

Orchard Mason Bees are native to the Pacific Northwest, but in urban bee houses they face challenges unknown in the wild in the past. In our native rainforest, bee-sized holes and flowering shrubs are fairly dispersed, so our native bees were too. Living in the more crowded conditions of “bee condos” and urban gardens crammed with flowering plants, diseases and parasites have more opportunity to spread. Similarly, predators such as woodpeckers may regard your nesting block, with its ranks of holes filled with bee larvae, as a tempting smorgasbord! A little attention in summer and fall can greatly improve your bees’ return rate year after year.

Here’s what our mason bee vendor does to maximize his bees’ survival:

In late July or early August, when the bees have pupated, I collect my bee houses and **gently** move them to an area protected from hot direct sun and from woodpeckers. A homeowner could also construct a protective screen around the nesting block to keep woodpeckers from gaining access. If your bee house is a style that does not allow you to harvest your bees, you should keep the house protected from birds and from extremes of temperature (but exposed to normal seasonal temperature swings) until you move it to your spring location.

If you are going to be collecting and inspecting your bees (recommended!), you can start that process in early fall; I usually do it in mid-September.

Here are the steps I use for houses that are made up of blocks that can be separated.

### **HARVESTING & CLEANING THE COCOONS**

1. Separate the blocks and gently remove the bee cocoons from each block. Set the empty blocks aside (we’ll get back to them later.)
2. Inspect the cocoons; remove any that are C-shaped or chalky.
3. Prepare a very mild bleach solution to wash any mud, fungal spores, and mites off the cocoons. I use about one cap full of bleach per gallon of COLD tap water.
4. Take a handful of cocoons and drop them in the bleach solution. Swish them around in the solution for about 30 seconds, making sure that all the cocoons get completely submerged.
5. Remove the cocoons from the solution and rise them in cold clean tap water for about a minute.
6. After rinsing them, place the batch of cocoons on towels or paper towels to dry.
7. Repeat this process until you have inspected and cleaned all your cocoons.

### DRYING AND STORING THE COCOONS

1. My next step is to take the cocoons and place them in a plastic tray with paper towels to dry in my refrigerator at about 40 - 45° F for about two weeks. I do this like making lasagna: four or five layers of paper towels, a layer of cocoons, more paper towels, more cocoons.
2. After two weeks, I pull the trays, remove the paper towels, and put the mason bee cocoons back in the refrigerator between 35° and 45° F to store until spring. If your refrigerator is frost-free, store them in a plastic container with a moist cloth to provide humidity, and check periodically for signs of mildew.
3. Put the bees out about two weeks before you expect to need them for pollination.

### CLEANING THE BEE HOUSES

1. Prepare a stronger bleach solution: three or four caps full of bleach per gallon of cold tap water.
2. Drop the blocks in the solution and let one side soak for 30 seconds or so. Then use a brush (I use an old tooth brush) to scrub any mud and debris off the side that was in contact with the solution. Drop the blocks back in the solution with the cleaned side up, and repeat for the other side. (I do this in batches of five because that's how many my washtub holds.)
3. When both sides are clean, rinse in clean water for about two minutes.
4. Repeat until all blocks have been sanitized.
5. Store your blocks in a clean dry place for at least one week so they can dry completely before you reassemble your bee houses.
6. Once they are completely dry and the scent of the bleach has dissipated, reassemble and store until next spring.

If you are using bee houses that have straw inserts, you can clean those houses using the same bleach solution as for the bee blocks. Be sure to let them dry and air completely before inserting fresh straws.

Remember to clean your bee houses early; I find that bees do not like the smell of freshly bleached houses!