

Acton WildAware Beacon article
June 23, 2016
Paula Goodwin

Pollinators: Bees, Butterflies and Hummingbirds

The “Plant Something for Pollinators” campaign became a Massachusetts state-wide effort on May 15, 2016. The Plant Something for Pollinators campaign is a joint program organized by the Massachusetts Flower Growers Association (MFGA) and the Massachusetts Nursery and Landscape Association (MNLA). Residents are encouraged to plant at least one pollinator-friendly plant to improve pollinator populations across the Commonwealth.

Pollination is the process by which all plants reproduce. Although some plants can produce seed from self-pollination, most require cross-pollination. The majority of flowering plants (close to 75 percent) rely on animal pollinators, rather than wind, which carries the pollen of grasses, conifers and ragweed. Animals (bees, butterflies, hummingbirds and others) transfer pollen more efficiently than the wind. The grains of pollen on these flowering plants are larger and have rough surfaces that help them cling to the pollinators. The protein level may be as high as 60 percent. To attract pollinators, plants have developed flowers in brilliant colors and perfumed scents. Nectar and protein rich pollen are the rewards. The more types of flowering plants you grow, the greater variety of pollinators you will attract.

Bees

Honeybees, having their origin in Europe and evolved with food plants such as apple and plum trees, also pollinate berry bushes very efficiently.

Bumblebees are attracted to blue flowers and notably cannot see red or ultraviolet reflecting light, but can see all colors humans can see. They use flower color as a memory trigger to remind them which flowers have the most nectar and pollen, and where they are located.

Hummingbirds

Hummingbirds are especially attracted to the color red. They feed from many different flowers, bushes, trees and shrubs. Some suggestions are nasturtium, snapdragons, foxglove, day lilies and impatiens.

Butterflies

Caterpillars need the right host plants on which to feed, so eggs are laid on specific plants which will support them right after they emerge and begin eating immediately. Unlike bees and wasps that lay their eggs in protected brood cells in a nest, where they are tended by adults, the conditions for flies, butterflies and beetles are much more variable. The larval (caterpillar) stage depends on weather conditions, time of year and abundance of their host plants. As the caterpillar grows, it molts four or five times as it grows to full size. When the caterpillar is full grown, it attaches itself to a leaf or branch where it dangles. Its outer skin splits and falls away and the skin hardens into a shell called a chrysalis. The chrysalis is very fragile. The colors of the butterflies wings may be seen as days and weeks pass and the shell becomes more transparent. When the butterfly is fully formed, the chrysalis cracks open and the

moist, crumpled butterfly emerges. It swallows air to pump blood into the wings so they expand, hardening as they dry.

Special Planting Guidelines for Butterflies

- A few suggestions of flowers (check on-line web sites and book resources) such as Purple Coneflowers, Snapdragons, Parsley, and Marigolds, Asters, Zinnias and Bee Balm.
- Puddles: Fill a shallow pan or dish with garden soil. Push a few stones taller than the level of the soil. Fill with water to a depth that keeps the soil soaked. The nutrients in the soil provide nourishment that flowers cannot provide
- Sun and Shade: 8 hours of sunshine a day is recommended.
- Shelter: Butterflies are delicate and cannot handle blustery wind

With the start of the summer season underway, now is an opportune time in the growing season to establish backyard gardens, window boxes and patio potted plants which all have the capacity to provide flowering herbs, vegetables and annual and perennial flowering plants that support a variety of pollinators.

Resources for this article, available at Acton Memorial Library:

[The Wildlife-Friendly Vegetable Gardener](#) by Tammi Hartung

[The Xerces Society Guide: Attracting Native Pollinators](#)(2011)

[How-To Library: Making Butterfly Gardens](#) by Dana Meachen Rau

Paula Goodwin is a member of the Acton Conservation Commission who introduced WildAware with Acton Natural Resource Assistant Bettina Abe. WildAware is a program sponsored by the Town of Acton Natural Resources Department that began in September and will continue through the summer of 2016. The purpose of WildAware is to educate the community about the existence and habits of wild creatures, and the goal is increased community awareness of shared habitats. For information, call 978-929-6634 or send email to nr@acton-ma.gov.