

Wild bees can be effective pollinators

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Over the past few years, honey bee keepers have experienced problems due to Colony Collapse Disorder (CCD), which has hurt honey bee populations, causing some growers of fruits, nuts and vegetables to wonder how their crops will be pollinated in the future. A new study published in the *Annals of the Entomological Society of America* shows that wild bees, which are not affected by CCD, may serve as a pollination alternative.

In the article "Wild [Bees](#) (*Hymenoptera: Apoidea: Anthophila*) of the Michigan [Highbush Blueberry](#) Agroecosystem," authors Julianna K. Tuell (Michigan State University), John S. Ascher (American Museum of Natural History), and Rufus Isaacs (Michigan State University) report the results of a three-year study which took place on 15 southwestern Michigan blueberry farms. Using traps and direct observation, the authors identified 166 bee [species](#), 112 of which were active during the blueberry blooming period. Many of these species visit more flowers per minute and deposit more pollen per visit than honey bees (*Apis mellifera* L.), and most of them are potential blueberry pollinators.

"This should help growers know what kinds of bees are in the fields so that they can make informed decisions about whether they should modify crop management practices in order to help conserve [natural populations](#) of bees," said Dr. Julianna Tuell.

Unlike honey bees, which live together in hives, most of the bees found by the authors were solitary bees that nest in the soil or in wood cavities. While soil-nesting bees may be difficult to manage, the authors see potential for cavity-nesting bees, such as several species of mason bees, to be managed by growers who can support their populations by providing nesting materials.

"Untreated bamboo or reeds are good materials because they provide natural variation in hole diameter to attract the broadest range of species," said Dr. Tuell. "There are also a number of

commercially manufactured options that growers can use, such as foam blocks with pre-drilled holes and cardboard tubes made to a particular diameter to suit a particular species of interest. Drilling different sized holes in wood is another option. If a grower is interested in trying to build up populations of a particular species, there are also details about how to do so available online."

Besides blueberries, many of the species in this study also visit cherries, apples, and cranberries, and managed mason bees are already being used to pollinate cherry orchards.

More information: www.entsoc.org/wildbees.htm

Source: Entomological Society of America ([news](#) : [web](#))

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