



## Bats – Damage Prevention and Control

### Identification, Distribution and Behaviour

Megabats, commonly referred to as flying-foxes, are generally large and eat nectar, leaf-material and fruits from a variety of native and horticultural plants. In Western Australia, they prefer the warmer tropical, coastal grassland or coastal desert climates of the state. Flying-foxes, which are common in some rural areas of WA, form large, permanent groups called 'camps' and during daylight hours they roost in large numbers in tall trees or cave entrances.

Microbats are a highly diverse group of smaller and mainly insectivorous bats, and they can consume up to half their body weight each night. The main exception is the ghost bat *Macroderma gigas*, which is a carnivorous species and preys on a variety of frogs, lizards, birds, small terrestrial mammals, large insects and other bats. WA is home to 37 species of microbats, many of which are common and widespread in rural and urban parts of the state. They roost either alone or in small groups in tree hollows, caves and crevices, under bark or out in the open.

If you want to find out what species of bat you have seen or what bat species are found in your area, you can:

- Use a field guide,
- Email a description and/or a photo of the bat to [fauna@dbca.wa.gov.au](mailto:fauna@dbca.wa.gov.au), or
- Refer to [www.naturemap.dpaw.wa.gov.au](http://www.naturemap.dpaw.wa.gov.au) to find further information on the species distribution.

### Environmental Law

All fauna native to Australia, including fauna that naturally migrates to Australia, are afforded protection under both State and Commonwealth legislation. Under both State and Commonwealth legislation, the ghost bat *Macroderma gigas* and the Pilbara leaf-nosed bat *Rhinonicteris aurantia* (Pilbara) are recognised as threatened fauna. Both these species are listed as Vulnerable.

Depending on the type of fauna-related activity, a licence issued by the Department of Biodiversity, Conservation and Attractions may be required. It is an offence to intentionally or recklessly kill, injure, trade, keep or move them unless authorised by a permit. Further information is available on the Department's website.

### Bat-Human Interactions

Bats are naturally found in most of areas of WA, but widespread habitat loss and fragmentation has led to an increase in urban and rural bat populations. Most of the time, humans and bats co-exist without any problems, especially because bats are not aggressive. They also play an important ecological role as pollinators, seed dispersers and insect suppressors, which can have a positive impact both economically and agriculturally.

In some situations, flying-foxes can be a nuisance by causing a large amount of noise and odour. In other parts of Australia, flying-foxes have been known to cause damage to backyard and commercial fruit trees when food is scarce due to drought or habitat loss, but damage to orchards by bats is not considered an issue in WA. Microbats roosting in ceilings or wall-cavities can be a nuisance by causing noise and odour or causing from their droppings.

If you find a sick or injured bat, contact the [Wildcare Helpline](http://www.wildcare.wa.gov.au) on (08) 9474 9055 for information on registered wildlife rehabilitators and centres who can assist with your enquiry.

### Disease risk

Similar to other wildlife, bats can carry bacteria and viruses, including the Australian Bat Lyssavirus (ABLV), Hendra virus, Histoplasmosis, Leptospirosis and Salmonella. There have been very few documented cases of fatal bat to human infections, and the risk of infection can be managed by limiting direct handling and making sure you wear puncture-proof gloves, long sleeves and protective glasses when handling bats.

## Damage prevention and control

The best means for preventing or controlling damage to property by bats is by exclusion or providing alternate roosting sites. Shooting of bats is not permitted, and culling and other population control methods are not effective, humane or ecologically sound. Scaring techniques, including strobe lights, gas guns, repellents and ultrasonic devices, are not effective for deterring or dispersing bats.

If flying-foxes are roosting on your property, it is best to leave them alone as they are likely to move on within a few days. Try not to disturb their roost site, as flying-foxes will make more noise when stressed or frightened. The Department has received very few reports of damage to commercial and backyard fruit trees by flying-foxes. However, if damage prevention and control methods are required, the only legal, humane and effective measure is to exclude them by bagging the fruit until it is harvested, covering the tree with shade cloth or stretching netting over a frame. Bats can easily be injured if the netting is installed incorrectly, and any netting should be monitored daily and kept in good repair to ensure that bats do not become entangled.

Microbats may follow insects attracted by artificial lights into a home, garage or other building. They will often leave if all the lights are turned off and a window or door to the outside is left open. Microbats, which can enter into buildings through gaps as small as 1cm in diameter, may also roost under eaves and shingles, or in building cavities like ceilings and walls. If they are roosting in a building, you may notice noisy squeaking, the smell of urine and find crumbly droppings on the ground or walls.

If a bat does not leave the building on its own, it can be captured by waiting until it lands, and then covering it with a small box or container. A piece of cardboard should then be slipped between the wall and box and the bat can then be released outside. Bats should be released at dusk on the same day as capture by placing them on a nearby tree trunk. Bats should not be evicted from roosts during the summer breeding season because the dependent, non-flying young are unable to leave the roost.

Once evicted, bats can be prevented from re-entering a building by blocking gaps leading into a building using cloth, paper, corrugated iron or expanding foam. The entrances and exits that the bats use will often be evident from staining or droppings. In case all the bats have not been completely evicted, fit a one-way valve onto a remaining exit point to allow bats to leave but not return. Droppings should be swept up and the roost site and entry and exit points should be disinfected to discourage other bats from roosting in the building.

Providing an alternate roosting site can also prevent roosts from being established inside buildings. Retaining larger or dead trees may provide hollows for roosting, or install a bat box on a tree. When installing a bat box, it is important to ensure that the chosen tree is nearby a water source and that there is enough surrounding vegetation. Visit the [Australasian Bat Society](#) website or the [Go Batty](#) blog for more information on building and installing bat boxes.

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