Garden Guide for Pollinators

While insects and other animal pollinators may come in small sizes, they play a large partnership role in the production of the food we eat, in the future of our wildlife, and in the health of nearly all flowering plants. A garden without bees, butterflies, beetles, birds and even bats, is a garden devoid of the life-giving relationships that sustain plant reproduction.

Why are pollinators important?

GARDENS—Pollinators play a critical role in the reproduction of 90% of all flowering plants. Even non-pollinating animals play a significant part in turning the soil, recycling wastes and seed dispersal. A garden without fauna is like a stage without actors.

FOOD—Pollinators are involved in the production of about one out of every three bites of food that humans eat. Commodities produced with the help of animal pollinators generate significant income for agricultural producers. For example, domestic honeybees pollinate an estimated $14.6 billion worth of crops in the U.S. each year produced on more than 2,000,000 acres.

WILDLIFE—Pollinators play a critical role in the production of many plants, and their fruits and nuts, which in turn provide essential food and cover for wildlife. Over 80% of the world’s flowering plants are pollinated by animals. Pollinators also serve as direct food sources for many wildlife species, in the form of eggs, larva, and insects.

It is in the interest of gardeners, agricultural producers, wildlife advocates and the American consumer to help ensure a healthy, sustainable pollinator and beneficial fauna population.

Today, possible declines in the health and population of pollinators could pose a significant threat to the integrity of biodiversity, to global food webs, and to human health. Factors which can contribute to pollinator declines include: habitat fragmentation, loss, and degradation causing a reduction of food sources and sites for mating, nesting, roosting, and migration; improper use of pesticides and herbicides; aggressive competition from non-native species; disease, predators, and parasites; climate change; and lack of floral diversity.

Home gardens, in urban, suburban and rural locals, can play a major part in promoting healthy pollinators and the benefits they bring to our living world.
Ways you Can Help!

The US Botanic Garden and the North American Pollinator Protection Campaign (NAPPC) collaborated in 2004 to produce “The Great Pollination Partnership.”

Here are some of their suggestions for gardeners:

• **Use a wide variety of plants that bloom from early spring into late fall.** Help pollinators find and use them by planting in clumps, rather than single plants. Include plants native to your region. Natives are adapted to your local climate, soil and native pollinators. Don’t forget that night-blooming flowers will support moths and bats.

• **Avoid modern hybrid flowers**, especially those with “doubled” flowers. Often plant breeders have unwittingly left the pollen, nectar and fragrance out of these blossoms while creating the “perfect” blooms for us.

• **Reduce or eliminate pesticides whenever possible.** If you must use a pesticide, use the least-toxic material possible. Before purchasing, read labels carefully, since many pesticides are especially dangerous for bees. Spray at night when bees and other pollinators are not active.

• **Include larval host plants in your landscape.** If you want colorful butterflies, grow plants for their caterpillars. They WILL eat them, so place them where unsightly leaf damage can be tolerated. Accept that some host plants are less than ornamental if not outright weeds. A butterfly guide will help you determine the plants you need to include.

• **Spare that limb!** By leaving dead trees, or an occasional dead limb, you provide essential nesting sites for native bees. Make sure these are not a safety hazard for people walking below. You can also build a “bee condo” by drilling holes of varying diameter about 3 to 5 inches deep in a piece of scrap lumber mounted to a post or under eaves with southern exposure.

• **Add to nectar resources by providing a hummingbird feeder.** To make artificial nectar, use 4 parts water to 1 part table sugar. Never use artificial sweeteners, honey or fruit juices. Place something red on the feeder. Clean your feeder with hot soapy water at least twice a week. Butterflies need resources other than nectar and are attracted to unsavory foodstuffs. Try putting out slices of overripe bananas, oranges and other fruits, or a sponge in a dish of lightly salted water.

• **Learn more about pollinators.** Get some guidebooks and learn to recognize the pollinators in your neighborhood. Experiment with a pair of close-focusing binoculars for butterflies, bees and hummingbirds.