



The Environmental Records Centre for Cornwall and the Isles of Scilly

# **Helping Bats in Your Garden**

As well as being one of the most threatened types of mammal in the UK, bats are also among the most misunderstood. They are small, harmless, furry insect-eaters, far from being nasty dangerous animals, and are an important part of our natural environment needing all the help they can get! Bats exploit a wide range of both natural and man-made roosting sites including trees, caves, mine shafts, churches, bridges, tunnels and even our own homes. They make use of different roosting sites throughout the year including summer daytime roosts, winter hibernation roosts and breeding sites. In recent decades the number of suitable roosting sites has declined as a result of habitat loss and fragmentation, land use change and disturbance. Together with creating insect-rich habitats in your garden, you can also help bats by putting up simple bat boxes to provide additional roost sites.

## **Building a bat box** ← 150mm → Back plate 50mm Side Groove 3mm deep. 200mm 28mm wide 140mm → ← Roughened surface 200mm Side Screw side. back, front and plate base together to make draught-proof Underside of lid Front 20mm Alternative lid Base Press lid into top groove in back plate for a tight fit. Screw Roof 200mm lid down to prevent people looking into the box and disturbing Slit 15-20mm wide

## Some other key points to remember

Because of declining numbers, all bats and their roosts are protected under the Wildlife and Countryside Act 1981 and The Conservation of Habitats and Species Regulations 2010, making it illegal to disturb any bat when it is roosting, or to kill, injure or handle a bat without a licence.

## Things to remember

- Boxes should be well-built, rainproof and draught free.
- Wood should be 25mm thick for insulation and ensure a 15 to 20mm entry slit is left underneath the base of the box (wide enough to admit bats but narrow enough to keep out predators).
- Boxes can be fitted together using screws or nails, and odourless wood glue for extra insulation.
- Use rough sawn timber for all surfaces to give the bats something to cling to.
- Cut ridges into the back plate, 2mm deep every 0.5cm, to make a 'ladder' for the bats to climb up.
- Make sure the wood is untreated as some wood treatments and preservatives can be fatal to bats. Untreated boxes will last roughly ten years.

## Buying a bat box?

Many types of bat box are available commercially from wildlife suppliers and 'woodcrete' boxes made by Schwegler are often recommended. There are also special designs for artificial roost sites which can be incorporated permanently into buildings.

Bat species which often make use of boxes include common pipistrelle, soprano pipistrelle, noctule and brown long-eared bat (pictured).



Brown long-eared bat. Photo: Steve Marshall





## Location

Ideally, site boxes in areas where bats are known to feed, but with few potential roosts. Woodland, parkland and river banks are good places, as are gardens close to a marsh, pond or river. Position them as high as possible to avoid predators, **at least 3 metres** above the ground (5 metres for noctules) in a position that receives **some direct sun** for part of the day.

There should be a **clear flight path** to the box to allow bats direct and easy access, but preferably also with some tree cover nearby as **shelter** from the wind. If possible, site them **in groups of two or three** around the trunk of a tree, at different heights and facing in different directions, as bats like to move around from box to box as the temperature changes both during the day and from season to season. If you have no trees nearby,

boxes may also be attached to the sides of buildings, under the eaves to provide shelter.

Boxes must be securely fixed but use aluminium nails or attach with a strap or wire to avoid damage to trees.



Bat boxes positioned around a tree.

Photo: Kim Jelbert

# Are my bat boxes being used?

You can check if a box is occupied without causing disturbance by watching at dusk to see if any bats emerge to feed. You could also listen out for chattering noises from inside on warm afternoons and evenings or simply see if any droppings appear on the landing area. Bat droppings will crumble to dust quite easily because they consist of indigestible insect parts.

If you find bats are using your box, only a licensed bat handler is then authorised to inspect them. Contact the Wildlife Information Service or Cornwall Bat Group for help.



Common pipistrelle has a rapid, zigzag flight as it chases insects through the air and you may be lucky enough to see one in your yarden. They can eat over 3,000 tiny insects in a single night!

Illustration by Sarah McCartney

# You can also help bats by.....

- Encouraging a diversity of insects through planting a mixture of flowering plants, trees and shrubs.
- Growing night-scented species such as honeysuckle, evening primrose and night-scented stock to attract night-flying insects like moths into your garden at dusk, the peak feeding time for bats.



Honeysuckle attracts insect prey

- Building a wildlife pond to attract large concentrations of insects whose larvae live in water, as well as providing a place to drink.
- Avoiding the use of pesticides as these will reduce insect prey.
- Providing hibernation sites e.g. retaining dead wood in old trees.
- Keeping your cats inside before dusk and overnight if you suspect they're catching bats.

### **Bat Facts:**

- There are 18 bat species in the UK, all of which are threatened, with 13 species resident in Cornwall.
- The smallest (the pipistrelle) weighs just 5g, and the largest (the noctule) 40g.
- Bats are the only mammals that fly.
- Bats are warm-blooded, give birth and suckle their young. They are very sociable animals, living together in colonies.
- They are long-lived (some can live for up to 30 years!), intelligent, highly mobile and more agile in flight than most birds.
- Bats are nocturnal, flying and feeding in the dark
- Bats are not blind and have quite good eyesight but at night their ears are more important than their eyes. They navigate and locate prey by echolocation, producing a stream of high-pitched calls and listening to the returning echoes which give a distinct 'sound' picture of the surroundings.
- Bats in the UK eat only insects, which they catch in flight or pick off water, foliage or the ground.
- In winter, when there are few insects, bats hibernate in cool, quiet places such as disused buildings, old trees or caves.

## Further information and advice

Wildlife Information Service (WIS) Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) Five Acres, Allet, Truro, Cornwall TR4 9DJ

**Fel:** (01872) 302 250

Email: wis@cornwallwildlifetrust.org.uk

**Web:** www.erccis.org.uk

## Other useful contacts

- Cornwall Bat Group: Facebook Page
- Grounded or injured bats:
   Sue & Chris Harlow (01872) 278695
   batcare@cornwall-batgroup.co.uk
- Bat Conservation Trust Bat Helpline: 0845 1300 228 www.bats.org.uk
- Natural England (Truro)Tel: 0300 060 2544

#### Get involved

Share your sightings with us Online Recording for Kernow and Scilly (ORKS)

www.erccis.org.uk/ORKS

Become a member www.cornwallwildlifetrust.org.uk