



## Living with **FlyingFoxes**



Photo: Theo Allofs



### **Flying foxes**

Flying foxes, or fruit bats, are fruit and nectar eating mammals found in tropical and sub-tropical regions of the world. Four species of flying fox are native to Australia - the black flying fox, the grey-headed flying fox, the little red flying-fox and the spectacled flying-fox.

In Queensland, all four species are protected under the *Nature Conservation Act 1992*. The grey-headed flying fox is considered nationally vulnerable to extinction and has been listed under the *Environment Protection and Biodiversity Conservation Act 1999*.



### **The Lifestyle of Flying foxes**

Flying foxes are social mammals, which spend the day hanging in the canopy of trees at their camp. They fly out at dusk to feed and can travel up to 50 km from their campsite in search of nectar, blossom and fruit.

There are twelve known permanent camps of flying foxes in the greater Brisbane area, including Indooroopilly, Woodend and Logan. These camps swell in number during the birthing/mating season between November and March.

The largest camp in south-east Queensland is located at Woodend, Ipswich and is home to between 50,000 and 200,000 flying foxes at various times of the year.

Female flying foxes become sexually mature at 2-3 years and give birth to one young per year. Young are raised for three to four months after which they become independent.

In urban environments, flying fox hazards include goannas, snakes, powerful owls and eagles, and introduced ones such as foxes, dogs, cats, humans, powerlines and barbed-wire fences. Provided these can be avoided successfully, a flying-fox may reach 8-10 years of age.



### **Noise**

Flying foxes use sound as a means of communication. Over 30 different types of calls have been recorded for Grey-headed flying foxes (eg. mother/child and male/female calls). Vocal communication between individuals is necessary for identification and defence of territories.

Their hearing is similar to humans, making their calls clearly audible to our ears. Periods of noise occur mainly at dawn and dusk when the bats arrive at or prepare to leave the camp. Calls during the day occur mainly during the mating season in March/April or as a response to disturbances. These disturbances may include roaming dogs, birds of prey, planes, machinery noise (chain-saws, lawn-mowers, loud bangs) in or near the camp or people walking among the roosting bats. Flying fox noise can be minimised by preventing disturbances at the camp sites.

Flying foxes can be heard feeding in trees at night. Noise indicates the defence of feeding territory and will cease as soon as the trees in which they are feeding finish flowering or fruiting.



Flying foxes leaving their camp at dusk in search of food.

Photo: Environmental Protection Agency



## Odour

Amongst flying foxes, odours are used for identification and as attractants during the mating season. The scent is stronger in males, who secrete it from scapular glands and use it to mark their territory and to attract females during the mating season. Scents emitted by young that are left behind in camps at night allow mothers to locate their infants on their return to the camp.

Flying foxes defecate primarily at their feed-sites, not at their camps. Smell is therefore not generally caused by a build-up of faeces underneath the colony, but by the bats themselves. As in other mammals, this may be intensified by very hot or humid weather when bats sweat and fan themselves to keep cool.



## Bat Droppings

Flying foxes often defecate in flight, splattering objects beneath their flight path with excrement or guano. They have a very efficient digestive system with food passing through the gut in 12-30 minutes. This is to enable the bats to remain light so that they can easily fly. Given that flying foxes can ingest up to two-and-a-half times their body weight each night in fruit, this can amount to a significant amount of guano!

Guano is easily removed with water and does not pose a serious health hazard. In swimming pools it is neutralised by normal chlorination. To avoid damage to lacquered surfaces, cars parked in the street can be covered with a tarpaulin. To avoid the contamination of rainwater tanks with guano from bats, birds and other animals, keep tanks covered, chlorinate regularly and drain and clean the tank and area used for water collection on a regular basis. The spillage mechanism for deflection of the first flush following rain is the best way of keeping your tank clean.

*For information on bat-borne diseases please refer to Fact Sheet No. 5 of this series.*



## Flying Foxes in Fruit Trees

Although flying-foxes prefer the fruit and nectar of native plants such as eucalypts, paperbarks and figs, they will feed on cultivated fruit, especially when there is a shortage of native food.

People should not consume fruit that has been partly eaten by flying foxes. Fruit covered in guano should be washed thoroughly and peeled prior to consumption. Contaminated fruit that cannot be peeled such as mulberries should be avoided as a matter of good hygiene practice.



Photo: Environmental Protection Agency

*A grey-headed flying fox feeding on eucalypt blossom.*



## Encounters with Injured Bats

Occasionally, juvenile or injured bats may be found on the ground or caught in barbed-wire fencing. DO NOT HANDLE these animals but immediately contact the Queensland Parks and Wildlife Service who will direct your call to a qualified wildlife carer. In case of a bite or scratch injury, wash injury site thoroughly with soap and water and contact your local doctor.

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