



# Establishing a bee hotel

## Making a bee hotel

A number of bee hotel designs are [available to buy](#), but they are also simple to make using the following materials for nest cavities:

- Cut Bamboo canes
- Drilled logs or untreated wood
- Paper/Cardboard straws
- Dead hollow stems (e.g. Teasels, Reeds, Elder, Raspberries)

These are best stacked inside a **water-resistant frame** (untreated timber or plastic), or can simply be fastened in a bundle.

Use **entrance hole diameters of 2-10mm** to attract a range of bee species.

## Siting your bee hotel

Your bee hotel should be:

- **In full sun, in a south-facing position** to be kept warm.
- **Securely fastened at least a meter off the ground** to prevent damp.
- **Kept clear** of plants or other obstructions.

## Maintaining your bee hotel

**Check that your bee hotel is staying dry.** Repair or replace it if necessary.

Ideally, **replace drilled logs or wooden blocks every two years** to prevent the build up of parasites which can reduce the bee's nesting success.

**Take unroofed bee hotels (e.g. tied bundles of canes or straws) inside to a cool, dry place overwinter** to keep them dry and prevent fungal infection. Return them outside after the frosts.





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# Who's in your bee hotel?

## Mason bees and Leafcutter bees

### Red Mason bee (*Osmia bicornis*)

12mm April-June

Body covered in bristly orange hairs, with a large black head. Males have white hairs on the face and especially long antennae. Builds nest cells with mud walls and plugs the nest hole with mud when finished. A very common resident of bee hotels.



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### Blue Mason bee (*Osmia caerulea*)

7-8.5mm April-July

A small, glossy bee with bristly hairs. Females are black, often tinged with blue, with pale hairs. Males are metallic green/ gold with golden hairs and patterned eyes. Build nest cells and entrance plugs out of chewed leaves.



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### Leafcutter bees (*Megachile spp.*)

12-18mm May-September

Medium-sized, broad bodied bees with a hairy brown head and thorax. The abdomen is mostly bare and black above, with a dense brush of pollen-collecting hairs below. Females cut sections of leaves with their jaws, which they carry back to the nest and fold to make their nest cells. Some males have very hairy forelegs e.g. *Megachile willoughbella* (Inset).



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## Other bees

### Wool carder bee (*Anthidium manicatum*)

12-16mm      May-August

A chunky black bee with striking yellow markings on the abdomen and a border of pale hairs. Builds its nest cells and plugs the nest hole using hairs collected from woolly plants (e.g. Lamb's ear and Mullein).



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### Sharp-tailed bees (*Coelioxys* spp.)

6-9mm      June-August

Nest parasites of leafcutter and mason bees. The banded abdomen has a pointed tip for cutting slits through the nest plugs of the host and laying eggs inside. The larvae feed off the pollen stores gathered by the host bee.



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### Scissor bees (*Chelostoma* spp.)

4-8mm      May-August

Small, slender, black bees with almost cylindrical bodies and large heads. The Small scissor bee (*C.campanularum*) is one of Britain's smallest bees (4-4.5mm) The large scissor bee (*C.florisomme*) grows to 8mm and has distinctive forward-pointing jaws. Build their nest cells and plug the entrance with mud and sand grains.



Small scissor bee

© Steven Falk



Large scissor bee

© Steven Falk

### Masked or Yellow-face bees (*Hylaeus* spp.)

4-4.5mm      May-September

Small, black and almost hairless. Males have a pale yellow 'face mask'. Females have a pair of yellow markings near the eyes. Easily mistaken for a solitary wasp, especially since the females carry pollen in their crop rather than on body hairs. The Common masked bee (*Hylaeus communis*), pictured, is the most frequent in bee hotels.



female

© Ed Phillips



male

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# Wasps

## Mason wasps ( various *Eumeninae*)

10-13mm June-September

Striking black and yellow wasps. Appear similar to social wasps but with a broad, black band on the abdomen and a mostly black head. Build nest cells and plugs out of mud. The female stocks the nest with caterpillars she has paralysed with her sting as food for her larvae.



Mason wasp (*Ancistrocerus nigricornis*) with stocked nest cells.

© Andrew Cutts



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## White-spotted Sapyga (*Sapyga quinquepunctata*)

7-12mm May-July

A small slender wasp coloured black and red with white spots on the abdomen and with long-thick antennae. Males lack the red band. Females lay their eggs inside the nests of mason bees.



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## Jewel wasps (*Chrysididae*)

>10mm April-September

Small, brightly-coloured metallic wasps. Females lay their eggs inside the nests of other solitary wasps and solitary bees where their young feed on the food stores and the larvae of the hosts.

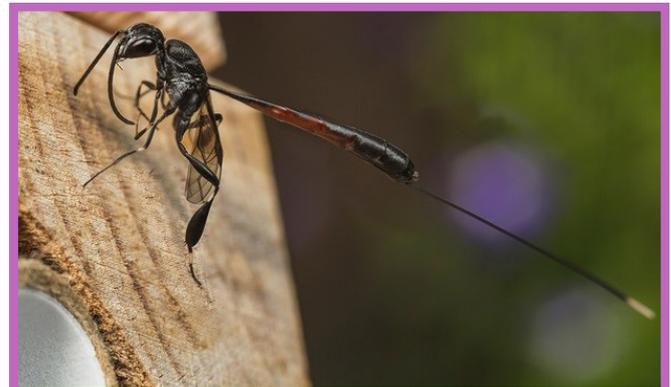


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## Wild carrot wasp (*Gasteruption jaculator*)

10-18mm May-September

A long, slender, delicate-looking wasp with black and red colouration. The female has a strikingly long ovipositor (egg-laying tube) which she uses to drill through the plugs of Mason bee and solitary wasp nests and lay eggs inside.



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