

Microbats

- information about microbats

An introduction to microbats

Have you watched a bat swooping after insects? If not go out tonight near a park with streetlights and watch – you may be lucky! Insect eating bats are alive and well in your area.

In Australia there are six families of microbats containing 58 species and many live around Sydney. Their body weight varies from 2 grams to 170 grams. Most microbats eat flying insects – masses of them! They can catch up to 500 an hour and eat up to half their body weight a night. So they are great for keeping down the mosquitoes. In some parts of America, farmers install boxes for bat colonies because bats do a much better job of protecting crops than insecticides and are much cheaper – not to mention better for the environment.

Unlike flying foxes, microbats use echo location to detect objects (although they can see). They produce high frequency sound pulses (above 215 kHz) through the nose or mouth. A flap of skin in front of the ear (tragus) directs the returning echoes to make a ‘sound picture’. When cruising microbats emit about 10 pulses per second. When an insect is detected the pulses go up to over 100 per second.



The blossom bat of Australia is one of the smaller flying foxes.

Blossom bats feed mostly on flowers and nectar, but will also eat some fruit and leaves

Bats vary considerably in size and appearance. The smallest bat, the bumble-bee bat, has a wingspan of about 6 inches (15 cm), while the largest bat, the Malayan flying fox, can have a wingspan as wide as 6 feet (1.8 m). Apart from their leathery wings, megachiroptera bats look a lot like other mammals, with large eyes, small ears and extended snouts. Most microchiroptera species, on the other hand, have a completely unique facial appearance, with wide, extended ears and peculiarly shaped nostrils.

Usually they catch insects in their mouth but they may use the tail or wing to scoop up larger insects. These are carried to a favourite feeding site – look for piles of insect “bits” on the ground. Some microbats can hover to catch crawling insects or spiders and some have developed more unusual diets. A ghost bat (in Northern Australia) eats frogs and lizards and we have a fishing bat! It has long claws to catch small fish near the surface of water.

Microbats live in roosts that vary between species. Some choose caves (or mine shafts or storm water pipes). They are fussy about conditions and will use a particular site at different times of the year. Females fly hundreds of kilometres to special maternity sites to raise their babies. Other species use tree hollows, under bark, cracks in posts, dried palms leaves or junction boxes. These types are more sedentary. They move between a few sites throughout the year.

Pregnancy is approximately 12 weeks and babies are born from November to December. Some have twins (Gould's Wattled Bat) while others have a single baby (Bent wings, also found in Sydney). The babies are furless, eyes closed and approximately 10% of adult weight. Within a week fur will appear and by 3 to 4 weeks they look like miniature adults. They can fly at around 5 to 6 weeks of age. Mother bats call to their young to find them in the colony, when returning from feeding.

During winter microbats become torpid which is the lowering of their body temperature like a mini hibernation. During summer/autumn bats build up fat to survive the torpor period. But they can't store much, so it is important not to disturb roosting bats in winter. They are also very slow to “wake up” and easy prey to cats if the roost is disturbed. Disturbance, and subsequent harm, is the main reason Sydney microbats come into care.

If you find a microbat that you think may need assistance – please do not handle it. Call your local wildlife rescue service for advice.