



Building a Kent bat box

Instructions for bat box building



© Jude Hirstwood

This leaflet was produced by the Bedfordshire Bat Group as part of the Luton Bat Project funded by the Big Lottery Fund. The Bedfordshire Bat Group has been working with the Priory Park Rangers since 2008 to build Kent bat boxes with children, like these from Queens Park Lower School.

The great thing about these boxes, apart from their simple construction, is that they can be monitored without disturbing the bats.

As you can see, they are used by bats. This box at Priory Country Park was occupied within two months of being put up and in November 2009 it was being regularly occupied by 5 pipistrelles.



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Five pipistrelles in a bat box

1. The kit

Make sure you use untreated wood as some of the preserving chemicals could kill bats. The following kit requires approximately 1.6m of untreated, rough sawn wood (or rough it up by scraping with a suitable tool – possibly a saw blade or screwdriver) and 25 screws (8 x 1 ½ inches) to assemble. Pre-drill the holes to prevent the wood splitting. The hanging screws may either be at the edges of the front panel or in the side of the centre block (not in the rails!).

Part	Quantity	Size in mm
Roof	1	250 x 160 x 20
Back	1	450 x 200 x 20
Centre	1	330 x 200 x 20
Front	1	210 x 200 x 20
Centre Rails	2	330 x 20 x 20
Front Rails	2	210 x 15 x 15
Stand off	2	200 x 20 x 20

2. Preparations for box building

If preparing your own kits, label the parts of each kit. Use an elastic band to secure each pair of rails and the stand offs as they are the most variable and you want the boxes to have a snug fit as bats don't like draughts.

Other equipment

Two drills, preferably both cordless. This means that there are minimal delays.

Working safely

If using a mains-powered drill, ensure that there are no trailing wires and that the drill is to one side of the main working area. You will also want spare drill bits.



All we need is tools...

Working with Children



Set up the room so that children have safe working space. We tend to put two pairs of children to a table. Boxes of screws are kept on a separate table, so no one group of children hogs them. Give a safety briefing – safe use of screwdrivers, beware of splinters, no running, **only adults to use the drills**.

Queen's Park Junior Rangers at work

Show them how the box is assembled – you will probably need to recap this. Explain that sometimes screws can be tricky and to ask an adult for help in getting screws flush with surface. At each stage the rough surface of the wood should be on the inside of the box to give the bats something to grip on to.

Experience has shown us that it is best to fit the top of the box first as you can then abut other pieces of the kit to it, to ensure a tight fit with minimal draughts.

3. Instructions for building the boxes



Hold the roof against the back panel.

Drill two holes in the bottom of the top section of the box.

Insert two screws
Then add centre rails, again abutting them to the top.



Drill two holes in each of the centre rails, one at each end of the side bar.



Screw firmly into place

The centre section will need to be roughened on the smooth side. This could be done beforehand with a rasp or can be scored by the children with a screwdriver – if closely supervised.



Place the centre panel snugly against the top. Drill two more sets of holes (offset them from holes you put in the previous layer). Fix screws.



Add the front set of rails, Drill two holes in each, once again avoiding where they have put screw in the underlying layer.



Add the front, abutting it tightly to the roof. Drill four holes. Put screws into the holes. The box is nearly complete...



If you are going to put the box on a building, add the two stand offs to the back of the box as shown. Fix the screws.



Finally, drill two holes into the centre (not the rails), one on each side of the box. Thread each screw through a washer, but leave them standing proud so you can attach wire or bailer twine to hang the boxes.



Congratulations, you have built a bat box!



Do not paint or treat your completed box as many paints and varnishes are toxic to bats.

If you are putting up bat boxes in your garden or local park, please let your local bat group where you put them and monitor them for signs of bat usage. The bat group will be very happy to provide advice on siting your boxes.



See also

- **B.3.a** - A guide to bat boxes
- **B.3.d** - Monitoring bat boxes at Priory Country Park
- More resources in the 'Gardening for bats' (**B.4**) folder of the Resources Pack DVD

You can find out more about the Luton project by checking the Bedfordshire Bat Group website at <http://www.bedsbatgroup.org.uk> or on The Luton Bat project Facebook page.

For more information, contact us at batsinbeds@fsmail.net

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