



Bats in your Backyard

Backyards for Wildlife Fact Sheet

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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. Bats can also be used as indicators for ecosystem health. Creating and improving habitat for bats will also provide habitat for other wildlife. However, over the years, the bat population has been steadily declining. This is due to declining habitat caused by growing development and urbanisation.

Bats in South Australia

Within the metropolitan Adelaide region there are 9 bat species. These unique and fascinating creatures are the only mammals that can fly.

It is thought that nearly all the bat species that occurred in the Adelaide area prior to European settlement in 1836 still occur today, although their relative abundance has 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.

Flying foxes (aka fruit bats) have gained a reputation as a nuisance in Australia. They are noisy and sometimes smelly when they roost in urban areas. They will raid orchards and have destroyed some important trees in the Botanic Gardens in Sydney and Melbourne, but do not occur in or around Adelaide.

Threats

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

The primary threat is habitat loss through urban development and the resulting increased competition for hollows. 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.



Lesser Long-eared Bat, *Nyctophilus geoffroyi* in flight.
(Photo: Terry Reardon)

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 when mobilised can cause sickness or even death.

Habitat Requirements

Found in most habitats, from woodland to urban and wet to arid areas, most South Australian bats are tree-dwellers. Bats roost during the day and are most active shortly after dusk and just before dawn. These bats are insectivorous, and use echolocation to navigate and find prey. They do drink, so are also found visiting creeklines and other water bodies like dams.

Bats need places to roost during the day that provide shelter from the weather. Most bats roost in tree hollows or under bark, rather than in caves as is typically thought. However, for the more adaptable species, they can also roost in buildings and other man-made structures.

The provision of artificial roosting boxes will increase the number of potential roosting sites for bats to use, and perhaps breed in. Bats are faithful to one roost area and regularly move between a number of roosts in the area. By providing more than one box in your backyard along with the natural hollows, you will increase your chances of seeing them and aiding bat conservation efforts in Australia.

Bat Roosting Boxes

Hollows, crevices in tree bark and roofs offer protection and a place to hibernate during winter. Roosting boxes made specifically for bats differ from a more generic wildlife nest box in that: bats prefer an 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 and entrances easily accessible. You can also put them on more than one side of the tree at the same height so that bats can move between them according to weather conditions.

Nesting Box Maintenance

It is important to remember that nesting boxes for all native species require some management. You must be aware of which creatures are using it for what purposes, so observing your box at different times of day is highly recommended. 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, also be vigilant during the day to see if pest birds or bees are using it and remove these with care. Also be patient as it may take a while for bats to find your box in the landscape.

What Should I Plant?

Including a variety of locally indigenous species will further support animals attracted to your boxes. Plant a native understorey with dense, prickly shrubs near trees with hollows to deter predators like cats and foxes. Don't forget to keep the entrance clear of vegetation so bats can easily fly into your box. Locally native plants attract local native insects, which are food for bats. Mulch also provides good insect habitat.

Where can I get nest box construction information?

A widely available and comprehensive book exists with dimensions, drawings and details of nest box construction for Australian native wildlife. See *Nest boxes for wildlife – a practical guide* by Alan & Stacey Franks (2004). Also find resources on the internet to build your own 'bat roost box'.



Backyards for Wildlife is managed by the SA Department of Environment and Natural Resources, with support from the Adelaide & Mount Lofty Ranges Natural Resources Management Board and the Australian Government.



A wildlife nesting box in a tree, occupied by Gould's Wattle Bats. (Photo: Terry Reardon)

Why a Backyard for Wildlife?

In Australia, gardening has been recognised as one of our favourite pastimes and what we do in our home gardens has the potential to benefit or harm the natural environment.

By choosing to develop and maintain a garden that follows the five basic Backyards for Wildlife principles (see below), you can help contribute to a better local environment while at the same time conserve our local flora and fauna, create important habitat, reduce your maintenance costs, and reduce the threat of invasive environmental weeds.

Backyards for Wildlife principles:

1. USE LOCALLY NATIVE PLANTS.
2. USE PLANTS THAT ARE A RANGE OF HEIGHTS.
3. PROVIDE FLOWERS THROUGHOUT THE YEAR.
4. MANAGE YOUR PETS RESPONSIBLY.
5. MINIMISE CHEMICAL USE.

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

Find Out More

Visit www.backyards4wildlife.com.au to access more Backyards for Wildlife and biodiversity information including an interactive map with lists of what grew in your suburb prior to 1836, a plant database and contact details for specialist native plant nurseries.

For further Information Contact

Urban Biodiversity Unit, Department of Environment and Natural Resources
Wittunga House, 328 Shepherds Hill Road, Blackwood SA 5051
Telephone: (08) 8278 0600 Facsimile (08) 8278 0619
Web Site: www.backyards4wildlife.com.au



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