

BOTANICAL RESEARCH INSTITUTE OF TEXAS FORT WORTH BOTANIC GARDEN















Green Revolution's Environmental STEM Learning at Home

The Importance of Bees

by Demekia Biscoe

Our thoughts on bees are often influenced by dramatic swarm scenes in movies or our most recent unpleasant encounter with them. Did you know there are nearly 20,000 known bee species in the world? 4,000 of them are native to the United States (United States Geological Survey, 2020). From the tiny and solitary *Perdita minima*, known as the world's smallest bee, to the large carpenter bee, or the more commonly known European honeybee, there is an overwhelming variety of species.

Bees are so much more than the cloud in Winnie the Pooh, they serve a crucial role in the world as **pollinators**. Pollinators help spread plant pollen from blossom to blossom and enable the reproductive processes of plants. Native bees pollinate native plants like cherries, blueberries, and cranberries, and were here long before European honeybees were brought to the country by settlers (honeybees are not native to North America). Native bees are estimated to pollinate 80 percent of flowering plants around the world (United States Geological Survey, 2020).

According to the United States Department of Agriculture (USDA), bees of all sorts pollinate approximately 75 percent of the plants grown in the United States. They are responsible for bringing food to your table. Their pollination work is estimated at more than \$15 billion in increased crop value each year (United States Geological Survey, 2020). Simply put, bees are a big deal!

Always discover more!

Try it!

Bees are not the only **pollinators**. Insects and mammals play a part in pollination too. Many species are uniquely adapted to pollinate specific plants. Try thinking like a scientist and exploring the world of **pollinators** with PBS NOVA's matching game below:

https://www.pbs.org/wgbh/nova/nature/pollination-game.html

Extending your learning

What to know more about native bees? Check out the link below to the US Geological Survey site: https://www.usgs.gov/centers/pwrc/science/native-bee-inventory-and-monitoring-lab?qt-science center objects=0#qt-science center objects