

## How to build a Native Bee Nest Box

Of all the bees native to North America, about 30% use some kind of tunnel in which to lay their eggs. The diameter of the tunnels, as well as their preferred length, varies with the different species of bee. So, to attract a wide variety of native bees, it is best to use a wide variety of tunnel sizes.

The most popular bee tunnels range from about 3/32" to 3/8" wide. The narrower ones are usually shorter (about 3-5 inches) and the wider ones are longer (up to 6 inches). These numbers are not exact, so approximations work fine. The tunnels are easily made with a long drill bit in blocks of lumber or in the ends of bucked logs. Important points to keep in mind:

- Use untreated wood
- The tunnels should be as smooth as possible
- The holes should not go completely through the wood (one end remains closed)
- Try to clean the holes and take the burs off the opening with a round file.
- If you drill the holes at a slight upward direction then you don't need the top to keep the water out. A 2X 6 untreated wood is easier to saw. If all you have is a 2X4 than use it.



Photo at left is an example of a bee block with 5/16 inch holes for larger bees and tubular reeds or paper straws for smaller bees.



This box is made using a cut-off old flower box with 6 inch lengths of tree trimmings that may be discarded or disinfected after the bees leave in the spring to prevent disease.

Although most native bees are solitary in the sense that one female raises a family by herself, the members of a species like to live near to one another. Hang your bee boxes at least three to four feet off the ground so they don't disappear among the weeds and snow. Early morning sun is okay, but the boxes should be protected from direct afternoon rays. Add a small overhanging roof to keep out the rain. Mount the boxes on a steady structure rather than one that sways in the

wind. That's really all there is to it. For maximum protection against disease build-up, boxes can be sanitized with vinegar at the end of the season after the next generation emerged or replaced altogether after two or three seasons. Paper straws may also be used if you seal up one end.

<http://www.rootsimple.com/2012/08/how-to-make-a-native-bee-nesting-box/>

<http://www.ext.colostate.edu/sam/bees-nests.pdf>

<https://www.youtube.com/watch?v=HWv3HrVoXZs>



This is a box made with using an scrap piece of 2X6 lumber untreated with insecticide. I like to drill the holes on a slight incline upward so waters doesn't run into the drilled holes as shown by the black markings.



In late summer and fall, bees seal up the holes with natural plaster made from a variety of materials including moss, mud and their own bodily mixture to protect the next generation from the rain. Some people use paper liners in the holes for disease management. They may also choose to bring the box inside a cold garage in the cold winter months for additional protection.

This information compiled by Jack Speer [smallwaters.org](http://smallwaters.org)

Thanks to <http://www.nativebeeconservancy.org/> for a great source of information and photos