

Native Bee Hotels

Most of us, when we think of bees, think of the introduced European honeybee *Apis mellifera*, but Australia is also home to around 1500 species of native bees. Some, like the stingless bee *Tetragonula carbonaria*, form hives and produce honey, but most Australian bees are solitary and nest either in the ground or in small gaps and hollows in timber and stone. All bees are pollinators, although some are able to pollinate a wider variety of plant species than others; some species, like the native blue banded bee (*Amegilla cingulata*), are particularly valuable pollinators for food crops, and are a boon to gardeners and farmers alike.

So how can we attract more of these oh-so-helpful solitary bees into our gardens? By building them a hotel of course.

Bee hotels are collections of tiny hollows for the use of solitary bees looking for a good place to rest up and deposit some eggs. The wide-scale land-clearing that has occurred in Australia in recent decades has resulted in a general decrease in the number of trees with nice flaky bark and small splits in their branches to be found across the landscape in many areas, along with a decline in the amount of deep leaf-and-bark litter that helps protect ground-nesting bee species. Bee hotels provide great alternative nesting sites, with the added bonus that they're fun to make and add a quirky feature to your garden. Check out the fabulous insect hotel Grong Grong locals made from reclaimed items at the Grong Grong Earth Park.



Insect hotel at Grong Grong Earth Park

So how do you make a bee hotel? There are a number of ways, depending on what materials you have on-hand and which species of bees you'd like to accommodate.

Found objects, clay, hard-packed sand, timber off-cuts, bamboo, sticks, bark, old pots, house bricks, lengths of piping, and even reeds can be incorporated into a bee hotel.

Here are some examples of different bee hotels I've found around the internet:





You can find out more about these hotels and many others from the following sites - have a browse and pick a style you'd like to include in your own garden at home:

The Pollinator Garden - <http://www.foxleas.com/>

The Permaculture Research Institute - <http://permaculturenews.org/2013/10/08/building-insect-hotel/>

Sustainable Gardening Australia - <http://www.sgaonline.org.au/insect-hotels/>

National Geographic - <http://education.nationalgeographic.com/media/build-your-own-bee-hotel/>

Little Eco Footprints - <http://www.littleecofootprints.com/2014/05/how-to-build-a-native-solitary-bee-hotel.html>

Here's one simple way using sticks and timber off-cuts:

Start by collecting a bunch of sticks and very small logs, that you can drill into or otherwise remove the centres from (bamboo is good), make sure you use untreated timber, as chemically treated wood is toxic to most insects. How many sticks you use, and how long they need to be will depend on how big you want your bee hotel to be, but try to keep them a similar length to each other, and mostly between 10 and 20mm diameter, although having a bit of variety of width is good.

Now for the fiddly bit – you will need to drill holes into the blunt ends of your sticks, or remove the centres if you're using bamboo or something that can be hollowed out without drilling. The holes should be a variety of widths, anything between 3mm and 10mm wide is good, and the deeper the better, so the bees can snuggle right in away from the weather and any predators that may be lurking about. Smaller twigs can simply be bundled together, no drilling required.

Tuck your sticks securely into a box or frame, with the drilled ends pointing outward. Make sure the sticks are snug enough to stay put, but that they still have some gaps between them, as this will provide even more little nooks and crannies for your bees to use. For a smaller hotel you can use an old wooden box turned on its side, or make one up yourself, and for a larger hotel you will need to construct a timber frame with several shelves to hold all your sticks; drilling some holes into the box or frame will add even more little 'rooms' for your bees. Having a back on the box or frame can help reduce drafts through the structure when it is complete (even bees don't like a draft when they're trying to get cosy at night), while adding a lid of corrugated iron over the top will help keep the rain out as well.

Set your completed bee hotel up on a stump or a post in your garden, somewhere where it will get lots of sun, particularly in winter, and close to your veggies and fruit trees. Your local bees will thank you, and so will your garden.

Here are some of the bee hotels built by members of the Narrandera Landcare Food Garden at a workshop held in 2015:



This article was written by Kimberley Beattie and originally posted on the blog of Narrandera Landcare Food Garden - <http://narranderafoodgardening.blogspot.com.au/>