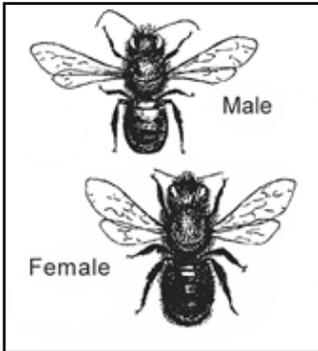


Mason Bees in the Garden



Bees! What comes to mind when you think of those buzzing little critters? Perhaps you're reminded of the troublesome "bees" (actually yellow jackets) that ruin your late summer picnics. Or maybe you've been following the headlines about the crisis hitting honey bee populations as Colony Collapse Disorder and various pests take their toll. But did you know there are about 4000 native species of bees in North America? About 30% of these are solitary wood nesters, one of which is our native Mason bee (*Osmia lignaria*). This small, gentle, solitary bee is garnering attention in the Northwest as orchard growers and backyard gardeners look for other pollinators to replace the declining honeybee populations.

Here on the SU campus, we have installed five bee block houses this spring to encourage the Mason bee to make its home here. What about the potential for a swarming, stinging mass? None at all, for the Mason bee has a very different lifecycle than most of the bees that we're familiar with. Rather than living in colonies, this non-aggressive bee is a solitary nester that has no hive to defend and therefore rarely stings. The male, in fact, has no stinger at all. He lives only a few weeks in the spring to mate with the female and then he dies. The female Mason bee spends most of her life within the nest, emerging in mid-March to mate; gather pollen and nectar and begin the task of finding a suitable nest site. In the wild, she'll look for holes in tree trunks bored by beetles, or hollow-stemmed twigs like the native Elderberry. The human contribution to nest options is the wood or plastic bee block (see photo). The plastic block makes for easier cleaning to control for mites that compete with the larva's food. Once the female chooses her nest site, she lays her eggs, providing each egg with a store of pollen and nectar, and walls off the cell with mud. By mid-summer, she's finished with her work and dies, leaving a cavity filled with eggs that develop into larvae that pupate and rest in cocoons, all within the nest cavity until the next spring when the cycle begins again.



This is an insect that lives side by side with us. It's small, about two thirds the size of a honey bee, shiny blue/black, and looks very much like a housefly. You've probably seen Mason bees dozens of times and never realized it's a bee, not to mention a fantastic pollinator, working at lower temperatures than most honey bees, emerging earlier in the day and staying out later in the afternoon to get her work done during her short life.

The flowering plants on campus provide the nectar and pollen and our water features provide a source of mud for these native bees. In turn, the Mason bee pollinates those plants that set seed and form fruit to feed the many species of birds that we depend on for natural pest control on campus. It's all part of our ongoing efforts to support a species-rich, balanced ecosystem here in our urban oasis.

Question: Why are the plastic trays different colors?

Answer: This helps orient the female Mason bee to her chosen nesting hole.