



The Habitat Corner

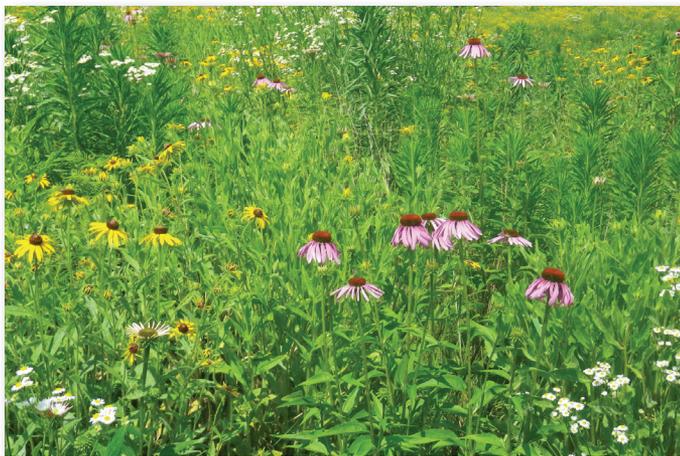
THE IMPORTANCE AND PLIGHT OF POLLINATORS

Pollination is an essential process for plants which occurs when pollen fertilizes the flower resulting in the production of seeds, fruits and vegetables. While some plants are fertilized by pollen being carried by the wind, many require assistance by insects or animals that transfer the pollen within or between flowers. It is estimated that one of every three mouthfuls of food or drink we consume require the presence of a pollinator (*Xerces Society, Book: "Attracting Native Pollinators", 2011*).

Bees are the most important group of pollinators, but also include wasps, hummingbirds, butterflies, moths, beetles, and even bats in some areas. In recent years, the plight of declining populations of some pollinators, particularly honeybees, has received increased publicity. Pollinator declines have been attributed to pesticides, diseases, and loss of habitat.

While crops such as soybeans and tomatoes are wind pollinated, in order to reach their maximum yield, they require pollinators to assist in pollination of flowers. If not fully pollinated, fruits like apples may be misshapen or undersized. When pollinators disappear, long-lived plants may appear normal for many years after but their ability to reproduce is greatly affected.

How much pollinator habitat is needed will vary greatly depending on whether you have a small garden, an orchard, or a large row crop farm. Field borders and odd areas are com-



An assortment of wildflowers such as purple coneflower, black eyed susans and asters attract the eye as well as provide good habitat for pollinators.

A good pollinator habitat has...

- a variety of plants that flower at different times*
- downed branches and logs*
- no pesticides*
- sandy or loamy soils for ground-nesting bees*
- stumps, snags or large-stemmed plants for tunnel-nesting bees*

mon places chosen to locate pollinator habitat. Research has shown that for some crops total yield can be increased with as much as 30 percent of the same acreage in pollinator habitat instead of crop. Simply reducing or avoiding mowing of idle areas through late summer or fall will allow many wild plants to flower and provide food and structure for pollinators.

We can battle the loss of pollinator plants through increased use of native flowering plants and shrubs. Several U.S. Department of Agriculture (USDA) programs now have "Pollinator Habitat" practices, and native plant gardening and landscaping is increasing in popularity.

Habitat Tips: To help you with your habitat planning, the Xerces Society (www.xerces.org), the Pollinator Partnership (www.pollinator.org), and the U.S. Fish and Wildlife Service (<http://www.fws.gov/pollinators/>) have a wealth of information. The National Wildlife Federation (www.nwf.org) has a backyard habitat certification program. For those inter-

ested in larger pollinator habitat projects, contact your local USDA Service Center or TWRA habitat or nongame biologist.

Habitat Opportunities: There are many opportunities to create habitat that benefits pollinators – and opportunities to have USDA programs help fund it.

- The "Declining Habitat-Pollinators" practice in the Environmental Quality Incentives Program or Wildlife Habitat Incentive Program
- The CP42-Pollinator Habitat practice in the Conservation Reserve Program
- The Conservation Stewardship Program – Pollinator Habitat enhancement practice
- Other USDA practices that establish or restore native grass with a variety of native forbs, or native shrub thickets and hedgerows

ASK THE BIOLOGIST

Q: What is best to do on my land to benefit pollinators?

A: Many plants are specialized to be pollinated by only one or a few different pollinators. Start your planning by identifying what pollinators are needed to pollinate the crops you are growing or which you would simply like to see more of. Then structure your habitat plan to meet their nesting, foraging and cover needs.

"Helping Landowners and Wildlife Through Habitat Enhancement"

The Tennessee Wildlife Resources Agency has Private Lands Biologists that will assist you in developing a management plan for your property and a strategy to implement it. See www.TWRPrivatelands.org for who to contact for technical assistance and other useful information on habitat management and programs.