

Orchard Mason Bees are gentle pollinators of our early blooming landscape plants, tree fruits and some berries in Kittitas County.

- ◆ Mason bees look like black flies, but flies have two wings and bees have four wings. Mason Bees are fuzzy, blue-black, and smaller than a honey bee. The males have a white dot on the top of their head.
- ◆ Mason Bees don't sting or bite because they lead solitary lives without a hive to protect. They do like to nest close to each other. They also don't mind humans getting up close to look and watch them work, making great educational projects for children.
- ◆ All adult Mason Bees feed themselves only with nectar. Females gather the high-protein pollen to feed their young during hibernation.
- ◆ The earliest native bees seen in spring, they emerge from hibernation when daytime temperatures reach 50-55 degrees for several consecutive days.
- ◆ Native to North America, Mason Bees are at extreme risk from disease and mite populations brought in by European Honeybee keepers.
- ◆ Mason bees are not destructive. They do not bore holes or destroy wood, but instead look for ready-made sites. Their nests can be woodpecker holes, abandoned tunnels of wood boring beetles, or Mason Bee houses put up by caring people.



**For more information
visit the Master Gardener
Diagnostic Clinic
May through September
Tuesdays 11:30 a.m. - 2:30 p.m.**

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Orchard Mason Bees:

The Gentle Pollinators



Orchard Mason Bee Life Cycle

- ◆ The female marks her chosen nesting hole with her scent, fills the back with mud, and then makes 15 to 25 trips with nectar and pollen. She lays her egg in the middle and seals the cell with a thin mud plug. She continues creating one cell per egg until the hole is nearly full.
- ◆ Mason Bees can select the sex of their eggs. Females are laid in the far back of the hole and the males in the front.
- ◆ When the last egg chamber is filled, she leaves a gap (about the length of a woodpecker beak) and then seals the hole with an extra thick mud plug.
- ◆ It takes about one day to create each egg chamber. After laying approximately 34 eggs, the female Mason Bee dies.



- ◆ Males emerge from the nest by chewing out the thick exterior plug, and then their own individual cell plug. They forage for nectar, building up energy for when the females emerge several days later. Males die off quickly after all the females are mated.

- ◆ A female's short lifespan can be extended if the weather is inclement. When daytime temperatures fall below 55 degrees, she cannot fly and will rest in the nesting hole (as she does at night) or will sit in the sun until her body warms.
- ◆ Larvae hatch and feed from stored pollen during spring. They spin a cocoon and pupate within the cell, spending the winter hibernating in their adult form.

Mason Bees Are Good Pollinators

- ◆ Honey bees have less body hair and generally pack pollen neatly in carrying sacks on their legs for transport to the hive. Mason bees have stiff hairs on their abdomen that they stuff with pollen.
- ◆ The native Mason bee visits many more blossoms than the honey bee does. They dust their pollen-filled underside everywhere they go, and pollen sticks to all parts of their hairy bodies.
- ◆ Mason bees wake up and begin flight at about the same temperature that apple blossoms open and are ready for pollination.

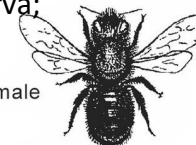
Orchard Mason Bees will not generally travel more than 100 yards away from the nest, so if one element is removed they will go elsewhere

Simple habitat requirements:

- ◆ A hole to nest in;
- ◆ A supply of nectar and pollen for the larva;
- ◆ Water and a mud supply.



Male



Female

Cultivating Orchard Mason Bees



- ◆ If you have provided habitat but want to insure or control nesting locations, you can make nesting blocks for them.
- ◆ Take a block of untreated lumber and using a very sharp drill bit, drill 5/16" diameter holes to about 6" deep. Drill on 3/4 inch centers. Don't drill all the way through the block.
- ◆ Keep nesting blocks clean. After the bees emerge from their nests provide clean nesting holes for the new generation so they remain free of bacteria or parasites.
- ◆ It is perhaps best to make new blocks each year, but you can clean them by passing a 5/16" drill through the hole then washing with a 10% solution of bleach water; let dry thoroughly for use the following year.
- ◆ Another option is to buy paper straw liners that are inserted into purchased or homemade Mason Bee houses.