



## BUILD YOUR OWN NATIVE BEE HOME

While there are no native honey bees in our area, in Vermont we have around 300 species of native bees. These native bees are pro pollinators – one Cornell study found native bees pollinate 2-3x more than honey bees! Most of our native bees, including Mason and Leaf-Cutter bees, are solitary. This means that instead of living in a hive, they find tiny holes in trees, stems, or rotting logs to lay their eggs inside. They feed their young larvae with pollen. Because these bees don't make honey or have a hive to protect, they very rarely sting. We can support these endangered helpers by building homes for them. And remember, for every third bite of food, thank a bee!

### Materials needed:

- Recycled paper: while it can have ink on it, it should be clean; newspaper might not be safe for the bees because the ink can come off easily and might harm them
- Pencil
- Plastic bottle
- Duct tape, Scotch tape
- Sharp knife or scissors (have an adult do this part)
- Durable twine (long enough for hanging the house up)

**Step 1 MAKE YOUR BEE HOUSE STRUCTURE:** Ask an adult to cut the opening end off the plastic bottle so that it measures no longer than 6" in length. Recycle the top piece. Cover the cut rim with duct tape so it is not sharp.

**Step 2 ADD TWINE TO YOUR BEE HOUSE:** Ask an adult to make a small cut on the side of the bottle, close to the uncut end. Thread one end of twine through this slit and through the large opening of the bottle. This twine will be used to hang up your bee home (do not tie the ends of twine together until you are ready to hang it up).

**Step 4 CREATE ROOMS FOR YOUR BEE HOUSE:** With an adult, cut your paper so it is the same length your plastic container is now (~6"). Roll each piece of paper around a pencil. Tape the loose edge shut but leave both ends of the tubes open like a straw. Repeat this step until you have enough tubes to fill the plastic bottle – it should be a snug fit! Be sure that the paper does not stick out the open end (if it does, you can trim it).

To increase the number of different species in your bee home, vary the opening width of the tubes. Some native species can fit in a tube that is 4mm in diameter! That's about the width of the wire on a coat hanger.

**Step 5 HANG YOUR BEE HOUSE UP:** Find the right location! Ideally, hang your bee home near a native plant garden or fruit trees. It should be angled slightly downward so the opening doesn't get rained on, and it should be sheltered from wind and harsh sun. Hanging it under a tree limb snug against the trunk works well. Then sit back and enjoy watching these busy bees buzz in and out of their homes!

### Video demonstration:

Mason Bee House: <https://www.instructables.com/DIY-Mason-Bee-House-great-for-Kids-and-Gardens/>

### Further reading:

Crown Bees - Bee Knowledgeable: <https://crownbees.com/bee-knowledgeable/>

Xerces Society - Wild Bee Conservation: <https://www.xerces.org/endangered-species/wild-bees>

Planting for Pollinators: <https://kidsgardening.org/resources/planting-for-pollinators/>

### Community science opportunities:

The Great Sunflower Project: <https://www.greatsunflower.org>

The Vermont Wild Bee Survey: <https://val.vtecostudies.org/projects/vtbees/>