

Flying-foxes (also called fruit bats) are members of a large group of mammals called BATS. They are the only group of mammals capable of sustained flight. There are four recognized species on mainland Australia: little red, grey-headed, black and spectacled. They have a very keen sense of smell and good eyesight, both of which are needed to locate their food during the night. Flying-foxes are a protected native Australian species. They are usually found in coastal areas of Melaleuca and Casuarina swamps, mangroves, heaths, dry and wet eucalypt forests, woodlands and rainforests. The little red flying fox can also be found further inland in arid and semi-arid areas.

# Family life

Flying-foxes only have one live young per year. The little red gives birth around April/May whilst the remaining three species give birth around October/November. The young are carried by their mother for 4-5 weeks until they are fully furred. They begin to fly at about 8-10 weeks and feed by themselves at 12 weeks.



After 4-5 weeks the young are left in trees with other young whilst the mother goes at night to search for food. Females start breeding when they are 2-3 years of age. Males form either paired or harem groups during the mating season. It is during this season that flying foxes tend to be the noisiest due to the defending of territories. It is also during this time that the campsite appears to emit the strongest odour due to secretions from the male scent glands.

#### **Campsites**

Campsites are very important to the survival of flyingfoxes, as this is where they are born, grow, form relationships and learn to survive. Campsites may be permanently or temporarily occupied throughout the year depending on the season and availability of food. Flying-foxes only have one live young per year. The little red gives birth around April/May whilst the remaining three species give birth around October/November. The size of the campsite may also vary during the year, increasing when there is a good food source around or when mothers arrive to give birth to their young. Numbers may also increase if there is little food elsewhere or another campsite has been disturbed or destroyed. A decrease in numbers usually indicates poor food in the area or disturbance of campsite.



Flying-foxes need campsites made up of large areas so that they can circulate with the site according to the defoliation of the trees in which they roost. Currently many sites sustain more damage due to the small areas that the flyingfoxes are now confined to and due to their staying longer because of lack of food elsewhere or due to the extensive distances that now exist between campsites. Campsites are usually located on rivers, creeks or near large bodies of water, which provide both fresh water, and a navigation device when coming home at night.



# Feeding Habits

Flying-foxes are very fond of the nectar, pollen and fruit of native Australian forest trees such as eucalypts, *Melaleuca*, *Banksia*, Lily pilly and Moreton bay figs. Although they do consume cultivated fruit such as peaches, mangoes and pawpaw, they only do so when their native food is scarce.

Flying-foxes generally migrate from one area to another depending on the amount of food available. Unfortunately, with land clearing for agriculture and urban development, flying-foxes have very few areas in which they can migrate to once flowering/fruiting ceases in another area and so find it necessary for them to sometimes eat cultivated fruit.

#### Role in our Environment

The food that flying-foxes eat and the method by which they forage and process that food has lead to the flying-fox being one of the most efficient pollinators and seed dispersers of native Australian forest trees. As they move amongst the flowers of Eucalypts or Melaleuca searching for nectar, large amounts of pollen attach to their fur. When they fly to the next tree, which may be several kilometers away, this pollen is deposited on the stigma of awaiting flowers. Such transport of pollen is very important for trees such as eucalypts as they rely on cross-pollination, i.e. pollen coming in from other trees which are a substantial distance away. In the case of seed dispersal, many seeds will not grow unless they are a certain distance away from the parent tree. Flying-foxes carry out seed dispersal by one of three methods: 1) carrying the fruit away and dropping it accidentally, 2) carrying the fruit away, eating the flesh and spitting out the seeds and 3) consuming the fruit and seeds but passing the seeds through the gut. Flying-foxes have a very short digestive tract, thus seeds swallowed are not digested but pass through the gut within 12-34 minutes.

## Know the risk – not so deadly Bats are

very clean animals and spend hours grooming and cleaning themselves. They are not associated with many diseases as they spend their lives in the tree tops, not scavenging on the ground. **Australian Bat Lyssavirus** has to be the rarest fatal disease in the world having killed only 3 people in history, one from a Yellow Bellied Sheath-tailed (a microbat) and 2 from a flying-fox. Just like being bitten by a snake there is a protective vaccine if anyone is bitten. The message is do not handle them. Only a small proportion of the bat population may have the virus. Since routine vaccinations of humans who are bitten or scratched, no one has died. **Hendra virus** is not contagious from bat to human; it requires a mediator, such as horses in the case of the Australian incidents. More research needs to be done as the assumed transmission mode from bats to horses is still unknown.

What can you do? If you do find a bat alone during the day, this is not normal, it needs help, whether it is a flying-fox or a microbat, do not pick it up, like any wild animal it may bite when frightened or injured.

**Please** - **do not handle bats** – **seek help** immediately call Bat Conservation & Rescue Qld. Do not risk infection to yourself by being bitten this means the death of the bat for testing. If bitten or scratched, wash the area immediately and thoroughly with soap and warm water for 10 minutes, seek medical attention as soon as possible.

## Conservation

Flying-fox numbers have decreased dramatically over the last 50 years due to a continual loss of habitat and changing climatic patterns. Governments are undermining important protection legislation in many states. Qld State Government has reintroduced draconian and cruel legislation by returning Damage Mitigation Permits (DMP) to shoot bats for orchard protection instead of helping farmers with exclusion netting to make them sustainable. New legislation could see a further loss of protection and welfare standards for bats such as DMP's for the destruction of roosting habitat and driving bats away from traditional roosts.

Information by Dr. Patrina Birt © Illustrations by Louise Saunders <u>WWW.bats.org.au</u> Bat Conservation & Rescue Qld Inc. Rescue line: 0488 228 134 .Rescue.Education.Conservation.Habitat.

All donations \$2.00 and over are Tax Deductible



ALLABOUT FLYING-FOXES Important Australian Wildlife!

**VITAL** Keystone Species

