

## THE BUZZ ON BUMBLEBEES

When we think of bees, we usually think of honeybees. What many may not know is that honeybees are a relatively recent introduction to North America.

While the first European colonists brought honeybees here in the 1600s, Texas actually hosts hundreds of other bee species that are native. These bee species were here long before the honeybee and play critical roles in Texas' diverse ecosystems.

Of all the state's native bees, bumblebees are among the most familiar. Their fuzzy black-and-yellow bodies are easy to recognize as they buzz from plant to plant gathering nectar and pollen.

Unlike the colonies of European honeybees, which may persist for years, bumblebee colonies last for less than a single year, from spring into late summer or early fall. New queens, produced at the end of summer, are the only members of the colony to survive into the following year to begin the entire cycle again. The founding queen and all her workers perish as flowers diminish and temperatures drop.

Like honeybees, bumblebee colonies produce honey from sugar-rich flower nectar. Honey serves as a food reserve for the colony when nectar is in short supply or when cool, rainy conditions prohibit worker bees from foraging. The amount of honey produced by bumblebees is very small, nowhere near enough for human consumption.

Declines for some North American bumblebee species have been documented only within the last few years. A principal factor driving bumblebee declines has been habitat destruction, specifically the loss of flower-rich grasslands. Other potential contributors to species declines include the introduction of parasites and diseases into wild populations, pesticide use and competition with the European honeybee.

Why should we be concerned about the decline of native bees like bumblebees? The majority of flowering plants in North America require pollination by insects. For many plant species to produce viable seed, an insect must move pollen from one flower to another, resulting in fertilization. Without pollinators, many plant species would fail to reproduce. Of all the insects that visit flowers, bees are the most important pollinators.

Along with their substantial ecological contributions, native bees have proven to be more efficient and effective pollinators than honeybees for some agricultural crops. Like the honeybee, native bees are facing declines.

There is a real need to evaluate the status of these insects in our state to assess how their populations are faring. The website [texasbumblebees.com](http://texasbumblebees.com) enlists citizen “bumble-watchers” to aid in evaluating the state’s bumblebee fauna. Visit [texasbumblebees.com](http://texasbumblebees.com) to learn more about this endeavor and how you can help.

As with many other insect groups, accurate identification of bumblebee species can be a little tricky. Don’t let that intimidate you. There are only nine bumblebee species in Texas. That’s not an overwhelming number to get acquainted with. With some patience and study, you should be able to familiarize yourself with the bumblebees that occur in the state.

All bumblebees are relatively large, fuzzy insects. Their body is divided into three segments – the head, thorax and abdomen. The abdomen, in turn, is composed of six segments. Dense hairs, in varying combinations of black and yellow, cover most of their body. When attempting to identify a bumblebee, the features you will want to concentrate on most will be the pattern of black and yellow on the thorax and abdomen.

From spring into midsummer, female bumblebees will be the most commonly encountered sex. As a result, identification is simplified at this time of year with the absence of contrastingly patterned males. (A downloadable/ printable version of helpful illustrations can be found at [texasbumblebees.com](http://texasbumblebees.com).)

You can enhance areas around your home for bumblebees and other native bees. Most of the methods used to create butterfly gardens also work well for native bees. In fact, it might be better to apply the broader moniker of “pollinator gardens” to such sites.

Bumblebees have two basic needs: food from flowers in the form of nectar and pollen and suitable nesting sites. By creating home garden plantings with appropriate plant species, you can increase foraging opportunities for native bees in your area. Attracting native bees is especially beneficial for those with backyard vegetable gardens.

Plants native to Texas are the best choice for a bumblebee garden. Native plants have adapted to the often extreme conditions of a Texas summer and typically, once established, require much less care than non-native plants. The nonprofit Pollinator Partnership ([www.pollinator.org](http://www.pollinator.org)) has produced very detailed, regionally specific plants lists for bees in Texas.

**GO OUTSIDE & PLAY!**