

# Bee hotels for native bees

Nests for native bees in the garden allows people to observe their native bees and help with pollination of fruit and vegetables. A native bee hotel can attract blue-banded bees, masked bees, leafcutter bees and resin bees. They are fun to watch. Native bees are not aggressive and they only sting if you grab them.

Different substrates are wooden bee blocks with pre-drilled holes, bundles of bamboo, hollow twigs or pithy stems and mudbrick blocks with holes.

## A bee block

### The wood

Find a piece of untreated dry wood at least 13cm long. The denser the wood the smoother the insides of the holes will be and the better the bees will like it. Avoid wood with deep cracks, the bees won't use it as it gives parasites easy access.

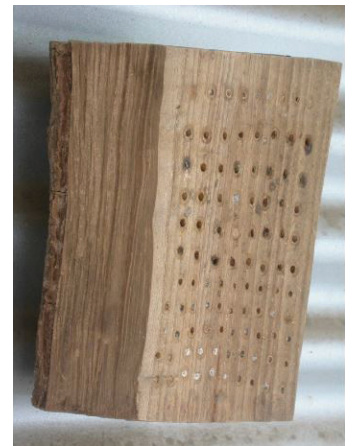
### The holes

Drill holes of a diameter of 3–8mm and a length of 80–150mm in the wood, across the grain. Do not drill completely through the timber. Drill the hole to a depth of about 10–15mm from the back of the block. A variety of diameters will accommodate different bee species.

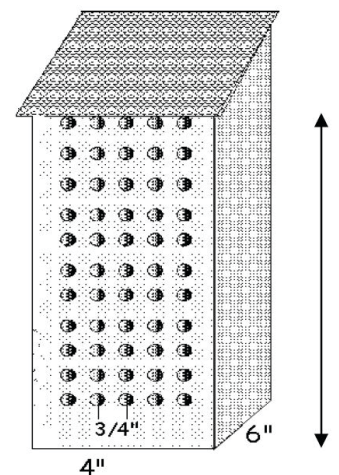
### Finishing touches

Attach a roof to provide protection from the midday sun and rain, or place in a sheltered position in full shade or morning sun. Outside surfaces may be painted or stained but don't use wood preservatives.

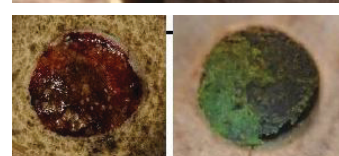
Place or hang the nesting blocks so that bees have open flight access. Fix firmly so that the block doesn't sway in the wind.



*A nesting block hanging in a sheltered spot.*



*The red-tailed resin bee closes its nest with pure resin.*



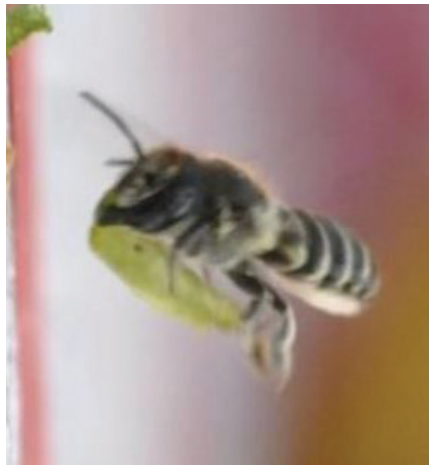
*The golden-headed resin bee uses a mix of resin and chewed leaves.*



*A small resin bee closes her nest using resin and small bits of mud, wood or stones.*



*The nest of the common wasp mimic bee (below).*



*A leafcutter bee uses pieces of leaf to protect her developing offspring.*



*Masked bees make a sort of cellophane to protect their offspring.*

## Bee bundles

### Bamboo

Use small iron saws to saw off stretches of bamboo of different inner diameters (5–8mm) at the node. Make sure the open stretch is at least 10cm. Clean them out with a skewer and bundle them with 10–15 using rope or zip ties. Hang in a sheltered position, for example under an eave or a branch.

### Twigs with pithy stems

Some bees, such as small carpenter bees, like to dig their own nest. Prune shrubs leaving a length of branch with pithy centres on the plant. Alternatively, stand pruned twigs with pithy stems in existing shrubbery in the shade. Most bees prefer that to the sun.



## Mud brick

Some bees, such as blue-banded bees, dig their own nest in clay rich soils. You can make small blocks by using 10cm stretches of 90mm square pvc stormwater pipe as casings.

Mix red Adelaide clay soil (without stones or coarse sand grains) with water to a thick paste. Fill the pipe pieces with the clay. After some drying, use a pencil to poke holes (6–7mm in diameter, 6–10cm long). The clay should still be wet, but firm enough so that after withdrawing the pencil from the tunnel, it should keep its inner diameter.

Drying time depends on temperature and the thickness of the clay paste. Slide the block out of the casing. These blocks can be placed in existing stone walls, but should be protected from the rain.



## Nesting wall

To make a nesting wall, fill large or small besser blocks with clay. Make sure the clay fills the space, remove air bubbles. After some drying, poke holes of various diameters in the blocks. Use the filled besser blocks to build your wall.



*Photo credit: Marc Newman*

## Nesting boxes

Make a nesting box with various substrates.

## Maintenance

Find out what the bees like to use and supply more of that type in the next year. Every three years, remove some of the old substrate. Now and then remove cobwebs.

