Frequently Asked Questions
- Pollinators -

CLEAR CHOICES CLEAN WATER
NATIVE PLANTS & POLLINATORS

What is a pollinator?
How do native bees compare to honey bees at the job of pollination?
I thought honey bees were native to the United States?
What's the importance of pollinator diversity?
How do I identify pollinators?
How likely am I to get stung?
What are the greatest threat to pollinators?
Does Colony Collapse Disorder affect all species of bees?
What can I do to help protect pollinators?

What is a pollinator?

A pollinator is any animal which carries pollen from one flower to another flower, which is how flowering plants reproduce. Pollinators don't do this on purpose—it happens while they forage for nectar inside the flowers—but the process is essential for plant fertilization. Honey bees, an important component of modern industrial agriculture, are integral to fertilizing many food crops. In addition to honey bees, which are an exotic species that do not naturally occur in the Americas, many native bumblebees, butterflies, moths, flies, birds and bats are also important pollinators. While we hear a lot about threats to honey bees—and deservedly so—our native pollinators are also critical to the pollination of many crops and nearly all wild plants. They are suffering from the same threats as honey bees.

How do native bees compare to honey bees at the job of pollination?

Honey bees make crop pollination easier for farmers, because they can be easily transported to where the farmer needs them. However, there are a wide variety of fruits and vegetables for which native pollinators are more efficient. These include apples, cherries, squash, watermelon, blueberries, cranberries and tomatoes. Native bees are also less sensitive to environmental conditions, so they will be out working in wetter and colder conditions than honey bees. This means that native species forage for longer periods of time – earlier and later in the day – and through seasonal fluctuations. It also seems like honey bees are motivated by a little competition. When they're working around native bees, they move between plants more frequently, effectively pollinating more plants quicker.

I thought honey bees were native to the United States?

Honey bees are native to Europe and were brought to the Americas/United States by settlers. Another non-native honey bee found primarily in the southwestern United States is the Africanized honey bee, or "killer bee". This is a hybrid bee species and is much more aggressive than European honey bees.

What's the importance of pollinator diversity?

Most of the world's 250,000-plus species of flowering plants require pollinators to help them reproduce. Flower come in all shapes and sizes, and they bloom at different times of the season, too, so pollination requires a diverse collection of animals. Some plants make more sugar-rich nectar in higher volumes, which attracts hummingbirds, whose metabolic rate requires more food than insects. Other plants only open their flowers at night and rely on moths, bats or other nocturnal

species for pollination.

How do I identify pollinators?
There are more than 200,000 species of pollinator—everything from beetles to bees to bats. There are more than 20,000 species of bee alone! It might be difficult to identify every insect you see, but start with these guides - Citizen Scientist Pollinator Monitoring Guide and Bee Basics: An Introduction to Our Native Bees.

What about getting stung?
About 3% of the adult population (and just 0.5% of children) is allergic to bee stings and at risk of possible systemic reactions, including anaphylactic shock. If someone is stung and experiences nausea, wheezing, or difficulty breathing, or if they are stung multiple times, they should seek immediate medical care. However, more people are killed each year by lightning strikes than bee stings, so the risk is fairly small. It's also important to remember that most bees are not very aggressive. Yellow jackets and some species of wasps and hornets can be aggressive, especially around their nests (this goes for bees, too), but bees foraging in a garden are usually too busy to bother with a person working next to them. Just stay calm, and they will, too!

What are the greatest threats to pollinators?
Toxic pesticides, pests and disease, habitat loss associated with agriculture, suburban sprawl, and commercial development, and chemicals used around the home all commonly put pollinators at increased risk. Combined, these threats pose a grave risk to pollinator populations. Climate change, which has an effect on the natural cycle of pollinator emergence and wildflower blooming, also has an impact on pollinators.

Does Colony Collapse Disorder affect all species of bees?
No, Colony Collapse Disorder only affects the non-native European honey bee.

How can I help protect pollinators?
Start by taking an action pledge! By demonstrating your commitment to pollinator protection, you help inspire others to do the same. Collectively, we can have a big impact! Even if you don't want to take a pledge, following one of our recommended actions is still a great way to contribute.