



Bats Of Fraser Island

Traditionally bats have captured the imagination of story-tellers and film-makers worldwide and as little was known about these flying mammals myth often replaced fact.

As more and more research is carried out it is becoming apparent that bats are a unique and fascinating group of animals. Bats (*order Chiroptera - chiro meaning hand and pteron wing*), comprise around 25% of all Australia's mammal species.

Bats are nocturnal and the use of ultrasonic echolocation, better known as sonar, enables them to hunt and fly in the dark. When bats use sonar they emit a very high pitched sound that is produced in the larynx and comes out through the mouth.

This sound, emitted in pulses only a few thousandths of a second long can vary from 11- 150KHz in frequency depending on the species. This sound bounces back from objects and the returning echo is translated by the bat into shape, distance and texture and, in this way the bat can see at night.

Each bat species has a distinctive ultrasonic pattern which can be likened to a language or accent and with special equipment researchers can use this pattern to identify different bat species.

Fraser Island is fortunate in having twelve different species of bat regularly visiting the island. Five of these bat species are fruit bats (*suborder Megachiroptera*) and the remaining seven are insectivorous bats (*suborder Microchiroptera*).

The fruit bats feed on the blossoms of trees and shrubs such as those of the eucalypts and banksias. Insectivorous bats capture flying insects and generally consume half their body weight in insects nightly.

Fraser Island's insectivorous bat population feed widely throughout the island but are best observed in an area where their activity is concentrated such as over the lagoons in front of Kingfisher Bay Resort and Village.

Three fruit bat species commute nightly from a daytime roost - called a camp - at Hervey Bay, returning to the mainland in the morning. Similarly, two of the island's insectivorous bats species are cave dwellers and as Fraser Island has no caves they too must come from the mainland. It is believed that some may come from as far away as Gympie.

Bats usually mate before their winter hibernation. During this time the female stores the male's sperm until spring when the young begin to develop.



Bats are normally born around November/December when there is an abundance of nectar and insects. The female bat carries her young with her, suckling it on her milk for up to six weeks.

After this the juvenile bat may be placed in a bat cr?che where it learns to fly and feed itself being cared for by adult bats.

Fraser Island's bat species include:

Little red flying fox (*Pteropus scapulatus*) Wingspan 80-120 cm; Forms temporary camps and commutes to Fraser Island; Nomadic within distribution; Red-brown fur with more reddish bank around neck; Fruit bat.

Grey-headed flying fox (*P.poliocephalus*) Wingspan 120-160cm; Commutes nightly from large camps on mainland; Rusty yellow fur, grey on head; Noisy while feeding; Fruit bat.

Black flying fox (*P.alecto*) Wingspan 140-180cm; Roosts and commutes as grey-headed flying fox; Black with red on back of neck; Largest of the Australian fruit bats.

Queensland blossom bat (*Syconycteris australis*) Wingspan 25-32cm; Roosts in dense foliage; Small bat with red to pale brown fur; Feeds on nectar from native trees, often hovering to do so.

Hoary bat (*Chalinolobus nigrogriseus*) Wingspan 22-27cm; Roosts in tree hollows; Small lobe at corner of mouth; Echolocation call 35KHz; Insectivorous.

Little bent-wing bat (*Miniopterus australis*) Wingspan 25-30cm; Roosts in caves, mines and tunnels; Commutes from mainland; Call 58KHz; Insectivorous.

Common bent-wing bat (*M.schreibersii*) Wingspan 27-34cm; Roosts in caves, mines and tunnels; Commutes from mainland; Call 44KHz; Insectivorous.

Large-footed, mouse-eared bat (*Myotis adversus*) Wingspan 27-31cm; Roosts in caves, mines and trees near water; Feeds over water "trawling" for insects and small fish; Call 37KHz.

Gould's long-eared bat (*Nyctophilus gouldi*) Wingspan 24-31cm; Roosts in tree hollows, under loose bark and buildings; Slow flight while feeding; Big ears; Faint call at 45KHz; Insectivorous.

Little broad-nosed bat (*Scotorepens greyii*) Wingspan 20-26cm; Roosts in trees; Common and widespread; Feeds in forest gaps; Call 40KHz; Insectivorous.

White-striped mastiff bat (*Tadarida australis*) Wingspan 41-45cm; Tree roosting; Fast direct flight above canopy; White stripe at inner junction of wings; Audible call at 13KHz.