

## Why are microbats important?

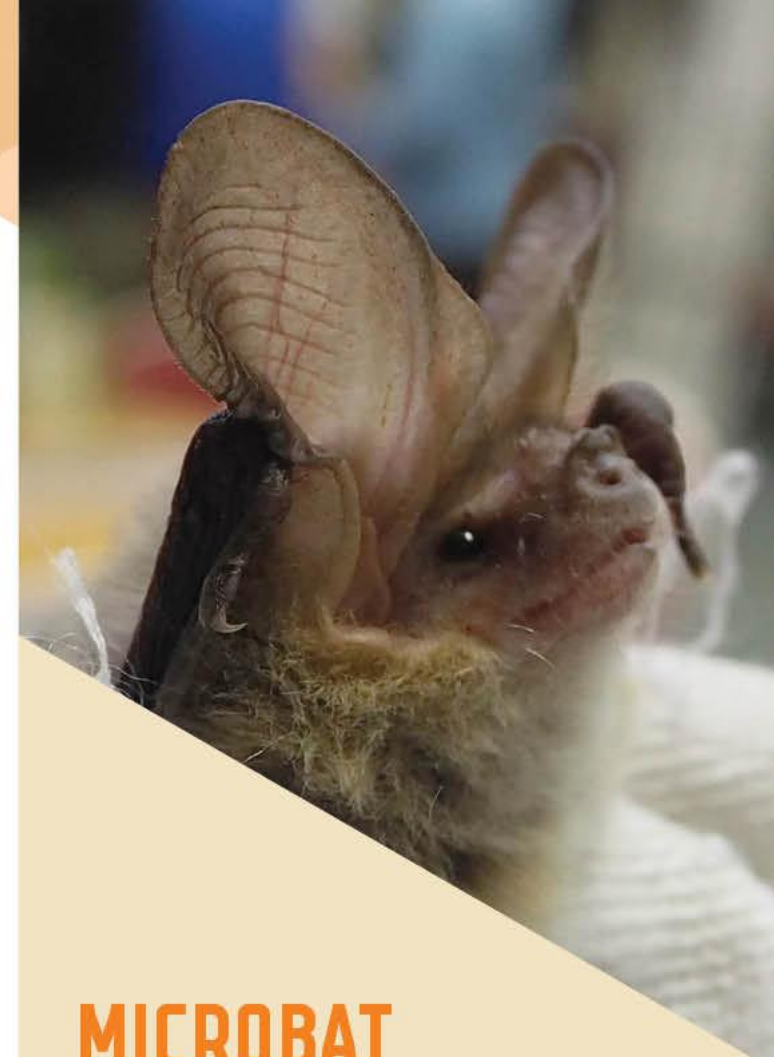
Australia is home to 68 species of microbats. We suspect there are five or six species present in the City of Melbourne itself. They are possibly the most common type of mammal in the city, though they tend to go unnoticed because they are silent to our ears, small, secretive and nocturnal. But we just don't know – amazingly, very little work has been done on their distribution and numbers. We want to change that.

Microbats are important because they are insect eaters (insectivorous). Microbats can eat up to about half their body weight in insects every night. That makes them serious pest controllers. With climate change, we can expect increases in pest insect species that can threaten the urban forest. Microbats are our first line of defence.

## Cool bat facts!

- Bats make up a fifth of all mammal species in Australia.
- Bats can eat up to half their body weight in insects every night.
- Bats use ultrasonic sounds we can't hear to "see" what's around them. They emit about 10 chirps per second, but when they identify their prey that goes up to 100.
- Bats are brilliant fliers, far more nimble than birds.
- Bats aren't blind. They can all see, and some species have very good eyesight.
- Most Victorian bat species don't live in caves. Most roost in trees. Some species find their favourite homes in people's homes, under weatherboards, in crevices or in the roof.
- Bats are clean and sociable.
- Mother bats carry their babies attached to special milk teats under their armpits when they fly.
- Batwings are actually evolved from hands, with the same bone structure.

**For more information, contact City of Melbourne on 03 9658 9658 or email [nature@melbourne.vic.gov.au](mailto:nature@melbourne.vic.gov.au)**



# MICROBAT BIOBLITZ

Supporting Melbourne's  
biodiversity

## Are microbats threatened?

Some species of microbats depend on hollows to live, and those species are threatened by urbanisation because as the city grows we tend to lose tree hollows. There is often strong competition with other species such as birds for use of tree hollows. Species of microbats that don't need hollows are better adapted to life in the city, and can live beneath loose bark, in small gaps in concrete, drains and in crevices in buildings and other structures.

Light pollution can also discourage some species of microbats, while other species use the streetlights that attract night-time insects as their hunting grounds. Overall, light pollution isn't good for our bat communities. Water pollution and cats can also pose significant problems for microbats.

## Bats of Melbourne

### Gould's Wattled Bat (*Chalinolobus gouldii*)

Gould's Wattled Bats can be found all across Australia. They are often the first species of microbat to emerge at dusk to forage for insects; however, this makes them easily visible to predators. Their fur is dark brown on the back which darkens to black on the head and shoulders. Females often have twin babies.



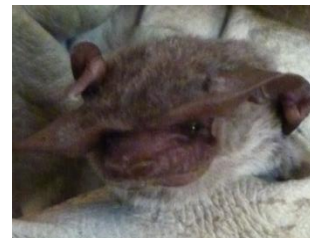
### Lesser Long-eared Bat (*Nyctophilus geoffroyi*)



Lesser Long-eared Bats have distinctive long ears up to 2.5 cm long and a 'Y-shaped' groove behind the nostrils. They generally live alone, or in groups of up to three. They like to hunt near the ground, feeding on moths, grasshoppers and crickets, and avoid areas near light sources. Their fur is light grey on the back and almost white on the belly.

### Southern Free-tailed Bat (*Ozimops planiceps*)

This widespread species has a tail that sticks out beyond the end of the tail membrane, giving it a mouse-like appearance. They are adaptable in terms of where they roost but prefer tree hollows, and are hesitant to take-off when released as they prefer to be up high to launch.



### Chocolate Wattled Bat (*Chalinolobus morio*)



Chocolate Wattled Bats have a distinctive dome-shaped head and a ridge of fur that runs along their muzzle. Most roost in trees but across Australia's arid zone they have also been found in caves, and they tend to forage in spaces below the tree canopy. They are extremely agile and have been recorded at speeds up to 28km/hour. This species avoids foraging in lit areas.

### Little Forest Bat (*Vespadelus vulturnus*)

Weighing 3–5 grams, the Little Forest Bat is the smallest species of bat in Australia. This tiny bat has light brown fur on the back, and a cream to white belly. Being so small, Little Forest Bats are quick, agile fliers which are able to successfully hunt small flying insects. They do not typically eat from the ground or from foliage. Little Forest Bats breed once a year and usually give birth to only one baby in the summer.



**Photo Credits:** Front Cover – Emmi van Harten; Gould's Wattled Bat – Alicia Dimovski; Lesser Long-eared Bat – Emmi van Harten; Southern Free-tailed Bat – Pia Lentini. Chocolate Wattled Bat – Danielle Eastick CC BY-NC-SA 4.0 Little Forest Bat – Copyright Bruce Thomson [www.auswildlife.com](http://www.auswildlife.com)