

Mason Bee Enemies

Aromatic Wood -- Woods such as cedar and redwood contain natural chemicals that are detrimental to insects, including mason bees. Aged, weathered cedar and redwood may be used for mason bee nesting blocks as the aromatic chemicals have deteriorated over time. New cedar and redwood may be used for nesting block roofs or shelter frames as they withstand the weather well. Birch, fir, and pine are preferred materials for making wood nesting blocks.

Beetle – The red-winged beetle (*Meloid-tricrania*) feed on mason bee nests in successive life cycles throughout the summer.

Birds -- Long-beaked birds, like woodpeckers, will pull out and tear apart straws to eat mason bee larvae. Birds also feast on flying mason bees, and hover near shelters to catch and eat returning mason bees. Louvered covers, screen (hardware cloth), or chicken wire over mason bee shelters will prevent birds from eating mason bees.

Flies – Large bee flies (*ichneumon*) feed on mason bees in the wild. They lay their eggs at the mason bee entrance hole. Fly larvae then eat and destroy mason bee larvae.

Fungus – Chalkbrood fungus (*Ascophaerae Torchioi*) afflicts both mason and honey bees. Chalkbrood are round, black fungal organisms that leave dry, brittle, partially completed mason bee cocoons.

Man -- Humans commonly mistake mason bees for houseflies, and kill them with a fly swatter. Mason bees have four wings, while flies have two wings. They also have antennae and make a buzzing sound like bees.

Mites – Older straws absorb moisture and attract parasitic mites (*chaetodactylus krombeini baker*). *Varrora* and tracheal mites that devastate honeybee hives do not attack orchard mason bees. Discard damaged old straws and replace with new, clean straws.

Mold – Old paper straws retain moisture, causing mold. Mason bees do not thrive in an unhealthy, moldy environment. Discard and replace with new, clean straws each year. Do not use plastic drinking straws, as they collect moisture and allow mold to grow.

Pesticides – Toxic chemicals in herbicides, insecticides and pesticides are fatal to mason bees, as they contaminate blossoms, nectar, pollen, soil, and water. Do not spray them on or near mason bee habitats during their active life cycle. Cease spraying a few weeks prior to mason bee emergence. Resume spraying after fruit tree blossom petals have fallen from trees, and mason bees have gone into hibernation Use natural, organic, ecology friendly methods for disease and insect control.

Spiders – Spiders will spin a web where there is a potential food source. Remove spider webs from and around mason bee nesting sites.

Wasps – Parasitic (monodontomerus) wasps attack pre-pupae mason bees in unplugged tubes, or through thin-walled tubes. Nylon stockings, or covers, prevent wasp access to the mud capped mason bee entrances during hibernation and storage.

Weather – Exposure to moisture (snow and rain) and cold winds negatively affect mason bee habitats. Remove mason bee blocks/nesters in early fall, refrigerate, or store indoors (i.e. storage shed or garage) in a dry, unheated area. Minimize outdoor exposure to prevailing winds with shelters for mason bees. Locate these shelters facing east to catch warmth from the early morning sun.