

Bee Nest Box Guidelines



New Hampshire is home to hundreds of species of native bees. Many of NH's native bees are cavity nesting mason bees and leafcutter bees. These bees lay their eggs in narrow cavities within dead trees or hollow stems. Many will also nest in artificial nest boxes that can be easily constructed and installed in areas where we wish to provide additional nesting habitat.

Making bee nests is not an exact science. There is much that we do not know about the specific nesting habits and requirements of our many local bee species. When constructing nest boxes, it is important to remember that there are many types of bees, and providing cavities in a mix of sizes can help accommodate a wide diversity of bee species.

What type of wood should I use?

- Both hardwood and softwood can be used for nest boxes, but avoid pressure treated wood.
- Wood should be seasoned. Fresh-cut wood will wick moisture from the eggs as it dries.
- Nest boxes can be large or small.

How big should I make the holes?

- Use a mix of hole sizes ranging from approximately 1/8" to 1/2" (the Blue Orchard Bee prefers 5/16")
- Leave space between holes for bees to land and maneuver. Space holes approximately 3/4" on center.
- Narrow holes should be 3-5" deep. Wide holes should be deeper. Deeper holes allow for more female eggs to be laid, which leads to larger bee populations.
- Holes should have closed backs. Most mason bees will not nest in open-ended cavities.
- Holes should have clean smooth edges. Bees do not like to nest in rough splintery cavities.
- It is ok if other insects take up residence in your bee nest box.

Where should I hang the nest box?

- Hang the nest box with the holes facing east or southeast to receive morning sun and afternoon shade.
- Protect the cavities from rain by installing a roof or angling the holes slightly downward.
- Place your bee nest near a landmark – a tree, a shed, etc – so bees can easily return to the nest after foraging trips.
- Attach the box firmly so it does not blow in the wind. Movement can disturb the developing bees.
- Some bees nest in early spring, others later in the season. Hang your nest box early to accommodate early spring nesters.
- Place nest boxes at least a few feet off the ground to avoid cool damp air at ground level.
- Nest boxes may be left out all winter or stored in an unheated garage or shed.

Check your nest box regularly. Watch for bees entering and exiting the cavities. You will know that cavities have been filled with eggs when they become plugged with mud, leaves, or other materials.

Thank you for helping to support NH's native bees!

Questions? Contact Amy Papineau, UNH Cooperative Extension, 603-796-2151 or amy.papineau@unh.edu.

