



Photos by Terry Reardon

# Microbats in the Garden

**There are over 60 species of microbats in Australia with many found right here in Perth. Unfortunately, due to habitat destruction, many of Australia's microbats have been forced out of their native tree-hollows and into urban areas where they have to find alternative places to live. Despite their micro-size, microbats have a healthy appetite for insects and can benefit Australian gardens by eating the pests that like to feed on your plants and vegetables.**

While attracting these insect-feeders to your local area can sometimes take a long time, there are a few things you can do to make your garden microbat-friendly.

## What is a microbat?

There are two distinct types of bats among the 90 species found in Australia: megabats, which are large, fruit-eating bats, and microbats, which are noticeably smaller and eat mainly insects. Although microbats have a small wing span, they are very capable flyers and use echolocation to navigate in the dark. By emitting high frequency sound waves which bounce off objects, microbats can locate food and detect obstacles in their path. They can see but rely on echolocation rather than eyesight to find their way.

## Hanging Around

Like all bats, microbats cannot stand on their hind legs and spend their time either hanging or flying. Being nocturnal, microbats are active at night although you can sometimes see them flying in groups at dusk during the summer months. While they like to roost in large groups for warmth and protection, fewer tree hollows in urban areas makes it tricky for colonies to find a suitable place to live together.

## City Living

Many microbats have adapted to living in urban areas by roosting in man-made structures such as buildings, sheds, garages and ceilings. If you do not mind microbats making your shed or garage their home, you should try to trim or clear any branches away from the entrance to the building so they have a clear flight path. Removing any wires, especially barbed wire, from around your property will also make your garden safer.

## Roosting Boxes

A roosting box is the best substitute for a tree hollow. The box should be a rectangular shape with a slanted roof and a narrow opening at the base for optimal darkness. By having the base as the only entrance, unwanted birds are deterred from making it their home. The walls on the inside of the box should be lined with shade-cloth to provide grip for the bats. A rough piece of wood on one side provides a perfect landing surface.

Hang the box high in a tree using strong wire covered in hose piping to prevent it from cutting into the tree. Clear away any obstacles in the path of the roosting box. Some microbats hunt near the ground and others in the air but make sure you hang the box high enough that predators cannot reach it.

The box needs to be in full sun where possible. The bats require a hot, humid environment to reproduce successfully. Forty-nine degrees Celsius is their preferred temperature to create a nursery colony.

You could build several boxes and place them on different sides of a tree so the bats can choose which one is best. Although microbats prefer to roost in groups, this does not mean that your roosting box must be overly large. Bats like to keep close together so they will find a way to fit in. It won't take long to set up your roosting box but it may take some time before microbats see your property as a safe and permanent place to live.

## Helpful Hints

- Check the box only once a year to make sure it is still a safe place to live so you do not discourage or disturb any animals inside. Try looking around the box or listening for movement to see if anything has moved in.
- Do not feed any native animals including microbats as it is important they do not become dependent on your artificial food source.
- Be aware of dangers to microbats. Ring appropriate authorities if you see swarms of bees and move your roosting boxes if you see cats hunting around them. Being aware of your surrounding environment is an important part of any fauna-friendly garden.

## Microbats in Your Neighbourhood

Although they tend to be shy around humans, you may start to see a few different kinds of microbats when you get your microbat-friendly garden up and running.

The Lesser Long-eared Bat can be seen catching insects around street lamps at night. Because these bats are common in urban areas, domestic cats are one of their main threats.

The White-striped Freetail Bat is one of the few microbats that can be heard by humans. This microbat makes a distinctive ting, ting, ting sound, especially at night, and along with the Gould's Wattled Bat, is attracted to areas where there are moths.

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