROTECT MY FRUIT TREES FROM BATS?

Damage to fruit trees in backyards or orchards can sometimes be a problem. The best solution is to cover the trees in netting. This can also protect trees from bird, possum and rat attack, while offering some weather protection.

It is important to use a wildlife friendly netting. Using the wrong type of netting, or poorly installing the netting, may result in injuries or death to native birds, flying-foxes and possums if they become entangled.

The main cause of injuries to flying-foxes occur from entanglement in fruit tree netting and barbed wire fences. To help protect flying foxes, and other animals from possible entanglement ensure you install the correct wildlife friendly netting and fencing.

# BATS & TREES SOCIETY OF CAIRNS INC

## CARE, CONSERVE AND COMMUNITY

Bats and Trees Society of Cairns (BatSoc) Inc is a not-for-profit incorporated association dedicated to the care, protection and conservation of bats in the Cairns region. BATSOC aims to engage the community and educate people about the vital roles bats play and works towards resolving conflict between humans and bats to enable people to co-exist with bats.

### BatSoc:

- carries out education in schools and the community
- represents and assists local bat carers and bat hospitals
- advocates and works with all levels of government to improve conservation policy, legislation and management of flying-foxes
- collaborates with landcare and other conservation and community groups to create and improve bat roosting and habitat sites.



If you are interested in helping BatSoc deliver school education, community events, train as a volunteer carer, support the committee or simply want further information, please visit: [www.batsoc.org.au](http://www.batsoc.org.au)



## COUNCIL & FLYING FOX MANAGEMENT

**Council adopted a multi-faceted strategy to managing flying-foxes in urban areas and aims to balance protection of spectacled flying-foxes and the amenity of residents through:**

- management approach by using scientific advice and data on spectacled flying-fox population numbers and movements to determine what actions (if any) will occur;
- action by responding to immediate concerns and acting to minimise conflict;
- community education and awareness to debunk myths about flying-foxes and provide residents with scientific facts about spectacled flying-fox populations, behaviours and diseases; and
- collaboration with State and Federal Governments on all matters relating to management of spectacled flying-foxes, including compliance, conservation and recovery planning.

Cairns Regional Council works with wildlife experts, carers and staff to address flying-fox management issues. When managing flying-foxes in urban areas, Council considers both the needs and expectations of the community and the welfare of the animals with consideration given to the following:

- Human/ flying-fox contact;
- impacts to property and amenity of the noise, smell or droppings from flying-foxes;
- health issues associated with flying-foxes;
- importance of flying-foxes to the ecosystem;
- costs to ratepayers;
- health of trees in roost areas.



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**Get the bat facts. Visit [www.cairns.qld.gov.au/bats](http://www.cairns.qld.gov.au/bats)**