

# Providing bumblebee nest sites

Bumblebees need two things in life – a ready supply of nectar and pollen and somewhere suitable to build a nest. First ensure that your garden or land is full of their favourite plants to tempt them in and support growing nests (BBCT factsheet available). You could also help us to learn more about artificial nesting sites by taking part in our simple trial of different designs.



Different bumblebee species like to nest in different places. Some, like the Common Carder Bee, like to nest above ground, for example in thick grass or hedgerows. Others, such as the Buff Tailed Bumblebee prefer to nest underground. They cannot dig their own underground cavities, so they use existing ones, such as abandoned rodent holes.

Bumblebees may sometimes find it hard to find natural nest sites, due to habitat loss in the wider countryside. BBCT are keen to optimise the design of artificial nesting sites. Several types are available commercially, but we don't yet know how effective these are. There are other different designs that you could try creating at home. We've come up with a few designs of our own, details of which are contained in this leaflet, but feel free to be creative and try out your own ideas.

## General guidelines for all designs

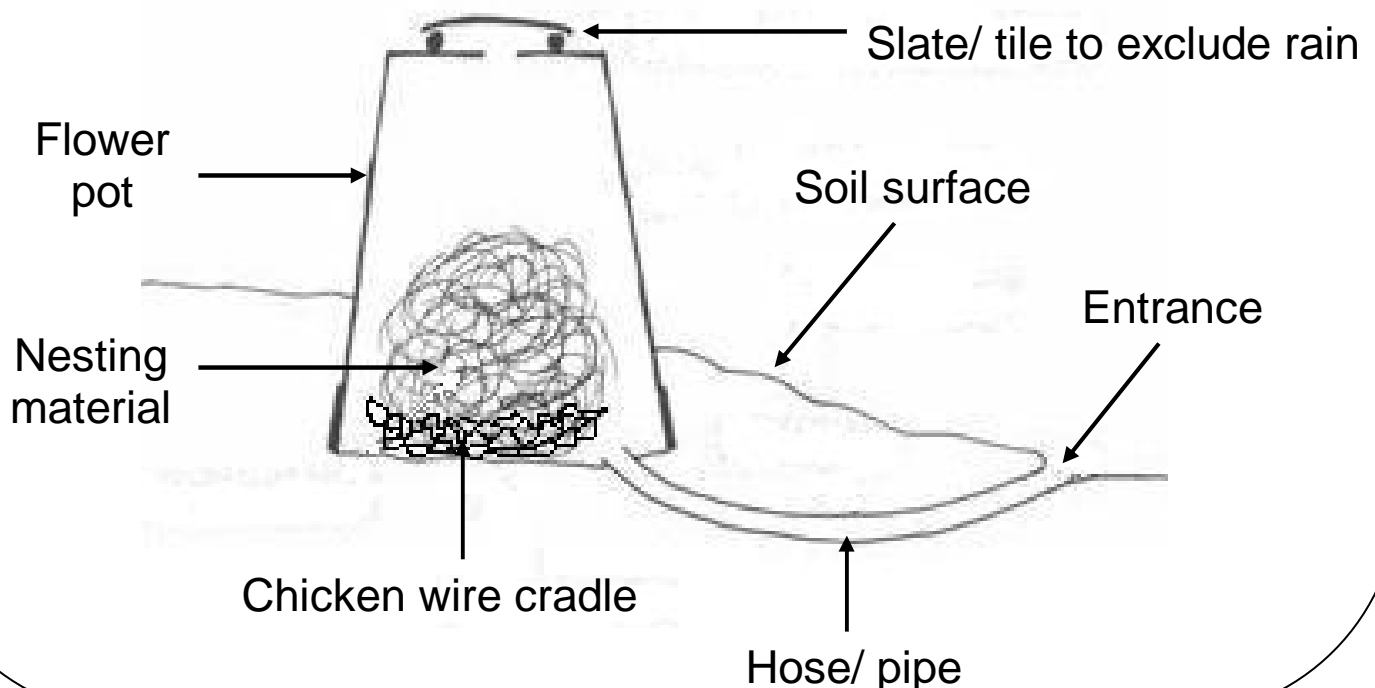
- Make sure that you provide lots of bumblebee friendly flowering plants in your garden to tempt the queens in and support growing nests. Bumblebees cannot survive without the right flower-rich habitat.
- Nests should be sited in a sheltered spot along a 'linear feature' (a hedge, bank or fence), out of direct sunlight.



- Most bumblebees look for a dry, dark, ventilated cavity with a small entrance hole that they can access at ground level.
- Many species prefer an entrance tunnel. Use a bit of hose or pipe greater than 18mm in diameter and 30-50cm long. Garden hosepipe is probably too narrow. A pin across the entrance will stop snails from blocking the pipe, and small drainage holes will prevent water pooling.
- Put in a handful of dry moss, upholsterer's cotton, hair felt or hamster bedding mixed with dry grass or hay for the bees to mould into a nest. Cotton-wool and fibre-glass insulation should be avoided, as the bees may get tangled up in the fine fibres. To aid ventilation in the nest, try placing the material in a cradle made from chicken wire.

### Design 1

All you need for this design is a flowerpot (greater than 20cm in diameter) and a bit of tube or pipe. Sink the upturned flower pot into the ground. Put a slate/ tile over the drainage holes to keep out rain. Run a hose or pipe underground to the pot, leaving a prominent entrance. Be sure to make drainage holes in the pipe. Make a chicken-wire cradle and fill with a generous handful of nesting material.



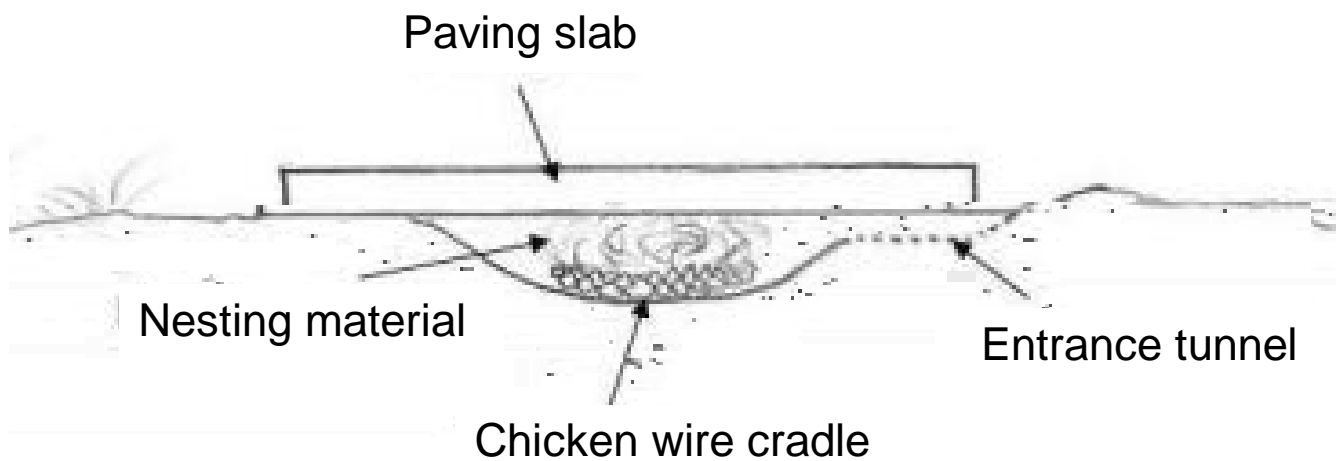


## Design 2

This can hardly be called a design at all! Simply leave a corner of your garden to become overgrown, leave a section of hedge uncut or allow a section of grass to become thick and tussocky. Alternatively, why not leave a wood pile or a mound of earth in a shady corner of the garden?

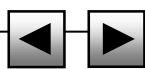
## Design 3

Simply dig a cavity in the ground (roughly 15cm deep and 25 cm wide) and cover with a paving slab or piece of thick plywood. Dig a few channels at the sides to provide entrance holes and ventilation. It should be dry underneath. Try to make the entrance holes as obvious as possible so that the queens find them easily. Again, put a handful of nesting material in the cavity, perhaps in a chicken-wire cradle.



## Commercial nest boxes

These are usually a wooden box, with a hinged lid and an entrance hole at the bottom. We suspect that these are more likely to work if sunk into the ground so that the entrance hole is at ground level. You could try attaching a 30-50cm length of pipe or hose to the entrance hole. Bury the pipe, leaving the entrance as an obvious dark hole in the ground. Put in some nesting material, perhaps in a wire cradle.





## Further suggestions

### Scent the nest site

It has long been suspected that bumblebee queens may use the smell of an old rodent nest as a cue to the presence of a suitable nest hole. Queens may be more attracted to your artificial nest sites if you bait the nest with rodent droppings and old nest material (for example from a pet hamster). We don't know if this will work, but you could try it!

### Leave the nest site for several years

It is noticeable that once a nest site has been used once, it is very often reoccupied the following year. It seems likely that queens searching for nest sites use the faint smell of an old nest as a good indication that the site is suitable for nesting.

### Create as many nest sites as possible

The more nest sites you can provide, the more likely it is that one will be found and used. If they aren't used by bumblebees they will certainly provide homes for other insects and perhaps voles and mice.

## BBCT nest site trial

We're very keen to improve our knowledge of the nesting requirements of the different bumblebee species. We'd really like to find a nest box design that we can recommend, but we aren't there yet. If you install nesting sites or boxes **please register them with us** via a form on our website, or by post to the address below. We'd like to contact you once a year to find out if your nesting sites were occupied.

In addition, if you come across a bumblebee nest anywhere else, please visit our website and let us know the details. There is a simple questionnaire that you can fill in about the nest. In doing so you would be making a valuable contribution to our research.

### **Bumblebee Conservation Trust**

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[www.bumblebeeconservation.org](http://www.bumblebeeconservation.org)

