



How to attract bats to your yard

Bats are warm-blooded mammals that are adapted to flying at night and roosting during the day. They eat prodigious numbers of winged insects and, because they forage at tree height, you'll hardly notice them reducing local mosquito populations. Encouraging such helpful creatures to roost in your backyard makes good sense.

Feeding your bats

All local bat species are insect eaters. They locate their prey by making ticking, clicking, or chirping sounds that bounce back like sonar from nearby surfaces. Their flight seems erratic as they dart in and out among the trees and higher in the sky chasing flying insects.

Many types of insects are taken by bats, from large individual flying beetles to swarms of small gnats and mosquitoes. The particular types favoured by various bat species is poorly understood. The key to attracting bats to your backyard is a plentiful supply of a variety of insects. For the most part this is beyond your control, although gardeners who encourage biodiversity by planting a wide range of regional plants and shrubs are likely to have better luck.

Roosts and breeding sites

Depending on the species, bats in the wild roost on the bark or leaves of trees, inside hollow trees, in natural hollows in rock faces, or in caves. In the city and suburbs, bats roost during the day in places where it is dark. Roosting surfaces must be rough enough to provide good footholds. Ideal sites are inside chimneys, under the eaves of houses and outbuildings, on the bark of trees, and inside hollow trees.

Some bat species are gregarious. Whole colonies will roost and breed in caves, hollow trees, and attics.

Occasionally bats will accidentally find a way into people's houses. If this happens to you, open up all your windows and doors. Bats are good navigators; it usually won't take long for it to find its way out.

Why install a bat box?

Bats prefer natural sites but these are limited in the urban environment. It is much easier to attract bats to temporary roosting boxes than it is to get

them to breed. On the reverse side of the info sheet, you'll find directions for building a small bat roosting box designed to hold up to 20 bats.

The bats most attracted to roosting boxes are the two common species of our region, the little brown and big brown bat. They are also the ones most likely to breed or roost in attics. The dimensions shown on the diagram allow for access by both species.

Where should a bat box be located?

A bat box should be placed on a tree trunk that is relatively free of branches below the level of the box to provide unobstructed access. Boxes are usually placed 3 to 7 metres from the ground facing south or southeast. Some people prefer to site bat boxes on poles.

Bat Conservation International recommends at least 6 hours a day of direct sun. You're much more likely to attract a nursery colony if your bat box is within 400 metres of a pond, lake, or river, and you live in an area of diverse habitat, especially a mixture of farmland and natural vegetation.

What happens in winter?

Our common bat species hibernate beginning around mid-October and emerging only when insects again become plentiful, about mid-April. Because bat boxes cannot provide the stable, relatively warm winter temperature that bats require, they will not use them to hibernate.

Once bats have gone into hibernation, boxes should be taken down, cleaned out with a garden hose, and stored. It's a good idea to wear gardening gloves to handle bat boxes and wash them afterwards.

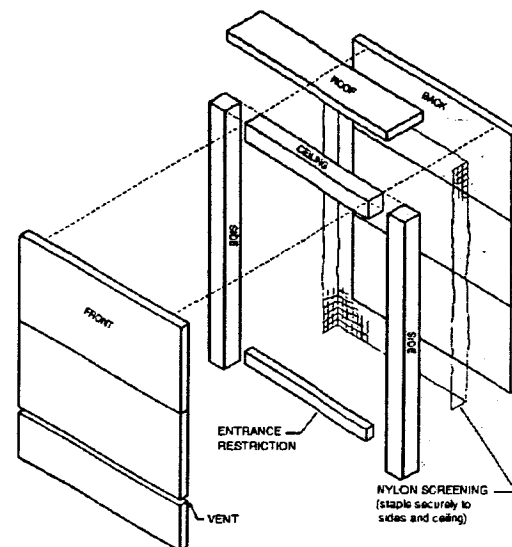
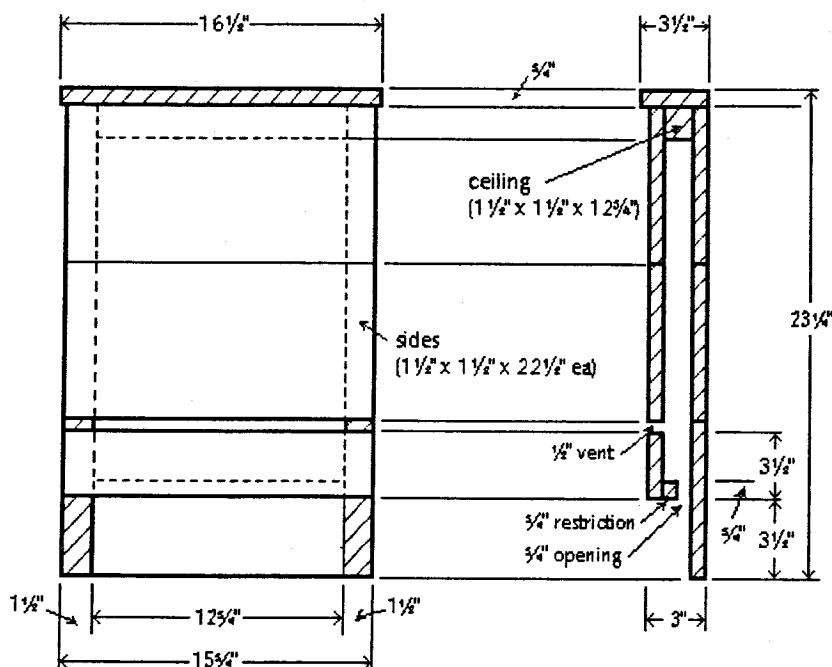
Recognizing our Canadian bats

In Canada, 18 species of bats have been identified; eight within 50 kms of Parliament Hill. Because

they fly at twilight, or in the dark, bats are extremely difficult to identify by sight. Sound-recording equipment is reliable for identifying only three local species, all of which are rare or uncommon. Size can be a determinant but most experts prefer to examine them in the hand for positive identification.

All bats are medium to dark brown in colour. Local species range from the Little Brown Bat with a forearm size of 38 mm to the Hoary Bat with a forearm over 51 mm. The following species are found in our region. An asterisk marks the ones that migrate.

- Eastern Small-footed Bat (*Myotis leibii*) rare
- Little Brown Bat (*Myotis lucifuga*) common
- Northern Long-eared Bat (*Myotis septentrionalis*) uncommon
- Silver-haired Bat* (*Lasionycteris noctivagans*) uncommon
- Northern Pipistrelle (*Pipistrellus subblavus*) rare
- Big Brown Bat (*Eptesicus fuscus*) very common
- Eastern Red Bat* (*Lasiurus borealis*) rare
- Hoary Bat* (*Lasiurus cinereus*) uncommon



Note: The dimensions shown on diagram are trimmed sizes, e.g., a 1" x 4" piece of lumber is actually 3/4" x 3 1/2".

Lumber required

- 1" x 8" x 15 3/4" — 5 pieces (2 for front, 3 for back)
- 1" x 4" x 15 3/4" — 1 piece for front
- 1" x 4" x 16 1/2" — 1 piece for top
- 1" x 1" x 12 3/4" — 1 piece for entry restriction
- 2" x 2" x 21 3/4" — 2 pieces for sides
- 2" x 2" x 12 3/4" — 1 piece for ceiling
- Piece of nylon screening, 19 3/4" long x 14 1/4" wide. Fold sides and top over 3/4".

Are bats safe?

Bats have a superb echolocation system, so contrary to popular myth, it is very unlikely that you will be struck by a flying bat or that one will become entangled in your hair.

Like most animals, bats may carry infectious microorganisms. People working in old houses where bats have roosted or bred in attics should take precautions. Outdoors however, droppings quickly decompose, so bat boxes are unlikely to present a hazard

References

- Bat Conservation International web site: <http://www.batcon.org>
- Dobbyn, J. 1994. *Atlas of the mammals of Ontario*. Federation of Ontario Naturalists, Toronto.
- Rand, A.L. 1945. Mammals of the Ottawa district. *Canadian Field-Naturalist*, 59(4), 111-132.

Jardin écologique

Fletcher
Wildlife Garden

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This information sheet is one of a series on nature and wildlife gardening. It is printed on recycled paper.