

How to build a solitary bee home

Most species of bee in the UK are solitary. Many nest below the ground but some species nest in cavities such as old plant stems. Females make individual 'cells' inside the stems to which they add pollen and nectar before laying an egg and sealing the cell with mud or sometimes leaves. The larvae eat the pollen and then spin a cocoon. They remain inside the nest over winter before emerging as adults and chewing their way out of the nest the following spring.



Cell containing pollen and egg



Mason bee cocoons inside the nest

Making a bee hotel is an easy way of attracting solitary bees to your garden or allotment by providing them with nesting habitat. These cavity-nesting bees are important pollinators, particularly of orchard fruits such as apples and cherries, which they visit to collect pollen for their young.

You will need:

- ◆ **Nesting tubes** e.g. dead plant stems, bamboo canes or paper/cardboard straws
- ◆ A **waterproof 'home'** for the tubes - lengths of drainpipe, plastic bottles, tin cans
- ◆ A **bracket or some wire and screws** to attach the nest to a wall or fence post
- ◆ **Chicken wire or mesh** to protect the entrance



Red Mason Bee (*Osmia bicornis*) male (top) and female (bottom).

Building your hotel

An ideal length for nesting tubes is **between 10-25 cm long**, and try to use a **variety of tube diameters** (ranging from 2 to 10 mm)

Pack your nest tubes tightly inside your chosen waterproof housing. It's a good idea to make sure the **tubes are slightly shorter than the housing**, to stop them getting wet!

Make sure the bee hotel is **only open at one end**- if you're using plastic piping, you may need to add a back. If you plan to hang the nest against the wall with the tubes facing outwards then it doesn't matter.

If you can, try to **secure some chicken wire to the entrance** of the bee home to stop birds from pinching the tubes.



Hints and Tips!

Have the hotel up and ready to be used from **February onwards**.

Look out for **mason bee (*Osmia*)** females early in the year, and the aptly named **leaf-cutter bees (*Megachile*)** returning to the nest with perfectly cut discs of leaf in mid-summer. Another sign that your bee home is being used is nesting tubes sealed at the end with mud.

Be patient 😊 It may take some time for bees to start using your hotel, but in the meantime it will provide shelter for other garden invertebrates such as earwigs and woodlice.

Location, Location, Location!

It's very important to put your bee hotel in the right place- ideally **south facing, in a sunny, sheltered position**, not too exposed to the elements.

Position the nest well above the ground- around **5-6 ft is ideal**, and make sure it doesn't move in the wind!

Drainpipe brackets are a cheap and easy way to securely mount your bee hotel, but you can also try using a hook, or some wire and screw in hooks. Make sure there is no vegetation covering the entrance.

