

Microbats

Microbats are generally 7 to 15 cm long. They weigh less than 100 grams and have a wingspan of less than half a metre. Most species feed on insects of one type or another. The actual types and size of insects eaten vary considerably between the different bat species. One Australian species eats small fish as well as aquatic insects while another feeds largely on orb weaving spiders. Microbats can eat up to their weight in insects per night that in some cases consists of several thousand insects.

Whilst not blind, microbat species navigate and find most of their prey by using ultrasound. Sound pulses emitted through their mouth reflect off prey insects and surrounding vegetation. Reflected echoes allow the bat to judge the distance, size and location of flying insects as well as avoid obstacles. The frequency and style of echolocation calls vary widely between the various bat species depending on their flight speed, wing design, diet and the type of habitat. Analysis of sound pulses is an important tool used by scientists to identify different species of bats.

By day, microbats normally roost within caves, the hollows of live or dead trees or under bark. Within urbanised areas many of these bats have learnt to roost within the roof or wall cavities of buildings, stormwater drains and other man-made structures.

During the breeding season, females congregate in "maternity roosts". These groups vary considerably in size between the various species, from a few individuals, to many thousands in the case of the Large Bent-wing Bat. Their young, either single or twins, are born naked and blind, but are self-sufficient in around six weeks.

Three species of microbat have been recorded at the Baldy's Children's Forest:

1. Goulds Wattled Bat
2. White Striped Mastiff Bat
3. Southern Forest Bat

1. Goulds Wattled bat (*Chalinolobus gouldii*)



Recorded at the Forest by Joe Tonga on:

- 8 November 2006; and
- 26 May–2 June 2008.

Family: Vespertilionidae

Scientific name: *Chalinolobus gouldii*

Gould's Wattled Bat has glossy black fur on the head grading to brown on the lower back. They are widely distributed throughout Australia except Cape York Peninsula and possibly the Nullarbor. They are also found in New Caledonia and Norfolk Island.

Where they roost:

Hollows in old trees, occasionally in ceilings or basements of buildings. They roost together in colonies of around 30 bats, sometimes smaller and other times larger.

What they eat:

They are a low level flyer - more like a jet fighter, and are able to jink, turn and twist rapidly. They eat a variety of insects including scarab beetles, caterpillars, crickets, cockroaches, ants and moths depending on the time of year.

Conservation threats:

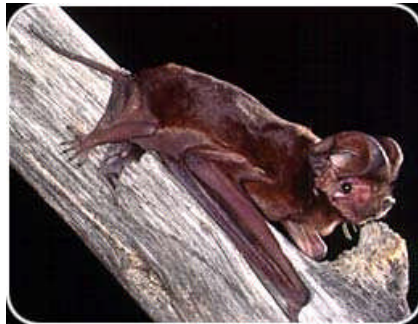
Vulnerable to loss of roost sites in tree hollows and loss of feeding grounds by forestry activities, clearing for agriculture and housing.

Other information:

In northern regions these bats are active all year round. In southern areas they hibernate during the winter. Females often have twin babies and give birth at different times depending on where they live. Twins are normally born in October or November and are independent by 6 weeks.

Source: Images and description from www.austmus.gov.au/bats/records/bat50.htm

2. White-striped Free-tail Mastiff Bat (*Tadarida australis*)



Recorded at the Forest by Joe Tonga on:

- 8 November 2006; and
- 26 May–2 June 2008.

Family: Molossidae

Scientific name: *Tadarida australis*

With thick, glossy auburn fur, vivid white stripes along the sides of the belly, wrinkled lips and large ears the White-striped Mastiff Bat is a striking animal. It is found in Australia, Indonesia and Papua New Guinea.

Where they roost:

Hollows in old trees and under loose bark, in dead stumps and the ceilings of buildings. Up to several hundred bats live together in a colony. They have been recorded roosting within buildings.

What they eat:

T. australis has long narrow wings adapted for fast direct flight, allowing it to forage for large flying insects including moths, beetles and grasshoppers above the forest canopy and over wetlands. They fly quickly and eat their prey as they fly.

Other information:

Unlike most of the other microbats, its echolocation calls can be heard by humans. These calls, a loud "chink.....chink.....chink" carry for at least several hundred metres.

This is the largest of all the free-tail bats. They are known as free-tail bats because part of their bony tail extends beyond the tail membrane.

Source: Images and description from www.austmus.gov.au/bats/records/bat31.htm

3. Southern Forest Bat (*Vespadelus regulus*)



V. regulus was recorded at the Forest by Joe Tonga on 26 May–2 June 2008.

Family: Vespertilionidae

Scientific name: *Vespadelus regulus*

Where they roost:

Hollows in old trees and under bark of trees, and in tree hollows. They roost together in small groups and often share their roosts with lesser long-eared bats.

What they eat:

Insects.

Conservation threats:

Vulnerable to loss of roost sites in tree hollows and loss of feeding grounds by forestry activities, clearing for agriculture and housing.

Other information:

These bats hibernate during winter and females give birth to one baby in early summer after forming maternity colonies in spring.

Source: Images and description from www.austmus.gov.au/bats/records/bat75.htm