

An abundance of bees make fruitful trees

“Imagine living in a world without bees. A world without flowers, fruit, even a cup of coffee. A world, even, without chocolate!”

Borrowing this alarming catch phrase from one of the U.S. Geological web sites (see address below), a site that focuses on a topic that is timely for the garden community and if not, the agricultural community as a whole.

Useful to both gardeners and farmers alike, not to mention anyone who delights in the pleasures and bounty of fresh produce, bees are necessary pollination factories.

With few exceptions, fruit will not form until pollen from male parts are transferred to the female parts of a flower. Without pollination, flowers may bloom abundantly, but will not bear fruit.

Pollination is the transfer of pollen to the stigma from stamens of the same or a different flower. It can be performed by animals, insects, wind, or water, and in the home orchard or garden by hand. The pollen grain on the stigma germinates, grows the pollen tube down to the style and into the embryo sac where fertilization occurs. (U.C. Davis)

With the decline of both wild and domestic pollinator populations, pollination management is becoming an increasingly important part of horticulture. It is the horticultural practice that achieves or enhances pollination of a crop. It includes the study and management of pollinizers, pollinators and pollination conditions and by understanding a particular crop's pollination needs.

What are the factors that contribute to the decline of wild bees?

“Factors that cause the loss of pollinators includes pesticide misuse, unprofitability of beekeeping for honey, rapid transfer of pests and diseases to new areas of the globe, urban/suburban development, changing crop patterns, clear-cut logging (particularly when mixed forests are replaced by monoculture pine), clearing of hedgerows and other wild areas, loss of nectar corridors for migratory pollinators, and human paranoia of stinging insects, i.e. killer bee hype. (Encyclopedia Wikipedia)

This writer cannot possibly address all of these factors in an 800 word space so I will simplify my perspective and suggest that readers do what anyone can do.

Plant vegetation that attracts bees!

If you plan to encourage visitations from pollen bees in general, you might consider using a variety of plants blooming in your garden all season, to maintain a wide diversity of spring, summer, and early fall bee species. Brightly colored flowers in groups of the same color are ways in which the flowers advertise to bees. This exploits the fact that bees have not only color vision, but the ability to learn and remember where the site is. The spectrum of color visible to bees is blue, green, yellow and orange, but not red.

Scent is another attractant used by plants to attract bees. Flowers secrete scents from glands which are usually found on the petals. How is it that bees and humans find the same scents so alluring?

Avoid horticultural plants that are described as "double." This usually means that the plant has been selected to develop extra petals instead of anthers. So there will be little or no pollen available for bees. All bees need pollen as food for their offspring, and will not be attracted to double flowers unless they happen to produce lots of nectar.

Marigolds, mums, (unless early varieties) many roses will attract few bees species unless you plant the single varieties. Bees love Cosmos, Zinnia, and Dahlia (remember, not doubles) Plants in the mint family, especially Rosemary, are generally good choices. Sunflowers attract lots of native bees. The pollen less or ornamental varieties have only nectar rewards. These were developed because they are less messy when put in vases since the flowers don't drop pollen everywhere. Planting sunflower varieties with pollen will attract more bees.

In the tree or shrub categories, Western Redbud, plum, prune, peach, nectarine and chokecherry get top billing in attracting bees. In the annual and perennial categories, the common fiddleneck wildflower and Babyblue eyes attract bees. Mustards and radishes that are allowed to flower are also good choices. Dusty Miller and Lambs ears that are allowed to bloom, Bottlebrush, single bloom daisy like flowers, legumes, and Asters yarrow are all recommended.

See <http://cuadra.nwrc.gov/Techrpt/ITRseries.htm> on declining pollinators.

"'Bee vomit,' my brother said once, 'that's all honey is,' so that I could not put my tongue to its jellied flame without tasting regurgitated blossoms" (by Rita Dove, In the Old Neighborhood).

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