POLLINATOR-FRIENDLY SITES

FAST FACTS

Pollinator meadows may be used to attract honeybees and more than 4,000 species of native pollinators in North America, including bees, butterflies, hummingbirds, and even some flies. Increased attention to the plight of such pollinators as honeybees and monarch butterflies by the government and private sector has spurred an interest in developing pollinator-friendly habitats across the North American landscape. One of the highest examples was the 2015 White House announcement of the National Strategy to Promote the Health of Honeybees and Other Pollinators.

ABOUT POLLINATOR-FRIENDLY SITES

Almost any site not intended to be mowed repeatedly during the growing season may be designed to be pollinator friendly. Pollinator-friendly meadows are often thought of as being planted on flat sites in full sun, but they can also be planted at woodland edges. Pollinator-friendly species aid in soil stabilization on steep slopes and riparian areas. Storm basins and wetlands are more aesthetically pleasing when enhanced with pollinator-friendly species. Rights-of-way under utility transmission lines, above pipelines, and along roadways can be developed to an ecologically beneficial state when functional diversity and pollinator-friendly species are incorporated into seed mix design. When planted within a solar array, transpiration from native plants can reduce panel temperatures thereby increasing panel efficiency.

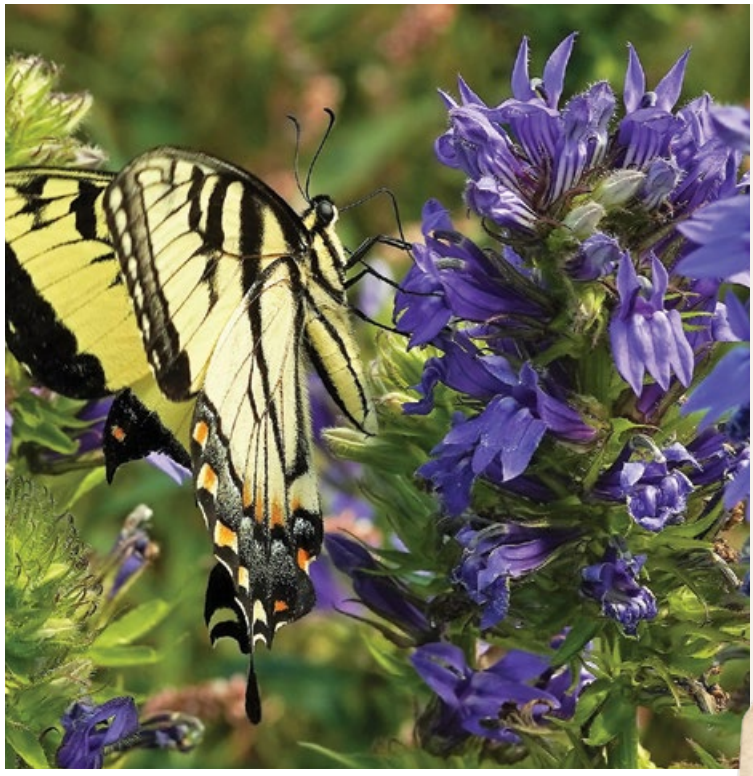
The primary energy source for most adult bees, butterflies, and other flower-loving pollinators is nectar. Pollen is essential for providing proteins and lipids to developing bee larvae while leaf tissue from specific host plant families is required for butterfly caterpillars. Most native bees are nectar generalists in that, though pollen specialists, they can consume nectar from many plant families. They are also pollen specialists whose larvae require a specific ratio of proteins to lipids. The best sources of pollen for native bees as well as leaf tissue for native butterflies are the native plant species with which they have co-evolved.

While not native to the U.S., honeybees have evolved to be able to use pollen from a wide range of species. Like native bees, honeybees feed nectar and pollen to their larvae. They also need pollen to have a particular protein-to-lipid ratio that they get by collecting pollen from a variety of plant species.

Honeybee on a Cup Plant *(Silphium perfoliatum)*.

Monarch butterflies on Marsh Blazing Star (*Liatris spicata*). Photo credit: Rob Davis.

To meet the dietary needs of a wide range of pollinators, it is important to know that some pollinator species are not active for the entire growing season. During the active period, food and nesting resources must be available. The availability of flowering shrubs or trees for pollen and/or nectar before herbaceous species bloom in the spring is beneficial to some pollinator species. Continuity of bloom from as early in the season to as late in the season as possible is important. A minimum of three species should be in bloom in the spring, summer, and fall. For the benefit of monarchs, milkweeds should be planted.



Swallowtail Butterfly on Great Blue Lobelia *(Lobelia siphilitica).*

TO SUPPORT THE GREATEST DIVERSITY OF NATIVE POLLINATORS:

- Provide continuity of bloom from as early to as late in the season as possible.
- Minimum of three species blooming in spring, summer, and fall.
- Plant milkweeds for monarchs.

POLLINATOR-FRIENDLY SITES SEED MIXES	
ERNMX-105	**Mesic to Dry Native Pollinator Mix**
ERNMX-125	**Mesic to Dry Native Pollinator Mix without Grasses**
ERNMX-153	**Showy Northeast Native Wildflower & Grass Mix**
ERNMX-153-1	**Showy Northeast Native Wildflower Mix**
ERNMX-155	**Deer-Resistant Meadow Mix**
ERNMX-157	**Honeybee Forage Mix**
ERNMX-179	**Butterfly & Hummingbird Garden Mix**

Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not. See "Disclaimer," p. 15. For "Expectations of Native Species," see p. 12.