

Mason Bee Trivia

One female mason bee is equivalent to 100 honey bees!

The female mason bee can control the gender of her offspring by choosing to fertilize or not. Fertilized eggs become females.

Mason bees prefer holes at least 6" long and 5/16" in diameter.

Male bees are laid toward the front of the nest hole because they need to hatch first in order to be available when the more critical females hatch.

Mason bees usually live for a year, although humans only see the active adult stage, which lasts about 3 to 6 weeks.

Mason bees only travel 100-300' from their nest, about the length of a football field.

Mason bees need trees and flowers that bloom from February to June.

Mason bees need mud with high clay content to construct the walls between their cocoons.

Bee Buddies Program

The Bee Buddies Program is designed to care for and increase the population of native mason bees in Benton County. We loan nesting kits to gardeners and fruit growers who want to boost fruit yields and support native pollinators and their natural habitats. We make sure the bees are properly maintained during their life cycle, so Bee Buddies can reap the rewards without worrying about the details.

We're here to help!

We are here to answer your questions and would be happy to arrange presentations for your neighbors.

Call or email us

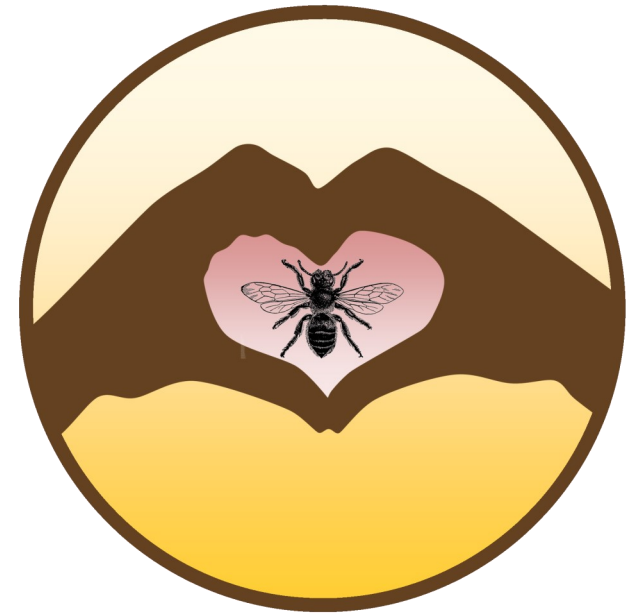
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Visit our webpage

bentonswcd.org/programs/plants/native-plants/bee-buddies/

www.bentonswcd.org

Mason Bees



Get to know these gentle native pollinators.



Pollinators are in decline, but you can help. Native mason bees are solitary bees that are easy to support in your home garden.

What's in a name?

Mason bee, orchard bee, blue orchard bee, and spring mason bee are all common names for *Osmia lignaria*, a bee native to North America. The name mason refers to their use of mud in constructing their nests. They carry the mud in their mandibles. *Osmia* means smell or odor and refers to the lemony scent mason bees use to mark their nest hole entrances. Researchers have discovered that even if a mason bee's nest hole is moved, she can find the right one based on its scent.

Meet the bees

Mason bees are frequently metallic green or blue to blackish. They are 3/8-5/8 inches in length. Males are smaller than females and have light-colored hair on their face.



At left, female mason bee on apple blossom.

The life cycle

Spring Fully formed adult bees emerge from cocoons. Males emerge first. Their sole duty is to mate with females. The females then forage to provision their nest holes. They place a loaf of nectar and pollen in each cell, lay an egg on top of it, and wall off the cell with mud, continuing until the cavity is filled. Female eggs are laid in the back of the nest and male eggs are laid toward the front.

Summer Each egg hatches into a larva and feeds on the pollen-nectar loaf. When the larva is fully grown it begins a resting stage. It then spins a silken cocoon and changes into a pupa. By the end of summer, it has transformed into a fully developed adult.

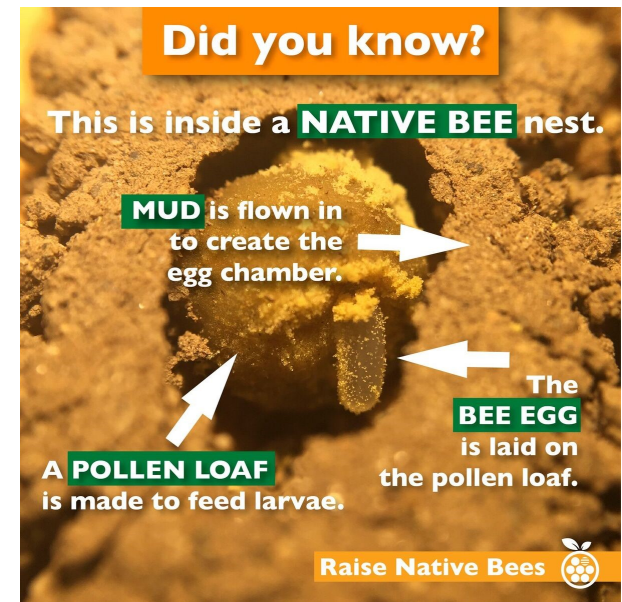


From left: larva, pre-pupa, pupa, and adult.

Fall and winter Bees remain in their cocoons in a state of dormancy until spring when the temperatures are about 55° for a few days. Chilling seems to be a requirement for maturation.

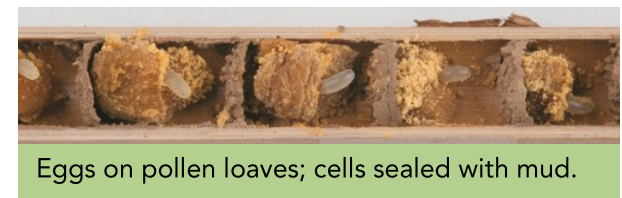
Photos above and at right courtesy of USDA, W.P. Kemp, and J.S. Wilson.

Inside a nest hole



Female mason bees take between 15 to 35 trips to gather enough pollen to provide for just one egg. The bee visits about 75 flowers each trip, for a grand total of 1,875 flower visits for just one egg. The females can lay two to three eggs per day. She will lay somewhere between 10 and 15 eggs before she is done.

Nesting holes generally hold between 5 to 8 egg cells. Once full, the female bee seals off the entrance to the nest hole.



Eggs on pollen loaves; cells sealed with mud.