

Planting for Pollinators

Pollinators are generating lots of “buzz” these days. In fact, June is National Pollinator Month. It’s the perfect time to learn who these pollinators are and why we should care about their well-being.

Pollinators are animals that move pollen from one flower to another so that the plants can produce fruits and seeds. Most pollinators are insects, including bees, wasps, butterflies, flies, ants, and beetles. But some plants are pollinated by birds such as hummingbirds, and some are pollinated by bats!

While most of these creatures are small, they are not insignificant! For without pollinators we wouldn’t be able to enjoy many of the foods we eat. We’d miss out on foods like apples, cucumbers, zucchini, almonds, and strawberries, which come from flowers after they’ve been pollinated. We’d also lose many food plants that are grown from seed, like lettuce, cabbage, and broccoli, since without pollination the plants can’t produce the seeds needed to grow more plants. In fact, it’s estimated that one out of every three mouthfuls we eat depends on bee pollination! Honeybees and other insect pollinators contributed, either directly or indirectly, to almost \$30 billion in crops in 2010!

And it’s not just food crops that benefit from pollinators. Over 75% of all flowering plants are pollinated by insects and other animals. Vital links in the web of life, pollinators are an integral part of healthy ecosystems worldwide.

Meet the Pollinators

While not native to North America, honeybees are important pollinators of agricultural crops in this country. Brought over by European settlers back in the 1600s, honeybees have become naturalized across the country. Both wild and managed honeybee colonies now play a vital role in our food production.

Native bees are also important pollinators. There are over 4000 species of native bees in the U.S. found in habitats from forests to farms, deserts to arctic tundra. Even in the small state of Vermont, home of KidsGardening, there are more than 350 species of native bees, including 19 different species of bumblebees!

Important pollinators of apple trees, bumblebees also help pollinate crops such as blueberries, tomatoes, and squash, as well as many wildflowers. Bumblebees are truly “busy bees.” They are very efficient pollinators because they work long hours, flying all summer long from early in the morning until late in the day. Native squash bees are excellent pollinators of squash, pumpkins, and gourds. They make their solitary nests in the ground near squash plants. You may even find one curled up asleep in a squash blossom!

Butterflies, moths, flies, and beetles pollinate certain plants. Butterflies pollinate many kinds of flowers. They are especially attracted to those with bright red, orange, or yellow petals. Moths often pollinate white or light-colored flowers that are open at night. Flowers that are pollinated by flies have an odor that we find stinky but flies find delightful!

Cause for Concern

Now here’s the scary part: honeybees and native bees are in trouble. Populations of both are in sharp decline due to pesticide use, disease and parasite problems, and loss of food and nesting habitat. In the Northeast U.S. more than one-quarter of the bumblebee species are threatened or have disappeared. Native bees in other parts of the country face similar threats. Many kinds of butterflies and other wild pollinators are also in jeopardy. This is why it’s so important to learn about and do all we can to protect all kinds of pollinators. Plants need pollinators – and we need plants!

Planting to Help Pollinators

A great way for gardeners to help pollinators is by planting pollinator-friendly gardens and landscapes. Include a wide variety of flowering plants for a succession of bloom from spring to fall to provide pollinators with nectar and pollen to feed on all season long. In addition to herbaceous flowering plants, many flowering trees and shrubs are important sources of food for pollinators, especially early in the season.

Place flowering perennials and annual in drifts, groups of at least three plants, rather than dotting them individually around the garden. Planting in clumps of one species makes it easier for pollinators to locate plants. As an added bonus, when set out in groups, your plants will have a much greater visual impact – it's good from a design standpoint as well! Skip plants with “double” flowers, as their extra petals have replaced nectar and pollen producing parts, and they don't offer pollinators any nourishment.

Include lots of native plants in your gardens and landscape. Native plants have evolved along with native pollinators, making them generally the most beneficial to these insects. Choose native plants that are adapted to the soil, light, and moisture conditions in your garden and you'll help pollinators and make your garden care easier.

Include plants to feed all stages of pollinators' life cycle. There are no butterflies without caterpillars! Make sure you have plants that will feed both the immature as well as the adult stages of pollinators. For example, while adult monarch butterflies feed on many kinds of flowers, their caterpillars feed exclusively on milkweed plants. Similarly, the caterpillars of eastern black swallowtails feed on plants in the carrot family, like Queen Anne's lace, carrots, parley, and dill. And accept that these caterpillar host plants will be chewed on – plant them in an inconspicuous spot if you don't want to look at ragged leaves.

Whether you're planting specifically to support pollinators or growing other types of plants such as fruits, vegetables, and landscape plants, minimize your use of pesticides, including “organic” ones. Even pesticides approved for organic gardens may harm pollinators, so try to use non-chemical methods of pest control instead. If you do choose to use a pesticide, choose one with the lowest risk to bees and other pollinators; check the label for bee hazard information. Spray in the evening after the pollinators have stopped flying.

Find suggestions for pollinator-friendly plants adapted to your part of the country in Pollinator-Friendly Plant Lists from the Xerces Society for Invertebrate Conservation. These nine helpful lists cover various regions across the country and list the bloom period, flower color, height, water needs, and types of pollinators attracted for regional native plants suited to garden and landscape plantings.

Beyond Planting

In addition to providing plants that nourish pollinators, make sure they have water, shelter and nesting habitat as well. A shallow basin of water set on the ground with some stones or piles of gravel in it for insects to perch on will help pollinators quench their thirst. Some insects, especially butterflies and some pollinator bees, prefer a mud puddle. Let a hose or faucet drip just a bit to form a damp, muddy sipping spot. Add a bit of sea salt or wood ashes to the mud to add micronutrients and minerals to their diet.

If you can, let a corner of your property go “wild.” A wooded area, hedgerow, or unmowed “mini-meadow” will provide shelter, food and nesting areas for many pollinators. Don't be too tidy. Leave some leaf litter and plants standing over the winter to provide spots for pollinators to overwinter. If you can, leave some dead wood standing in an out-of-the-way area to provide nesting sites for native bees.