

Bat Conservation Trust

Encouraging bats

A guide for bat-friendly gardening and living



Brown long-eared © Hugh Clark

Seeing bats in our gardens on a warm summer evening is a magical experience. These small and fascinating creatures often live close to us, using our gardens as a source of food, water and shelter.

Here we offer advice on creating a haven for bats in your garden, along with some helpful tips on how to identify these nocturnal visitors.

Gardening for bats

Gardens can be wonderful places for people and wildlife, particularly bats. A garden that is good for insects is good for bats, as all species of British bat eat only insects such as midges, moths, mosquitoes and beetles. Whether you have a tiny city garden or acres in the countryside, you can do your bit to help bats.

Bats need insects

Flying uses a lot of energy, so bats have huge appetites! For example, a tiny common pipistrelle can eat around 3,000 midges, mosquitoes and other small flies in a single night. Moths, beetles and crane flies (daddy-long-legs) are popular with other species, but flies are the main food for most British bats.

Most plants depend on insects

We grow flowers in our gardens for our own enjoyment, but their colour and perfume are really the plants' way of advertising themselves to insects. Sweet nectar and protein-rich pollen are bait to encourage insects to visit. In return, the insects carry pollen on their bodies from one flower to another so the flowers are fertilised. The key to a successful wildlife garden is to include plenty of plants that will attract insects, and to ensure that your garden has a good supply of insects from spring through to autumn.

Choose the right plants

Grow a wide range of plants to attract insects, and by planting a mixture of flowering plants, vegetables, trees and shrubs, you can encourage a diversity of insects to drop in and refuel from spring to autumn. Native plants tend to support

far more species of insect than hybrids or exotics, so they should be used as much as possible.

Different plants attract different types of insects. Flowers with long narrow petal tubes, such as evening primrose and honeysuckle, are visited by moths; only their long tongues can reach deep down to the hidden nectar. Short-tongued insects include many families of flies and some moths; they can only reach nectar in flowers with short florets.

Try to include some of the following:

- Flowers that vary not only in colour and fragrance, but also in shape.
- Pale flowers that are more easily seen in poor light, so attracting insects at dusk.
- Single flowers, which tend to produce more nectar than double varieties.
- Flowers with insect-friendly landing platforms and short florets, like those in the daisy or carrot families.

The plant list overleaf may give you some ideas, although the best method is often to simply watch and see which insects you find feeding on which plants.

Looking after your visitors

A problem often faced by bats in gardens is cats. If you own a cat, you can help to save lives this summer by bringing your cat in for the night half an hour before sunset. This will allow bats to emerge from their roosts undisturbed. This is especially important from mid-June to the end of August, which is when bats are rearing their young. The bats will also be able to return at dawn undisturbed by cats. If you find a bat that appears to have been injured by a cat, call the Bat Helpline (0845 1300 228) for details of your nearest bat carer.

Plant trees and shrubs

These are important in providing food for insect larvae and adult insects, shelter for flying insects and roosting opportunities for bats. In a small garden, choose trees that can be coppiced – cut down to the ground every few years – to allow new shoots to spring from the base.

Young shoots and leaves will support leaf-eating insects, even if they do not produce flowers, and bulbs will flourish under the reduced canopy.

Create a wet area

No wildlife garden would be complete without a water feature. Not only will a small pond, marshy area or even a bog garden provide bats with somewhere to drink, but they will also attract insects, as many of the tiny flies favoured by bats start life in water as aquatic larvae. Marginal plants can be planted around the pond to create soft edges and encourage insects further. Goldfish should definitely be avoided as they eat the insect larvae.

Make a compost heap or log pile

Recycle kitchen and garden waste – such as fruit and vegetable trimmings, annual weeds and lawn clippings – to produce useful garden compost, as well as an ideal habitat for insects.

A log pile in a damp, shady spot will also encourage insects, particularly beetles.

Avoid using pesticides

Chemical pesticides kill non-target beneficial invertebrates including natural predators and so may do more harm than good. They reduce bats' insect prey.

Encourage natural predators

Hoverflies, wasps, ladybirds, lacewings, ground beetles and centipedes are the gardener's friends, and natural pest controllers. Follow these suggestions to help maintain a natural balance:

- Allow some weeds to grow to provide ground cover for natural predators.
- Leave hollow-stemmed plants to overwinter as shelter for ladybirds.
- Leave heaps of dead leaves and brushwood undisturbed for hedgehogs.
- Provide regular food and water for garden birds, as they are also effective predators.

Which plants should I choose?

Bat-friendly gardeners should aim to plant a mixture of flowering plants, vegetables, trees and shrubs to encourage a diversity of insects, which in turn may attract different bat species. Flowers that bloom throughout the year, including both annuals and herbaceous perennials, are a good idea: night-flowering blossoms attract night-flying insects. Trees and shrubs provide food for insects and roosting opportunities for bats.

Approximate flowering periods are listed below, although they may vary according to area and weather conditions!

Flowers for borders

- *Aubretia (spring to early summer)
- *Candytuft (summer to autumn)
- *Cherry pie (summer to autumn)
- Corncockle
- Cornflower
- Corn marigold
- Corn poppy
- *Echinacea
- English Bluebell (spring)
- *Evening primrose (summer to autumn)
- Field poppies (summer)
- *Honesty (spring)
- *Ice plant 'Pink lady' (early autumn)
- Knapweed (summer to autumn)
- Mallow (summer to autumn)
- *Mexican aster (summer to autumn)
- *Michaelmas daisy (summer to autumn)
- *Night-scented stock (summer)

- Ox-eye daisy (summer)
- *Phacelia (summer to autumn)
- *Poached egg plant (summer)
- Primrose (spring)
- Red campion (spring)
- *Red valerian (summer to autumn)
- Scabious (summer)
- St John's wort (spring)
- *Sweet William (summer)
- *Tobacco plant
- *Verbena (summer to autumn)
- *Wallflowers (spring to early summer)
- Wood forget-me-not (spring)
- Yarrow (early summer)



Plants marked * are hybrids or exotics that may be useful in the garden



Herbs (both leaves & flowers are fragrant)

- Angelica
- Bergamot (summer to early autumn)
- Borage (spring to early autumn)
- Coriander (summer)
- English marigolds
- Fennel (summer to early autumn)
- Feverfew (summer to autumn)
- Hyssop (summer to early autumn)
- Lavenders
- Lemon balm
- Marjoram (summer)
- Rosemary (spring)
- Sweet Cicely (spring to early summer)
- Thyme (summer)

Things to remember

- Pesticide-free gardens tend to be better for wildlife and bats.
- Wherever possible, try to choose native plants and trees.
- Never dig up plants from the wild. Buy native plants from reputable suppliers who breed their own stock.
- Use peat-free compost or peat-substitutes such as coir. Peat extraction is unsustainable and seriously damages our unique bog habitats. Gardeners can help by reducing the demand for this product.
- Creating a range of habitats such as a pond, vegetable garden and hedgerow makes your garden more attractive to insects and in turn bats.
- Add a seat, put your feet up and watch your garden come to life!
- Hedge and tree lines are important to help bats navigate.
- Use lighting sensitively in your garden and do not point it at a bat box or roost.

Trees, shrubs & climbers

Bramble (climber)

*Buddleia (shrub)

Common alder
(suitable for coppicing)

Dog rose (climber)

Elder (small)

English oak (large gardens only)

Gorse (shrub)

Guelder rose (shrub)

Hawthorn (suitable for coppicing)

Hazel (suitable for coppicing)

Honeysuckle (native honeysuckle)

Hornbeam

Ivy (climber)

*Jasmine (night-scented)

Pussy willow (suitable for coppicing)

Rowan

Silver birch



Wild flowers for pond edges & marshy areas

Bog bean

Bugle

Creeping Jenny (spring to summer)

Flag iris

Hemp agrimony (summer)

Lady's smock (spring to summer)

Marsh mallow

Marsh marigold (spring)

Marsh woundwort

Meadowsweet
(summer to early autumn)

Purple loosestrife (summer)

Water avens

Water forget-me-not
(summer to autumn)

Water mint (summer to autumn)

Bat boxes

Bat boxes are artificial roosts designed to encourage bats into areas where there are few roosting sites, such as holes in trees or buildings.

There are various designs of bat box, some that can be made at home and some that are available commercially. Different bat species also need different spaces.

Wooden boxes

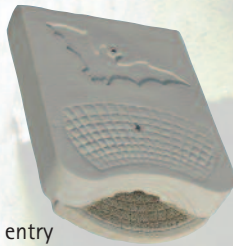
Are usually cubic or wedgeshaped, with a grooved 'bat ladder' and a narrow entrance slit at the bottom. They can be nailed to trees or walls.



Woodcrete boxes

Are usually of two basic types:

- cylindrical with an access hole in the front and designed to be hung on tree branches with a wire loop; or
- brick-shaped, usually with narrow roosting crevices inside and an entry slit at the bottom, designed to be fixed to flat surfaces such as walls of buildings.



Making your own box

Bats do not like draughts, and prefer well insulated boxes where temperature and humidity remain constant. They also need a rough textured wood to cling to.

The wood should not be treated because bats are very sensitive to chemicals. A 'bat ladder' or other landing area that leads to an entry slit wide enough to admit bats, but narrow enough to keep out predators is also essential (15 – 20 mm).

Once up, a bat box cannot be opened legally without a licence. For more information on bats and the law call the Bat Helpline (0845 1300 228).

Things to remember

- Make sure joints are well sealed and avoid large, loose-fitting front panels
- All timber used in bat boxes should be roughsawn (unplaned) and untreated from sustainable sources
- Keep entrance slits small (15 –20mm)
- Removable lids should not be used and the box should not be opened

Designs and instructions for making your own bat box can be found at www.bats.org.uk.

Putting up your box

Boxes are more likely to be used if they are located where bats are known to feed. Ideally, several boxes should be put up facing in different directions to provide a range of conditions. Some bats use a tree line or hedgerow for navigation. Putting boxes near these features may help the bats find the box.

Boxes should be put as high as possible in sheltered sunny places. On buildings, boxes should be placed as close to the eaves as possible.

Where to put boxes

- close to hedges and tree lines that bats fly along
- at least 4 or 5m above the ground
- sheltered from strong winds and exposed to the sun for part of the day (usually S/SW)

Bats need time to find and explore new homes, and it may be several years before boxes have residents – be patient! Droppings on the landing area, urine stains around the lower parts of the box and chittering noises from inside on warm afternoons and evenings are signs of occupation.

Watching for bats

Here's a guide to the species of bat that you're most likely to see in and around your garden, particularly as it begins to get dark.



Pipistrelles emerge around sunset, and these are the bats that you are most likely to spot. They have an erratic flight – twisting and turning around buildings, streetlights, trees and hedges. There are three species of pipistrelle that look very similar: common pipistrelle, soprano pipistrelle and the rarer Nathusius' pipistrelle.



Another of our bats is the **brown long-eared bat**. Long-eared bats come out after dark, and usually fly very close to trees, making them difficult to spot. Their flight is slow and hovering, a little bit like that of a big butterfly.



The **noctule** is one of our biggest bats; noctules emerge early in the evening, just as it starts to get dark. They can sometimes be seen flying in a straight line, high overhead. About the size of a starling, their narrow wings are quite distinctive.



If you see a bat flying very low over water, skimming the surface like a mini hovercraft, it's a **Daubenton's bat**. Watch Daubenton's bats carefully and you may see them touch the water's surface to seize an insect with their big hairy feet.

The best way to experience the usually secret nocturnal world of bats is by using a bat detector. These amazing devices enable you to listen in to bat calls, usually too high-pitched for humans to hear – with a bit of practice it's very satisfying to be able to distinguish between bat species! Your local bat group will probably hold bat walks and talks throughout the summer months to provide an introduction to these fascinating creatures and how to spot them.

If you regularly see bats in your garden, it's possible that bats are roosting in your home, or perhaps in one of your neighbours' houses. Call the Bat Helpline (0845 1300 228) to ask for a copy of the 'Living with bats' booklet, which gives advice on what to do if you share your house with bats. The Bat Helpline will also be able to provide details of your nearest bat group, and also more information on taking part in our summer bat surveys – if you enjoy watching and listening for bats, why not sign up for our National Bat Monitoring Programme and help us to count the UK's bats?

The future for bats

The Bat Conservation Trust (BCT) is working towards a future where everyone, everywhere can enjoy seeing and hearing bats as a natural part of their environment.

Join the Bat Conservation Trust and donate today. Visit www.bats.org.uk for more details on how you can support bat conservation.

Useful contacts

Bat Conservation Trust (BCT)

Quadrant House, 250 Kennington Lane, London SE11 5RD.

National Bat Helpline 0845 1300 228, enquiries@bats.org.uk

www.bats.org.uk

Contact BCT for more information on gardening for bats, bat box advice, taking part in the National Bat Monitoring Programme and for details of your local bat group or bat carers.

Statutory Nature Conservation Organisations (SNCOs)

Natural England
0845 600 3078
www.naturalengland.org.uk

Natural Resources Wales
0300 065 3000
www.naturalresourceswales.gov.uk

Scottish Natural Heritage
www.snh.org.uk

Northern Ireland Environment Agency
0845 3020008
www.ni-environment.gov.uk

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