

The Pollinator Hotel

You might be wondering, “What is the big box in the back of the orchard?” Well it is called a pollinator hotel. Pollinator hotels are designed to attract and provide nesting sites for solitary bees. As opposed to honey bees and bumble bees who live in hives, solitary bees tend to make their nests in the ground and in tiny cavities like you see in the hotel.

Differences between Social bees and Solitary Bees

Social Bees

- Include honey bee and bumble bee species
- make up about 25% of the approximately 4000 bee species in North America
- Typically live in groups in hives
- “Gatherers” of pollen, then carry it back to hive on hind legs, leaving less to pollinate flowers they visit.
- Honey bees travel up to 2 miles from hive

Solitary Bees

- Include Mason Bees and Leaf-cutter bee species
- Make up up to 75% of bee species in North America
- Typically live in the ground or in small holes in trees or reeds or some other tiny opening.
- Considered “Spreaders” of pollen. They require less pollen as a food source. They typically get pollen all over their bodies which quickly falls off in each of the flowers they visit.
- stay closer to home in a 200’ to 300’ radius of their nest.
- Responsible for around 30% to 60% more pollination activity than honeybees.

Habitat

As areas become more urbanized and gardens and landscaping becomes more manicured solitary bees are losing habitat. Our pollinator hotel was built to encourage solitary bees to stick around our area. The garden below our hotel is planted with native flowering perennials that are favorites of bees. Purple coneflower, beebalm, goldenrod and showy aster are a few of them. We will have a water source and mud source directly under the hotel come spring to encourage Mason Bees to lay their eggs in the tubes.

The Lifecycle

Mason bees live about 4 to 6 weeks. A female can lay up to 20 eggs during her lifespan. She lays one egg each day into a tube, places a bit of pollen with it, then seals the egg in with a bit of mud. She places between 6 to 10 eggs per hole, each separated by a wall of hardened mud. After a few weeks the eggs hatch and feed off of the pollen left in the hole. Each new grub spins a cocoon and transforms into an adult bee. Typically, the bees hibernate in their cocoons through the winter and emerge from the hole as adults in spring. Each female queen is laying next year’s bee population. The males job is to mate with the female to fertilize her eggs. Once this work is done, so is the male bee’s lifecycle. With each female producing 15 to 20 eggs, a small bee population can grow quickly when provided with good habitat.

