There are a wide variety of bee hotels for tube-nesting bees on the market that range widely in quality, structure and size. However it is easy & cheap to make your own bee hotel. One way of doing this is illustrated in the below diagram.

**Things you need**
- 2 Litre plastic drinks bottle
- A pair of scissors
- A hacksaw or pair of secateurs
- A wooden fence, shed wall or wooden post
- About 15 metres (16.4 yards) of bamboo or other hollow/pithy stems
- About 1 metre of string
- 2X nails/screws (+/-2x metal washers)
- A hammer or screwdriver
- MUST BE CONSTRUCTED BY AN ADULT

**Constructing your bee hotel**

1. Take an empty plastic bottle and cut 15cm off the bottom to use for your hotel with a pair of scissors. The example diagram uses a 2 litre bottle, but other sizes will work equally well, you just have to adjust the amount of stems used accordingly.
2. Carefully make a small hole in the bottom of the half-bottle with the scissors, making sure you point the end of the scissors away from others and all parts of your body. Thread through some strong string as shown.
3. Collect about 15m (16.4 yards) total length of dry hollow or pithy stems. Stems that work well include dead Bamboo, Elder, Raspberry, thistle, dock, Cow Parsley or other hollow or pithy stems. The larger the range of types & diameter of stems, the larger the number of species that will use your hotel.

4. Cut up the stems into 15cm (6 inch) lengths using a hacksaw or pair of secateurs, depending on the toughness of the stems.

5. Tightly pack the stems into the half bottle. If the stems are too loose birds will destroy the hotel while looking for food. Your bee hotel is now complete.

6. Choose where to put your bee hotel. Bees like it to be as sunny as possible, & it helps if it is sheltered from the wind. Therefore a sunny south-facing fence or wall is ideal. East-facing (sunny in the morning) is the next best thing, and West-facing (sunny in the afternoon) is not too bad. Bee hotels will also do well on masonry or stone walls, but you will need a drill, screws, & rawplugs to do this. The hotel should be at least 1m off the ground so that it is not shaded by vegetation. Putting it at head-height is ideal as it makes it easy to watch the bees using the hotel.

7. When you have chosen your spot, fix in two nails or screws level with each other on a horizontal plane a few cm/inches apart. It often helps to hold the bee hotel in place if metal washers are used to create a larger head on the nail or screw.

8. Tie the bee hotel in place making sure it is level, or the open end very slightly sloping downwards to drain water away.

When to install your bee hotel

Ideally the bee hotel should be put in place by Mid-March and taken down and stored in an unheated shed or outhouse at the beginning of October to keep it out of the worst of the elements to extend its life-span (this is not essential though). If you take it down for the winter, make sure you remember to put it back up again next spring so that the bees can emerge outside!

Other bee hotel designs

By Adam Bates, OPAL Community Scientist. This may be copied for educational purposes.