

The Press Democrat

June 19, 2021

ADVICE TO GROW BY » MASTER GARDENERS

Buzz on bees: What you need to know about helping them

QUESTION: Why should we help native bees, and what plants should be included in my urban garden to attract them?

Answer: Great question! Both non-native bees and native bees pollinate plants and help maintain a functional garden ecosystem, but native bees are more efficient pollinators.

Sonoma County Master Gardener and bee expert Janet Calhoon has a lot to tell us about native bees. “There are approximately 4,000 native bees in North America. Our state has 1,600 known species, all beautiful and fascinating creatures,” she said. “Our native bees range in size from tiny — about ¼ inch — all the way up to the largest carpenter bees at 1 inch or so.

“Only non-native honeybees live in hives and make honey,” she added.

“Most of our natives are solitary and only the females gather pollen. Solitary female bees are ‘single moms’ that work all day building nests and gathering nectar and pollen, the ingredients for ‘bee bread’ on which she lays an egg to provide food for the next generation. “These solitary bees must work quickly because their life spans can be no more than two months depending on the species, and typically only four to six weeks for the adult males.”

To thrive, all bees need food, water and homes that are free from pesticides and herbicides. Here are some suggestions to help you create habitat.

Food, water sources

Plant a variety of flowers that grow from late fall through summer and provide a mix of pollen and nectar. While adult bees get food and energy from nectar, a combination of pollen and nectar provides protein and vitamin-rich food for their young.

Native bees evolved with native plants, so it’s a good idea to plant natives. Asters, sunflowers and other members of the family Asteraceae are native bee magnets. So are members of the mint family (Lamiaceae). Native shrubs such as ceanothus and manzanita are also important native pollinator plants. Excellent non-native bee plants include rosemary, lavender and cosmos.

Studies at UC Berkeley show that floral consistency — planting a group of the same plants together — is more attractive to bees than an individual plant.

Certain native bee species need a water source and prefer mud puddles where they can access water and minerals from the soil. Also, some bees use mud in nest building.

Shelter

Since most of our native bees are ground nesters, it is important to leave some bare ground area in your garden. Beware of “mulch madness.” Bees cannot dig through mulch.

Other bees are cavity nesters that create homes in hollow twigs, beetle holes or nesting tunnels in wood. Smaller cavity nesters use hollow stems found in blackberry, elderberry and sunflowers as their homes. Our small carpenter bee (*Ceratina* spp.) uses its mandibles to hollow out a plant stem for its nest. Some cavity nesters, such as the blue orchard mason bee, readily use human-made wooden nesting blocks.

Avoid chemicals

Do not use pesticides and herbicides, please!

UC guidelines suggest using biological controls including beneficial insects that are predators and parasites of harmful insects. Or, use cultural and mechanical controls like traps, barriers and water sprays.

If you choose to use chemical products, make sure you read the labels, follow the instructions carefully, and never apply when pollinators are active. If you apply chemicals, consider applying only late in the evening when bees are not active. Avoid purchasing plants or using products containing neonicotinoids, a systemic pesticide that remains in the plants and soil and is toxic to bees and all insects that might visit your garden.

Lucky for us, we have UC Berkeley and UC Davis and all of their research readily available for us to use in planning our urban gardens. Use helpabee.org to go to Berkeley’s Urban Bee Lab site. It offers plant suggestions for bee and pollinator-friendly gardens based on 25 years of garden studies throughout California. You can use the bee photo gallery to identify the bees you might see visiting your plants. There’s also a great pocket guide called “Common Bees in California Gardens” for purchase through the UCANR (University of California Agriculture and Natural Resources) Catalog.

Next week, June 21-27, is National Pollinator Week, designed to celebrate pollinators and spread the word about what we can do to protect them. Here are some resources online:

- Xerces Society — wild bee conservation: bit.ly/3g1RCwS
- UC Davis — learn more about California native bees: bit.ly/2SL9YKR
- UC Berkeley Urban Bee Lab — seasonal bee gardening: helpabee.org

- The Pollinator Partnership: pollinator.org

June in the garden

June is a great time to mulch the garden, especially in this drought year. Mulch reduces evaporation while it helps control weeds, moderate soil temperature and improve soil fertility. (See the useful link below for more information on types of mulches, application, and timing.)

- Check soil moisture and adjust your watering habits or the watering schedule on your irrigation controller accordingly. Water early in the coolest part of the day to encourage maximum water absorption through plant roots with minimum evaporation.
- Deadhead roses and other summer blooming plants for continued bloom. Cut blossoms for bouquets early in the morning. The blooms stay fresh longer if you quickly put them in a vase of warm water.
- Harvest blooming lavender for indoor use. Bundle it up in bunches tied with string and hang them upside down in a dark, warm spot to dry.
- Set yellowjacket traps at the perimeter of the yard away from eating areas to discourage yellowjackets from visiting.
- Feed azaleas, rhododendrons and camellias with a balanced organic fertilizer formulated for acid-loving plants.
- Fertilize citrus with a nitrogen fertilizer according to label directions.

Useful Links:

- Mulch: bit.ly/3fCtrF2
- Yellowjackets: bit.ly/3bTACrp
- Fertilizing citrus: bit.ly/34tAhrp
- Watering and mulching: bit.ly/3csGs3o

Contributors to this week's column were Janet Calhoon, Pat Decker, Karen Felker and Debbie Westrick. Send your gardening questions to scmgpd@gmail.com. The UC Master Gardener Program of Sonoma County (sonomamg.ucanr.edu) provides environmentally sustainable, science-based horticultural information to Sonoma County home gardeners. The Master Gardeners will answer in the newspaper only questions selected for this column. Other questions may be directed to their Information Desk: 707565-2608 or mgsonoma@ucanr.edu.