Living near flying-foxes... frequently asked questions

Why are flying-foxes important?

Flying-foxes are native to Australia and make a significant contribution to maintaining healthy ecosystems as essential pollinators and seed dispersers for native forests.

In turn, these forests provide valuable timber, act as carbon sinks, stabilise our river systems and water catchments, and promote recreation and tourism opportunities returning millions of dollars to our economy each year.

Pollen sticks to their furry bodies and as they crawl from flower to flower, and fly from tree to tree, they pollinate the flowers and aid in the production of honey.

Eucalypts rely heavily on these pollinators, producing most of their nectar and pollen at night to coincide with when bats are active.

Because flying-foxes are highly mobile, seeds can be moved locally and over great distances. When seeds are able to germinate away from their parent plant, they can have a greater chance of surviving and growing into a mature plant.

Seed dispersal also expands the gene pool within forests. Mature trees then share their genes with neighbouring trees of the same species and this transfer strengthens forests against environmental changes.

This reinforces the gene pool and health of native forests.

Flying-foxes are an important part of the diet of some native predators including the powerful owl *Ninox strenua*, the largest native owl of Australia and considered a vulnerable species under Queensland legislation due partly to its rarity. Research shows flying-foxes comprised almost half of the total weight of food consumed by a pair of powerful owls over two consecutive years of study.

What if flying-foxes live nearby?

From a public health perspective there is in almost all circumstances no reason for a community to be alarmed if a colony moves in nearby.

In 1996 Australian bat lyssavirus (ABL) was identified in flying-foxes. However ABL is not a reason to fear flying-foxes as it is very rare and preventable. ABL can only be transmitted to humans when infected flying-fox saliva comes into contact with human tissue through an open wound or with mucus membrane eg. eyes, nose and mouth. Therefore it is very important that flying-foxes are not handled.

Humans are not exposed to the virus if flying-foxes fly overhead or feed or roost in gardens. Nor is it spread through droppings or urine, or if you live, play or walk near their colonies.

While there is understandably community concern about the current Hendra virus outbreak, it is important to remember that such outbreaks are rare and occur in exceptional circumstances only. There is also no indication that humans can catch the virus directly from flying-foxes.

There is a proper process in place where DERM can work with members of the public, local authorities and other organisations to manage flying-foxes where difficulties arise.

Why so noisy?

When at a roost or feeding, flying-foxes 'squabble' loudly. This mixture of screeches and cackles is actually a language and allows them to establish personal roost sites or feeding territories, ward off rivals, communicate with their offspring, and warn others of possible threats. The grey-headed flying-fox is known to have more than 30 specific calls. By listening and watching, it may be possible to link some of the flying-fox's behaviour to the calls it makes.

Why do flying-foxes now roost in certain areas?

Flying-foxes are highly mobile nocturnal animals that need access to sources of flowering and fruiting trees that can sustain their large roosts. They are capable of travelling up to 50km each night between their roost site or camp and places where their food is available.

They leave at dusk and use their well-developed sense of smell to find known feeding sites or search for new ones.

They respond to changes in food availability by either foraging in different areas or by moving to a different roost site closer to food sources.

The use of roost sites varies—some roosts are permanently occupied, others are used less frequently, and roosting may even occur at a site not previously having been recorded as a roost.

Sometimes for reasons not understood, a roost site may move a short distance of a couple of hundred metres.

Roosts are typically located near waterways on coastal lowlands—more likely to occur in small patches of bushland near urban development than in large patches of bushland.

Consequently, roosts often occur close to residential areas. Given the amount of bushland that has been cleared for development, flying-foxes are likely to have less available roost sites than they once did.

It is hard to predict how long a roost will be occupied. The size of an existing roost will often swell for a few weeks or months with the arrival of other groups of flying-foxes, especially the highly mobile little-red flying-fox.

Why is it important that flying-foxes aren't disturbed?

The current occurrence of Hendra virus is an important consideration in flying-fox management and DERM works closely with Biosecurity Queensland and Queensland Health in assessing any applications to disperse flying-foxes.

Attempting to move a flying-fox colony could increase the Hendra virus load in those flying-foxes and also spread the virus into other areas.

If flying-foxes are impacting on the health and wellbeing of the public or causing damage in a community, landowners or councils can apply to DERM for a damage mitigation permit (DMP) to safely and humanely manage a roost.

When assessing a DMP application, a range of matters are considered including human health and wellbeing and the likely effects on the survival of the animals in the wild.

Any consideration to disperse a flying-fox roost will be based on a comprehensive assessment of the situation. The dispersal of a roost will only be considered as a last option.

Alternative roosting sites must be available before any attempt to relocate a flying-fox roost is approved.

A DMP may be granted to a landholder or a local authority to disperse flying-foxes by non-lethal means in an effort to move them to a new location. This includes use of a bright light or noise based deterrents for a sustained period of time.

Flying-foxes may also be discouraged from using a roost by removing, or trimming vegetation.

Illegally disturbing flying-foxes in a roost; driving them from a roost; interfering with their roost; or harming or killing flying-foxes can attract penalties of up to a $100,000 fine or up to one year's imprisonment.

Can flying-foxes be culled?

No. They are a protected species by law.

Flying-foxes number in the millions, are highly mobile and widespread across most areas of Queensland. It would be impractical to try and cull them.

Species found in Queensland are also found in other Australian states and territories, and in countries north of Australia including Papua New Guinea and Indonesia. Any attempt to reduce flying-fox numbers in Queensland is likely to result in flying-fox groups arriving from other areas to fill the ecological vacancy.

The public should not to take matters into their own hands by deliberately interfering with flying-fox colonies.

Is there more information about flying-fox roosts?

The DERM roost monitoring program is gathering data about the dynamics of flying-fox roosts in Queensland. The program continues to develop our knowledge of roosts, which develops and refines DERM policy and management decisions.

For more information about flying-foxes visit the DERM website ‹www.derm.qld.gov.au›.