# **Bat friendly gardens**

Factsheet | July 2023

Adelaide is home to 9 species of bats. All play critical ecological roles through their ability to act as pollinators or environmentally friendly insect controllers, with some species eating around half their body weight of insects on an ideal summer's night. Enticing these unique and fascinating creatures into your patch can also provide habitat to benefit other wildlife.

### **Grey-headed flying-fox**

The Grey-headed flying-fox (aka fruit-bat) is the only megabat found in Adelaide. It became established in 2010 because of a changing climate in the eastern states, and available habitat and food provided by our city. Despite the name fruit-bat, they prefer to eat nectar, flowers and pollen.

They are listed as nationally threatened under the *Environment Protection and Biodiversity Conservation Act* 1999. These bats roost during the day by hanging from branches in trees and are typically found in large colonies.

#### **Microbats in Adelaide**

While most people are familiar with flying-foxes, many people are unaware of the 8 native microbat species commonly found in metropolitan Adelaide. They are found in diverse habitats, from woodland to urban and wet to arid areas, and are often found along creek lines and other water bodies, where they drink from the water's surface.

Microbats are insectivorous, meaning they feed on insects and invertebrates, and use echolocation to navigate and find prey.

Adelaide's microbats range in size from the little forest bat (*Vespadelus vulturnus*), which may weigh as little as 3 grams, up to the white-striped free-tailed bat (*Austronomus australis*) which can grow to 41 grams. Adelaide's microbats are most active at night, and only one species has a call that can be heard by humans.



Grey-headed flying-fox (Photo: Craig Greer).

### **Habitat requirements**

Being nocturnal, bats need places to roost during the day that provides shelter from the weather. Adelaide's microbats roost in tree hollows or under bark of mature trees, rather than in caves. The more adaptable species can also roost in buildings and other structures.

In winter months, these roosts offer protection and a place for microbats to go into torpor (a kind of hibernation). It is important not to disturb bats during torpor as they may become stressed, causing them to lose their fat reserves and possibly resulting in death.

### Threats faced by bats

The primary threat to bats is habitat loss. A trend toward manicured gardens, cleared spaces and other urban development has led to a decrease in the number and availability of mature trees and their hollows.

In addition, chemicals such as pesticides affect their food supply, which includes many insects. Some pesticides also accumulate in the fat tissues of bats, causing sickness or even death.

Due to their small size, microbats are often prey to domestic cats.

## **Native plants**

Including locally native plants in your garden supports native insects which provide an important food source for microbats. Gardens with a range of plant types that flower at different times across the year provide the greatest benefit.



### **Microbat roosting boxes**

Artificial roosting boxes will increase the number of potential roosting sites for microbats. Bats are faithful to one roost area and regularly move between roosts in the area. You can help bats by providing more than one box in your backyard, along with retaining any natural tree hollows.

Roosting boxes made specifically for bats differ from more generic wildlife nest boxes. Bats prefer an easily accessible entrance at the bottom of the box and a smaller space, the internal surfaces need to be rough so they can grip to them, and the boxes need to be entirely waterproof.

Roosting boxes can be placed on different sides of a tree, at the same height, so that bats can move between them according to weather conditions.



Discover tips on building your own roosting box from Green Adelaide website.

You may be able to find other resources on the internet, or your local library, such as *Nest boxes for wildlife – a practical guide* by Alan & Stacey Franks (2004), a comprehensive book, with dimensions, drawings, and details of nest box construction for Australian native wildlife.

Ready-made roosting boxes can also be purchased from specialists including State Flora and fauNature.

## **Roosting box maintenance**

Roosting and nesting boxes require some management.

You should be aware of which animals are using the boxes and for what purposes, which you can discover by checking the boxes at different times of day.

If you don't see bats leaving the box around dusk, be vigilant during the day to see if wasps, bees or ants have taken up residence instead.

Be patient as it may take a while for bats to find your box in the landscape.

#### **Bats and diseases**

Bats can carry a range of diseases including lyssavirus, however only a small proportion of bats will be infected. Even so, it is important that you don't touch a bat.

If you are bitten or scratched by a bat, you should seek immediate medical attention.



Lesser long-eared bat (Photo: Martin Stokes).

If you find an injured or distressed bat, please contact a wildlife rescue organisation, such as Fauna Rescue SA's Bat Rescue Hotline on 0475 132 093

#### Top 5 tips

- 1. Use plants native to your suburb.
- 2. Plant species that are a range of heights.
- 3. Select a mix of local native plants to provide flowers throughout the year.
- 4. Manage your pets responsibly.
- 5. Minimise chemical use.

Together we can work toward a cooler, greener, wilder Adelaide.

Scan to discover a list of native plant nurseries on the Green Adelaide website.



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