

The mason bee



There are many different kinds of pollinators. You already know about honey bees, which gather nectar and pollen from flowers, then deposit honey into honeycombs in their hive. © Valerie Littlewood

The **mason bee** (*Osmia lignaria* in the Pacific Northwest) doesn't have a hive. It doesn't create honey. But it does one thing even better than the honey bee. It pollinates the plants that produce a lot of the food we eat. If you eat apples, pears, cherries, nuts and berries, chances are mason bees helped produce them.

Where does the mason bee live?

It might live right in your back yard, especially if you have fruit trees around. Instead of a hive, it nests in holes in wood or straw, or in "bee houses" people put out for them.

What does the mason bee eat?

When it hatches from an egg, the larva eats a "power bar" that its mother has provided for it made of pollen and nectar gathered from flowers. The mother bee might make as many as 30 trips back and forth from the hole to the flowers to provide for each egg she lays.

What does it look like?

The mason bee might look like a house fly, unless you observe carefully. It has a similar blue-black color like a house fly, but its wings and body are different, and so is its behavior.

Do mason bees sting?

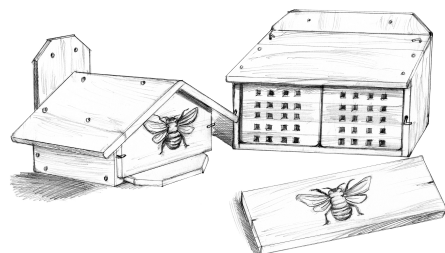
The male mason bee has no stinger. The female has a stinger, but she would use it only if she's accidentally trapped or squeezed. Unlike a honey bee, she has no hive or queen to defend. For that reason, mason bees are described as "gentle" bees, and they're fun to watch and have around. They're also called "solitary" bees, because each female is, in effect, a queen, laying eggs and providing food for her offspring.

What is the mason bee's life cycle?

Like all insects, the mason bee starts life as an egg that hatches a larva. The larva eats and grows until it spins a cocoon around itself. Inside its cocoon, it transforms into the adult insect. When the time is right in the spring, the bee emerges from its cocoon ready to go to work. The adult female bee lives for about six weeks while she works extremely hard to provide for the next generation of mason bees.

How can people help the mason bee?

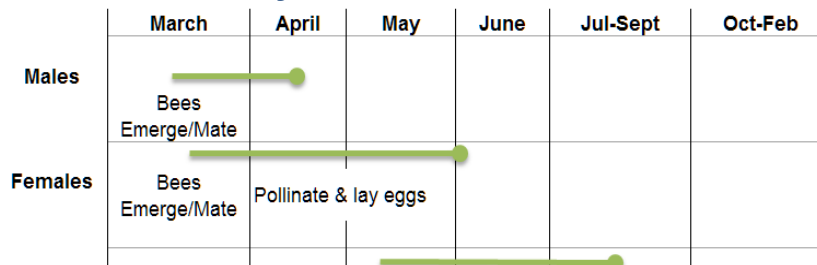
In the spring, people put out holes the female mason bee can use to lay its eggs in. Tubes with paper straws in them, plant stems and wood trays are favorite places for the mason bee. Then in turn, the mason bee provides us with pollination for our trees and gardens, helping to produce the food we eat. Plus, they're just fun to watch and learn about.



Tips for mason bee success in your yard

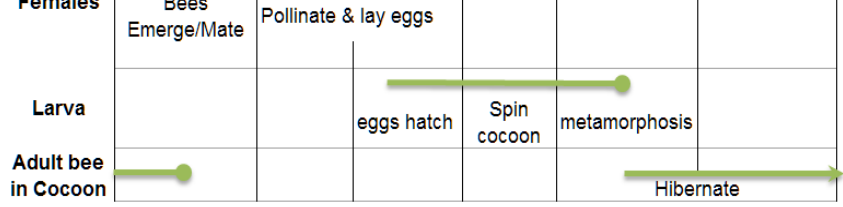
- Put out your mason bee cocoons when temps are consistently mid-50's, typically **late-March to early April**. Look around your block to ensure there are flowering trees and plants in bloom to provide your bees plenty of food. You can put your cocoons out in stages, like half in late March and the other half two or three weeks later.
- Place your bee house in a **south or east facing location** to catch the morning sun. Fixing them 2-3 feet or more above ground makes it easy to watch and care for them. Put your cocoons in their wake-up container (with an escape hole) near the nesting holes.
- Provide about as many **holes or tubes** as you have cocoons. Each female can fill two or three holes, and your population can easily triple or quadruple in one season.
- Mason bees **must find mud** to seal their nest chambers and plug their holes! They like wet clay soils. Expose the soil in a couple of places near your bee house to make it easy for them. Moisten it if it dries out.
- Take time to **watch your bees at work** during April and May.
- **By May 15, discard any unopened cocoons**. They may harbor pests.
- When the holes are plugged and your bees are done in June, leave your bee house alone for a few weeks, then gently move it in July or August to a **protected place** such as a shed or garage that shares outdoor temperatures. Best to put it inside a wasp-excluding net (or breathable fabric).
- In the fall and early winter, open your tubes to **remove the cocoons** and clear out pests. The main pests to watch for are pollen mites, mono wasps, Houdini flies and chalkbrood.
- Place your cocoons **in the fridge over the winter**, until they are ready to fly again in the spring. A vegetable drawer works well. Since a fridge dries things out, it's important to keep a damp sponge near your bee cocoons, but don't get the cocoons wet.
- **Learn more** about caring for your bees. crownbees.com is a great resource.

Mason bee life cycle



The mason bee needs three things to thrive:

1. **Food** from blooming trees, shrubs and other flowers



1. **Food** from blooming trees, shrubs and other flowers
2. **Nesting holes** sheltered from the rain
3. **Mud** from wet clay soils

From *Mason Bees for the Backyard Gardener*, by Sherian A. Wright