

# Bat Boxes

## Making and installing bat boxes



### Batty behaviour....

Bats like to roost in old hollow trees. Unfortunately there are fewer of these around in today's shrinking woodlands and tidy-minded parks - and so therefore, fewer bats! Putting up bat boxes in your garden can provide much needed summer homes for Northumberland's homeless bats.

Bats have very particular lodging habitats and will relocate to different roosting sites throughout the year. Bats generally use bat boxes only for summer and autumn roosting.

In winter they move to better insulated tree holes and cavities, where they can hibernate safely. Special 'hibernation' boxes have

been designed using extra thick timber, but it is not yet known whether these are successful.



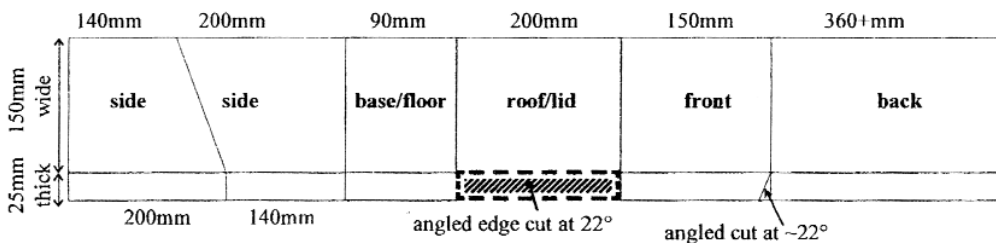
### Bat box building instructions:

You will need:

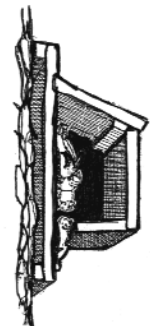
- Rough cut, unplanned, untreated softwood timber, 150 mm wide x 1500 mm long x 25 mm thick
- Scrap rubber, such as an old inner tube from a tyre
- Galvanised 40 mm or 45 mm nails
- And the following tools: carpentry saw, hammer, pencil and ruler, scissors for cutting rubber.

### For Noctule bats - alternative box specifications

*Increase the height of the sides to 240 mm/300 mm, height of the front to 240 mm, and the length of the back plate to 460 mm.*



NB: drawing not to scale



### 1. Marking out

- Mark out the panels of the future nest boxes with pencil and ruler to the dimensions shown. The 'Noctule' box is 300 mm tall (this is to accommodate the extra height that Noctule bats seem to prefer).
- Write the name of each panel onto the marked out wood (believe me, this will save confusion later).
- Where possible, try to ensure that the grain will run vertically in the finished box - this will help drainage.

now turn over

### Not doing-it-yourself :

#### Buying a ready made bat box

A bat box should not:

- Have an entrance slit wider than 15 mm - if you can get fingers underneath it's too wide.
- Be made of smooth planed wood without roughening grooves cut in.
- Have an interior width wider than 100 mm.
- Have wood stain or preservative anywhere.

A bat box should:

- Have a floor space of 100 mm x 100 mm.
- Be made from wood at least 25 mm thick.

**The Bat Conservation Trust**  
tel: (020) 7627 2629,  
is the UK's specialist bat conservation organisation

## 2. Cutting

- Saw the panels apart. Please note that you will need to make a slanted cut between the front panel and roof, at a 22° angle.

## 3. Roughing up

- If the timber has been planed or is very smooth, saw 1 mm deep cuts into the back plate at 10 mm intervals.

## 4. Nailing

Start by nailing the sides onto the back plate:

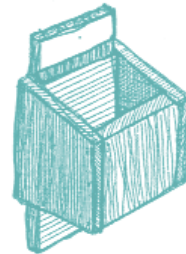
- The sides are fixed outside the width of the back plate, nailed onto the 25 mm thickness of the timber. Position the sides 80 mm up from the bottom of the back plate so that there is a 'tailgate' of this length protruding below the level of the box.
- Nail the floor panel onto the side panels so that it is flush with these at the front. There should now be an entrance slit at the bottom of the box between the floor panel and back plate. The entrance slit should be 10 mm wide (no wider than 15 mm) and run the width of the box.
- Nail all the other panels into place except for the roof panel.

## 5. And finally...

- Fix on the roof panel with a rubber flap 'hinge' made from scrap rubber. This should cover the joint between roof and back plate completely so as to be waterproof. Nail the rubber into the back plate first, then pull tightly over the joint and nail it onto the roof. The roof should be able to lift away like a lid.

## 6. Dropping in...

- To see if your bat box is in use without disturbing the occupants, check the ground below the box for droppings.



### LEGAL NOTE:

All bats are protected species. If you find bats in your box, only a licensed bat handler is then authorised to inspect them! Contact WTSWW or your local bat group for help.

*No wood treatments or preservatives should be used on your box. These can be fatal to bats*

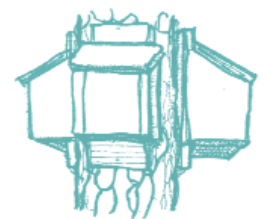
## Putting up your batbox

Bat boxes should be positioned at least **3 metres** above the ground (**5 metres** for Noctules) in a position that receives **some direct sun** for part of the day, with a **clear flight path** to the box, but preferably also with **some tree cover** nearby as protection from the wind. In the roof eaves, on a wall or fixed to a tree are all suitable sites. Boxes are most often used in locations devoid of alternative roosting sites.

In spring, bats seem to prefer south and east facing boxes that receive morning sun. In autumn this preference switches to north facing boxes. For this reason it is better to put up a

cluster of 2 or 3 boxes together, all facing in different directions, so that individual bats have a choice of box.

Bat boxes are often adopted as temporary roosts for a few years before bats attempt breeding in them. If boxes are not used for 2-3 years, it might be worth repositioning them somewhere else.



## Housework

### Maintaining your bat box...

- Do not inspect boxes if you know bats are using them.
- Your bat box need not be cleaned out unless other animals or birds have taken up residence in it. If so, wash out with warm water, not chemical cleaners, after the tenants have left.

### ... giving bats a little extra help

There is more chance of bats using your bat box if a food source is close by. Attract bat snacks into your garden by:

- Growing night-scented plants such as honeysuckle, evening primrose, and tobacco plant.
- Building a wildlife pond

- Painting and installing a white board under house eaves
- Switching on a low-brightness outside light at dusk

You can also help bats by:

- Providing hibernation sites (eg, dead wood in old trees)