

Bats in your backyard



Bats are an extremely important part of the urban ecosystem. They play a critical ecological role through their ability to act as an environmentally-friendly insect control, with some species eating around half their body weight on an ideal summer's night. These unique and fascinating creatures are the only mammals that can fly.

Bats can also be used as indicators for ecosystem health. Creating and improving habitat for bats will also provide habitat for other wildlife.

Bats in South Australia

It is thought that nearly all bat species that occurred in the Adelaide area prior to European settlement in 1836 still occur here today, although their relative abundance is likely to have declined. Bats are still common animals in South Australia, but because they are active at night and many of their vocalisations aren't heard by humans, they have often been overlooked.

Within metropolitan Adelaide there are nine microbat (small insect-eating bat) species. Found in most habitats, from woodland to urban and wet to arid areas, most South Australian species roost in tree hollows by day but several species have adapted to living in roof cavities. Bats become most active when foraging for food shortly after dusk and just before dawn.

Microbats are insectivorous, using echolocation to navigate and find prey. They do drink, so are also found visiting creeklines and other water bodies like dams.

Adelaide's tenth bat?

The Grey-headed Flying-fox (aka fruit bat) is a relatively new resident of the Adelaide region. It is listed as nationally threatened under the *Environment Protection and Biodiversity Conservation Act 1999*. These megabats have been present in South Australia since 2010. They roost during the day by hanging from branches in trees and are typically found in large colonies.

Habitat requirements

Being nocturnal, bats need places to roost during the day that provide shelter from the weather. Most microbats roost in tree hollows or under bark, rather than in caves. However, for the more adaptable species, they 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.



Lesser Long-eared Bat (*Nyctophilus geoffroyi*) in flight
Photo by Terry Reardon

Threats

A number of pressures threaten the conservation of native bat species including: availability of roosting habitat, food and the presence of environmental pollutants.

The primary threat is habitat loss through urban development. A trend toward manicured gardens and cleared spaces has led to a decrease in the availability of roosting sites in mature trees for bats across the Adelaide region. Similarly, the renovation of many older buildings means that roost sites in roof cavities may be lost.

Chemicals such as pesticides affect the food supply of bats, which includes many insects. Some pesticides can also accumulate in the fat tissues of bats, and can cause sickness or even death.

Bat roosting boxes

Artificial roosting boxes will increase the number of potential roosting sites for microbats to use, and perhaps breed in. Bats are faithful to one roost area and regularly move between roosts in the area.

By providing more than one box in your backyard along with retaining any natural hollows, you will increase your chances of seeing them and aiding bat conservation efforts in Australia.

Roosting boxes made specifically for bats differ from a more generic wildlife nest box in that: bats prefer an easily accessible entrance at the bottom and tight surrounds; they need internal surfaces to be rough so they can grip to it; boxes need to be draught and water proof.

You can also put them on more than one side of a tree at the same height so that bats can move between them according to weather conditions.



Where can I get nest box information?

Nest boxes for wildlife – a practical guide by Alan & Stacey Franks (2004) is a comprehensive book, with dimensions, drawings and details of nest box construction for Australian native wildlife.

You can also find resources on the internet to build your own 'microbat roost box'.

Nesting box maintenance

It is important to remember that nesting boxes for all native species require some management.

You should be aware of which creatures are using boxes and for what purposes, so observe them at different times of day.

Do not open a bat box during the day, but wait and observe the box from afar at dusk to see if bats are using it.

If no bats are emerging from your box, be vigilant during the day to see if pest birds or bees have taken up residence.

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

What should I be careful of?

All bats carry a range of diseases including Lyssavirus.

Despite only a small proportion of bats carrying such diseases, it is important that bats are not handled.

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

What should I plant?

By planting species local to your area it provides the best chances of providing the right habitat and resources for local bats.

Top 5 bat tips

1. Use plants native to your suburb.
2. Try and include local native plants that are particularly good at attracting insects.
3. Use a mix of local native plants that flower throughout the year.
4. Install one or more bat boxes that offer safe roosting sites for microbats.
5. Minimise chemical use.

Please consider applying some of these principles to your own backyard, so that together we can help grow a great living environment for Adelaide.



A wildlife nesting box in a tree, occupied by Gould's Wattled Bats (*Chalinolobus gouldii*)
Photo by Terry Reardon

More information

Adelaide Bat Care www.adelaidebatcare.com.au
M 0422 182 443 for 24 hour rescue or assistance

Visit the urban biodiversity page of our website to access more Backyards 4 Wildlife information and contact details for specialist native plant nurseries.

www.naturalresources.sa.gov.au/adelaidemtloftyranges

Or contact your nearest Natural Resources Centre

Black Hill

115 Maryvale Road, Athelstone, SA 5076
P (08) 8336 0901

Eastwood

205 Greenhill Road, Eastwood, SA 5063
P (08) 8273 9100

Gawler

43 High St, Gawler East, SA 5118
P (08) 8115 4600

Willunga

5 Aldinga Road, Willunga, SA 5172
P (08) 8550 3400

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