

WHAT ARE SOLITARY BEES

When somebody says the word 'bee', your mind probably springs to an image of a big fuzzy bumblebee, or maybe you think of honeybees, buzzing around their hive. But did you know that...

90% of the UK's 270 bee species are actually solitary bees?

Unlike bumblebees and honeybees, solitary bees build individual nests and work alone. The female builds individual cells in her nest, which for some species are built in underground burrows and tunnels. However, for many other species, their nests are made in hollow stalks or holes in wood, making your new solitary bee hotel a very appealing place for a female bee to build her nest!

An egg is laid in each cell along with a small ball of pollen and nectar for the bee larvae to feed on once they hatch. They then overwinter until they pupate into adult bees in the spring, ready to mate and make their own nests.

Solitary bees are fantastic pollinators and can even be more efficient than honeybees, partly due to their ability to stay active in cooler temperatures. They are also non-aggressive meaning that they are safe around pets and children, making them the perfect garden visitors!

Long-horned bee © Will George

HOTEL RESIDENTS

Here are some of the solitary bee species you might see taking up residence in your new bee hotel:



RED MASON BEE

COMMON
YELLOW-FACED BEE

LARGE SCISSOR BEE

PATCHWORK
LEAFCUTTER BEE

To find out more visit:
www.northsearegion.eu/beespoke
f @BeespokeNSR

Solitary bee images © Will George, Gilles San Martin and Peter Thompson



BEE SPOKE

Benefitting Ecosystems through Evaluation of food Supplies for Pollination to Open up Knowledge for End users

How to make a Solitary Bee Hotel



Interreg
North Sea Region
BEE SPOKE
European Regional Development Fund



EUROPEAN UNION

Solitary bee hotel © Ruby Woollard
Guide written by Ruby Woollard (Game & Wildlife Conservation Trust)

MATERIALS

- Untreated planks of wood
- Dried hollow stems (e.g. sunflower, umbellifers, common reed etc.) Use different diameters from 2mm to 10mm to attract a variety of species – most cavity nesting species require a minimum of 6mm diameter. Bamboo canes are not recommended as they are not very breathable and can become a harbouring ground for pests and diseases.
- Blocks of wood
- Paper
- Hook
- Tools: saw, secateurs, screws, drill



STEP-BY-STEP

1. Make the container that will hold all of your stems and wood.

- We used two pieces of length 15cm and two pieces of length 20cm to create a sloped overhanging roof – this will ensure that rain will fall off and prevent the hotel from becoming wet.
- Make sure your box (and thus stems) is at least 15cm deep.



- Add a back to make sure that only one end of the stems will be open – alternatively, you can block up one end of each of the stems using natural materials such as wax, clay, or mud.

2. Preparing the stems.

- Using the secateurs, trim the dead stems to lengths approximately 1cm shorter than the depth of your box – this will create a small overhang to protect them from the rain.
- Make sure that there are no blockages midway down the tubes so that the full length is accessible.

3. Prepare your wooden blocks.

- Drill holes of varying diameters into your wooden block.
- Insert tubes of paper into each cavity – this makes it easier to clean out pests once the bees have emerged and allows the cavity to be more breathable.

4. Pack the stems and wood blocks into your box.

- Make sure they're packed tightly so it's nice and sturdy.
- You can also add materials like broken terracotta pots, stones, twigs, and pinecones for other invertebrates to shelter in.
 - Sections of packed sand can also be great for mining bees.

5. Attach the hook to the back of your bee hotel.

- Methods will vary depending on which attachment you have.

TOP TIP

If you can't get your hands on some suitable wood, you can make your bee hotel using recycled materials such as a plastic 2 litre bottle cut in half, or even old tins!



SITING AND MAINTAINING

The perfect position for your new bee hotel should have the following properties:

- 1 to 3 metres above ground level.
- Sunny position – south or south-east facing.
- No vegetation blocking the entrance.
- Sheltered from the wind.
- Near to bee friendly flowers and a source of water.
- From October to February, bring your bee hotel into a dry, unheated area, such as a shed or garage to protect the bees over winter.
- In March, put it back out again for the bees to emerge.
- Once they have emerged, you can replace the used stems with fresh material and replace the paper tubes ready for a new generation of bees to find and use as their new home!

