Summer Mason Bee

Follow up spring Blue Orchard Mason Bee (Osmia lignaria propinqua Cresson) pollination with the Summer Mason Bee (Osmia californica Cresson). The summer mason bee will increase vegetable and flower garden pollination between early summer and early fall. They prefer flowers such as daisies, nasturtium, sunflowers, dandelions dahlias, and coneflowers..

Refrigerated summer mason bees are released about the time orchard mason bees conclude their work in early to mid June. Provide adequate nesting for your summer mason bees.

Summer and orchard mason bees may nest next to each other, as they are solitary bees.

Nesting tubes should be located near the area to be pollinated. Keep nesting units out of direct exposure to wind and rain. Nesting units should be placed horizontally in the dark interior of a nesting shelter that faces east/southeast to catch the warmth of the sun. Like honey bees, summer mason bees prefer to stay in their nesting area until outside temperatures are warm enough.

Placement does not need to be up under building eaves, as is sometimes suggested for the blue orchard mason bee. Locate summer mason bees at a convenient height to easily observe them.

Protect your mason bees from predators, including woodpeckers. Place wire mesh, or screen, such as galvanized hardware cloth, over their nesting shelters.

Summer mason bees are smaller in size than orchard mason bees. Males are similar to orchard mason bees, yet distinctive with grey mantle hair on their thorax. Females are much blacker than orchard mason bees.

Like the orchard mason bee, summer mason bees are non-aggressive and rarely sting. Their sting is like a mosquito bite.

A major difference between orchard and summer mason bees is the length of their life cycle. Orchard mason bees are an annual bee. They complete their life cycle each year. Summer mason bees are parsi-voltine, meaning some hibernate one winter, while others hibernate over two winters. They hibernate their first winter as pupae, and their second winter as adults. This is nature's way to protect the summer mason bee's survival, when unforeseen environmental disasters destroy their population in one year.

The summer mason bee does not require straws, as they live in a 5/32nd-inch (3.9667 metric) nesting hole.

You may make your own nesting blocks by drilling holes ½-inch apart in clean, untreated 4x4-inch wood blocks. Brad point drill bits are difficult to find in 5/32nd-inch size. You may experience smoke from the wood when using black oxide or titanium drill bits. Be patient and DRILL SLOWLY when using these bits.

Orchard mason bees plug their nesting holes with mud, while summer mason bees combine leaf mulch with mud to seal nesting cells and plug nesting holes.

Perform annual maintenance in November. Open and examine stacked nesting trays. Remove cocoons and refrigerate (33-38 degrees F) as you do for the orchard mason bee. Clean nests and set aside nesting trays in a dry, clean place to re-use next year.

Cocoons have a distinctive odor, as their pollen and nectar is primarily gathered from ornamentals; whereas mason bees gather mostly from fruit trees.

Nesting tubes of summer mason bees are available from Knox Cellars (www.knoxcellars.com) of Sammamish, WA.

Stacked nesting trays for summer mason bees may be obtained from Bee Diverse (www.beediverse.com) of Victoria, B.C., Canada.

Further information on summer mason bees is included in the books: "Pollination with Mason Bees," by Margriet Dogterom, PhD; and "The Orchard Mason Bee," by Brian L. Griffin.