

## Blue Orchard Mason Bees

There are about 140 species of *Osmia* in North America. There are many other species of Mason Bees around the world. The unique mud-building behavior of these Mason Bees leads to their common designation as masons. Blue Orchard Mason Bees are dark metallic blue and are often confused for common houseflies. The male Mason Bee has white markings on his head.

Mason Bees are gentle and non-aggressive. They sting only if trapped. Their sting is more like a mosquito sting and does not cause anaphylactic shock. They are beneficial pollinators of fruit trees, some berries and other crops. They are valued because they are native to the Northwest and self-sustaining with minimal maintenance and, therefore, low cost.

Mason Bees are solitary with each female being a queen tending her own brood instead of the hive/social nature of honeybees with one queen and many worker bees. Mason Bees emerge from their cocoons in early spring. The males mate over a two week period and die. The females go on to collect nectar and pollen, which they use to build nests in tubes or holes of the proper width and depth. Each female will lay about 30 eggs in holes they find, long enough to support and protect their eggs. Mason Bees are opportunistic when it comes to where they build their nests. They do not chew or create the holes for their nests. They use what they can find.

Females collect and carry pollen on their bellies rather than on their hind legs like honeybees. They bring it to their nests and knead the pollen into a ball, mixing it with the nectar and their own saliva. Once they have a food store that is big enough, they lay an egg on top of the food and seal-off the chamber or cell with mud.

Female Mason Bees can lay both female and male eggs. They will lay the female eggs towards the back of the nest and the male eggs towards the front. Mason Bee eggs become larvae, which then go through metamorphosis turning into new Mason Bees. In the spring when it warms, they hatch out of their cocoons and immediately begin their annual life cycle again. When colder, wetter weather prompts honey bees to remain in their hive, mason bees are actively foraging.

# Houdini Fly

(*Cacoxenus indagator*)

A new “bad guy” in the area, the Houdini fly sneaks into the mason bee nest when the female is out gathering nectar and pollen. After the Houdini fly lays her eggs, she leaves and her larva use the developing mason bee as a host.



The best way to eliminate this fly is to purchase mason bee cocoons that have been cleaned and are not still in nesting material. If you do have cocoons in straws and nesting material, plan to “harvest” them in the fall to remove any parasites (especially the Houdini fly). There are classes in October to help with this process. Check with WSU Extension Office.