

# Massachusetts Master Gardener Association

## FACT SHEET



**Have Gardening Questions?** The **Master Gardener Help Line Hours** are 10 a.m. – 2 p.m. on Fridays (all year) as well as Wednesdays (March-November) and Mondays (April-October).  
Phone: 617-933-4929 Email: [mgghelp@masshort.org](mailto:mgghelp@masshort.org).

### Ten Interesting Facts About Bees

 Bees are **vegetarians**. They eat nectar as their carbohydrate source and pollen as their protein source. Other members of the Hymenoptera order, such as wasps, eat other insects or spiders. It's important to note, however, that bees are descended from wasps.

 **Only female bees sting.** Their stingers evolved from the tube they use to deposit eggs, so males had no occasion to develop stingers.

 Bees play a big part in the economy. In the U.S. alone, they pollinate more than **\$15 billion a year worth of crops** and they produce about **\$150 million a year in honey**. Many farmers have beekeepers bring in hives during pollination season to ensure a good crop. Over a hundred agricultural crops in the U.S. are pollinated by bees.

 Being a bee can be **dangerous**. Apart from the serious decline in the bee population (discussed later in this handout), there are two other threats that bees face:

- 1) Once a male drone mates with the queen, he dies.
- 2) Once a female honey bee stings, she dies (so, if you've gotten multiple stings from one insect, it wasn't a honey bee).

 There are more than **4,000 species of native bees** in North America. The honey bee, however, is not native. It was brought to the U.S. by European settlers in the 1600s. Honey bees were known by Native Americans as "white man's flies."

 **Not all bees are social.** Apart from honey bees and bumblebees, who live in colonies, most other common bees are solitary and make their own homes. Most native bees nest in the ground.

 **Zombie bees** are spreading across the U.S. Also called "zombees," these bees have been infected with a fly parasite. The infection causes the bees to leave their nests at night and fly in erratic patterns, sometimes referred to as the "flight of the living dead." The parasitic flies de-

posit their eggs in the bee's abdomen. Then the bee dies and a few days later, the fly larvae emerge from between the bee's head and its thorax. The fly infects both bumblebees and honey bees.

 Bees have "**favorite**" colors, and they especially like purple, which produces the most nectar. Their next favorite color seems to be blue, followed by yellow and white.

 There's a lot you can do to **encourage bees in your garden**, even constructing homes for them, or buying them to bring home. Strive to plant native flowers and vegetables (check references for their favorites). Use organic methods (no pesticides). Make a "bee bath," a shallow container of water with pebbles and twigs. Keep the water fresh and try not to move the bath around.

 **Honey bees are in danger of extinction.** In 2006, the term "colony collapse disorder" started to appear in describing the sharp decline in the honey bee population. In the winter of 2013-2014, beekeepers lost more than 20% of their colonies. No single cause has been identified, but there is speculation that one or more of the following are reducing the bee population: "invasive mites, pathogens, pesticide residues, poor nutrition, habitat loss, and stress." Genetically modified organisms and diesel fumes have also been considered potential causes. You can help keep the populations up by attracting bees to your garden.



#### Read more:

[www.bringbackthepollinators.org](http://www.bringbackthepollinators.org)  
[www.bugguide.net](http://www.bugguide.net)  
[www.zombeewatch.org](http://www.zombeewatch.org)  
[www.thehoneybeeconservancy.org](http://www.thehoneybeeconservancy.org)

*The Massachusetts Master Gardener Association is a non-profit organization whose mission is to share knowledge and experience with the public through outreach programs in education, horticulture and gardening; to provide the Master Gardener Training Program to interested members of the public; and to provide graduates of the Master Gardener Training Program with educational and practical opportunities to extend their knowledge and interests in gardening and related topics. <http://www.massmastergardeners.org/>*