

Tips for Keeping Mason Bees by Donna Hauser UCCE Master Gardeners of El Dorado County

When we think of pollinators, honeybees are usually the first to come to mind, but another very effective one is the mason bee. Mason bees are native to most of the United States. They are solitary, so disease does not spread readily throughout their numbers. They rarely sting and they fly in cool and wet weather, when honeybees won't stray out of the hive. And they are relatively easy to keep.

Here are some things to think about if you want to raise mason bees:

You do not need lined cardboard tubes to raise these bees! The tubes are expensive and sometimes aren't sufficient to ensure a successful batch of new female bees, which are the pollinators of the species, as the female bee will only produce female babies in tubes that she deems long and wide enough. Nor can you successfully raise generations of bees in a block of wood with a bunch of holes drilled in it. Even if you get the right circumference and length of the holes, after the first use, the holes become breeding grounds for disease and pests. And it is very difficult to monitor your bees' health when you can't see what is going on.

To attract native mason bees, the best option is nesting blocks, rectangles of wood with channels in them. When stacked together, they form tubes for the bees. Simple plans for these blocks can be found online. One advantage of these is that once the tubes are filled, you can separate the wood to access the cocoons inside, allowing you to see what has laid eggs in your bee home. (Other solitary bees and wasps enjoy the same accommodations as mason bees.) Also, these blocks can be cleaned and reused the following spring.

When locating your nesting blocks, don't put them in direct sunlight. A southeast exposure is good, where the bees get early morning sunshine but don't get blasted all afternoon. Warm is better than cool. Mark the blocks in a way so that the female bees can distinguish which hole is theirs and return to it successfully. Also, be sure there is a nearby source of mud, which the female bee uses to create a wall around each egg along with a ball of pollen.

After hatching, the larvae consume the pollen ball and then spin a cocoon. The cocoons can be harvested in the fall. They don't need to be stored in the refrigerator! Bee cocoons need moisture, which is why commercial sites that tell you to refrigerate your bees also sell expensive moisture-retaining boxes in which to store your cocoons. After being washed (to protect from harmful mold spores), they can be stored in a predator-proof container in a cool and protected place outside.

In early spring, monitor your cocoons. You can put them in the refrigerator for a week or two, if the weather gets unseasonably warm and you are worried about early emergence. When you are ready to release them, set up your new bee house and place the cocoons on top of the nesting blocks. Early evening is a good time, because bees will then stay on the box and mark it with their scent. Male bees will emerge first and hang out nearby, waiting for the females to emerge.

Mason bees forage in about a 300-foot radius, so make sure your bees have plenty of pollen-producing plants within that radius. The female bees will live the rest of their lives collecting pollen and laying eggs. If the pollen isn't near the bee house, the bees will not return.

You can get started by purchasing cocoons online, but be advised that the California Department of Food and Agriculture requires a permit to obtain bee cocoons from out of state, so you will either have to find a local source, attract some native bees, or fill out some paperwork.

Detailed information for raising bees can be found online at http://www.helpabee.org/. Do your research. Attend a class. Talk to other beekeepers. After you do all that, get your supplies, set up your bee home, and enjoy your new, gentle tenants.

In response to Coronavirus (COVID-19) and recent California Department of Public Health and El Dorado County Health & Human Services guidelines, UCCE Central Sierra will cancel all El Dorado and Amador County Master Gardener public events and classes. This cancellation remains in effect through May 10th, and will be updated as public health guidelines change.

We realize our public classes are valued by County residents and we especially appreciate your continued support and understanding during this public health challenge. We will attempt to offer our cancelled classes and events at a future time if feasible; please refer to our website http://ucanr.edu/edmg which will be updated with the latest changes as they occur.

Stay safe and follow recommended health and sanitation practices in the coming weeks.

For more information on the UCCE Master Gardeners of El Dorado County, see our website at http://mgeldorado.ucanr.edu. Master Gardeners are available to answer home gardening

questions <u>Tuesday through Friday</u>, 9:00 a.m. to noon, by calling (530) 621-5512, or send us an email using the Ask a Master Gardener option on our website. Walk-ins are welcome at our office, located at 311 Fair Lane in Placerville. We also encourage you to visit us at the Sherwood Demonstration Garden, located at 6699 Campus Drive in Placerville, behind Folsom Lake College, El Dorado Center. See http://mgeldorado.ucanr.edu/Demonstration_Garden for more information and days and hours of operation, or call us to schedule a tour. To sign up for notices and newsletters, see http://ucanr.edu/master_gardener_e-news. Master Gardeners are also on Facebook and Instagram; we hope you enjoy our postings and will share them with your friends.