Plant for the Pollinators

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Provide for the physical needs of the pollinators (water, food, shelter)

Food sources will vary from insect to insect. Some will feed on pollen and nectar from the flowers in your garden. That means that there should be flowers blooming in the garden all season.

Some insects also need a high protein source and will feed on other insects to obtain that. Having a yard that is safe for the pollinators will also serve to bring in insects on which the pollinators can feed. Insects may feed on different food sources when they are young than they do as adults.

Water: It is important to have source of water available in times when rain is not plentiful. The source may be a bird bath or even a shallow saucer full of water. Be sure to drain and clean the water source every 3 or 4 days to keep it from becoming a breeding site for mosquitoes. If you place a small saucer out, it will probably dry out every day or two and eliminate the need for draining the water source. This will make less work for you.

Shelter is also important. Luckily our yards often provide what is needed. Some insects will seek refuge on plants, some live in the mulch or soil and even garden debris can be a safe haven. Of course, we want our gardens to be clean, but a little debris here or there may do more good than harm. There is some risk with garden debris as overwintering sites for pests.

Plant a diverse garden to attract many different pollinators.

A diverse garden provides a buffet for many guests with different tastes and different arrival times. Again, this really is not hard to do as we usually strive to have a garden with lots of flowers all season long for the visual appeal alone.

When we plan our gardens, we want to look at three things:

1. plant many kinds of flowers
2. have something in bloom at every part of the growing season
3. Consider using native plants.

Native plants are a food source for native insects, which in turn are a food source for wildlife and birds, native plants help support the food chain. Many native insects do not feed on introduced plants. While planning for the pollinators we can also turn our gardens into mini-habits that can support the local fauna. These mini-habitats help fill in the distances between larger wild habitats.

Get to know the pollinators.

Many people just assume that the majority of insects are pests, but this is not necessarily so. Many of them are beneficial in that they pollinate our plants. There is a wide range of insects that pollinate. We all know the honeybees, but there are many other species of bees that are also good pollinators and they are native as well. Wasps and hornets can also be pollinators. We are also familiar with butterflies, but may not know that moths can also pollinate.

Beetles, and even flies will pollinate plants. Hummingbirds are pollinators and in some parts of the world, bats serve the same purpose. Everything does not rest on the backs of the honey bees. Recognizing the pollinators will help us preserve them in our yard. Our first instinct often is to kill insects when we see them. Let's get to know some of the common pollinators and their preferences.

For each pollinator: A preferences for a particular flower type does not indicate exclusivity. Pollinators may be found on flowers that do not fit the 'type'.

- Flowers that appeal to bees and wasps often have the following characteristics:
  -rich in nectar; often tubular with the nectar in the base of the tube
  -usually brightly colored; petals are often blue or yellow or a mixture
  -fragrant
  -open during the day
  -shaped to provide a 'landing platform'
  -often bilaterally symmetrical

- Beetles often prefer flowers with the following characteristics:
  -bowl-shaped with gender parts exposed
  -often white, to dull white or green
  -strongly fragrant with a fruity scent
  -open during the day (some at night)
  -moderate producers of nectar
  -may be large solitary flowers (magnolias) or clusters of small flowers (goldenrod)

- Butterflies prefer flowers with these characteristics:
  -in clusters large enough to provide landing platforms
  -generally, brightly colored (red, yellow, orange)
  -open during the day
  -rich in nectar; the nectar is often deeply hidden in the flowers
  -sometimes clusters of smaller flowers (goldenrods, spirea)

- Moths prefer flowers with the following characteristics:
  -in clusters large enough to provide landing platforms
  -white or dull colors
  -open in the late afternoon or at night
  -rich in nectar; the nectar is often deeply hidden in the flowers

- Many flowers preferred by flies have some of these characteristics:
  -dull colored to dark brown or purple
  -sometimes marked by translucent patches
  -smelly! They offer smells attractive to flies like rotting meat, dung, sap, etc.
  -good pollen producers
  -often complex and may feature funnel like structures or complex traps

- Hummingbirds are attracted by flowers with the following characteristics:
  -tubular; with recurved petals; may have tubes, funnels, cups
  -brightly colored: red, yellow, or orange and open during the day
  -odorless
  -rich in nectar, with nectar deeply hidden
  -modest pollen producers

Protect your pollinators

Protect them from pesticides. The chemicals that help us kill pests often have a toxic effect on good insects as well. Use integrated approach to pest control (good plant culture, traps, barriers, handpicking). Use least toxic pest control and spot treat only. Consider eliminating use of pesticides.

Some good resources on pollinators and native plants:

http://illinoiswildflowers.info/flower_insects/index.htm

Heather Holm; "Pollinators of Native Plants"; Pollination Press, Minnesota; 2014

Heather Holm: "Bees, An Identification and Native Plant Forage Guide; Pollination Press, Minnesota; 2017

Eric Mader, Matthew Shepherd, Mace Vaughn, Scott Hoffman Black and Gretchen LeBuhn; "Attracting Native Pollinators: Protecting North America's Bees and Butterflies"; the Xerces Society; Storey Publishing; 2011