



## The Other Pollinators

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Quick! Name four different types of pollinators.

I'll bet you immediately thought of bees and butterflies. Two others, though, may not have come to mind so quickly. If you did name bats and birds, then congratulations, you have included two very important pollinators! While they don't get the recognition that bees and butterflies do, bats and birds are prolific pollinators and are critical to certain plants.

Like bees, many bird species visit flowers in search of nectar, a sweet liquid they use as a food source. As birds feed on nectar, pollen from the flower sticks to their bodies. When they move to another flower, some of the pollen rubs off onto the flower's stigma, the part that receives pollen, allowing fertilization to occur.

There are thousands of species of birds worldwide, but generally only those that feed on nectar are considered pollinators. In the United States our three oriole species (Bullock's, Orchard, and Baltimore) are nectar feeders. While in their tropical winter habitats in Central and South America, these orioles eat nectar from flowering trees and transfer pollen from tree to tree. When they migrate back to the United States they switch to eating fruit in the fall, preferring fruits such as native wild black cherries and blackberries. In the southwestern United States, the white-winged dove is an important pollinator of the iconic Sonoran Desert saguaro cactus. These doves synchronize their migration with the flowering cycle of the saguaro, sipping nectar from its flowers and facilitating pollination.



Juvenile male ruby-throated hummingbird by Thomas V. Ress

But hummingbirds are the most important pollinating birds. Hummingbirds are perfectly adapted pollinators. They have long, slender bills and tube-like tongues that they use to drink nectar from brightly colored flowers, which gives them the energy they need for their high metabolism. Hummingbirds drink up to two times their body weight per day. As they move from plant to plant, they carry pollen. As they pollinate the native wildflowers in parks and the plants in your garden, hummingbirds add a splash of color to our landscapes.

There are a significant number of hummingbirds to facilitate pollination. There are 366 species of

hummingbirds and most of them live in Central and South America. Fifteen species live in the United States, while an additional nine species visit us from Central and South America. In North America, ruby-throated hummingbirds are usually the only species in the eastern United States, while more than a dozen species are found in the west.







Plants that attract hummingbirds have common characteristics. They generally have tubular or funnel-shaped cups; are brightly colored red, yellow, or orange; are open during the day; and are prolific nectar producers and are modest pollen producers that are designed to dust the bird's head or body with pollen as the bird forages. Hummingbirds have very good eyes and are extremely attracted to red. They thrust their long slender bills deep into the flowers for nectar, withdrawing faces dusted in pollen.

It's easy to plant your garden to attract hummingbirds. Some native plants which fit this profile are trumpet vine, bee balm, hummingbird sage, foxglove, red buckeye, bleeding heart, cardinal flower, penstemon, and columbine.

So, what about bats, an often forgotten pollinator? It's not hard to think of hummingbirds as pollinators, but bats? Don't they fly around hunting mosquitoes and other bugs to make our lives easier? Well, yes, but there are several species of bats, primarily in subtropical and tropical areas of the Americas, that eat nectar.

In the United States, two species of nectar-feeding bats, the <u>lesser long-nosed bat</u> and the <u>Mexican long-tongued bat</u>, migrate north every spring from Mexico into Arizona, New Mexico, and Texas. During late spring in the Sonoran Desert, the white flowers of saguaro cacti bloom for just one evening and attract these two species. The bats use their elongated muzzles to reach deep into saguaro blossoms for nectar, covering their hairy heads with copious amounts of pollen that drop onto other flowers as the bats fly from cactus to cactus throughout the night. The blossoms close by the following afternoon, allowing daytime visitors such as wasps, bees, butterflies, and birds to pick up any remaining nectar or pollen.

Plants that attract bats are typically open at night, large, pale or white in color, very fragrant (bats have a keen sense of smell), and produce plentiful amounts of nectar. Flowers that attract bats for pollination include evening primrose, night-blooming phlox, moonflowers, goldenrod, native honeysuckle, four o'clocks, and cleome. Important fruit plants that rely largely on bats as pollinators are blue agave, mangoes, figs, dates, peaches, and bananas. So, the next time you enjoy your banana cream pie, thank a bat.

While pollinating bats are primarily found in the southwestern United States and Mexico, they do perform limited pollinator functions in other areas of North America, and they are ideal to have around to control insect populations. If you want to attract bats, consider planting native plants such as buttonbush, elderberry, wild hydrangea, and purple coneflower.

