

## Pollinator Habitat Restoration Initiatives



In the United States, bees pollinate about 1/3 of all crops that we eat. This equates to \$14 billion in food production annually. Over the years, honeybees and other pollinators have declined dramatically, due to a number of human induced and other environmental factors. The problem is so significant that in 2015 the White House Pollinator Health Task Force released its National Strategy to Promote the Health of Honey Bees and other Pollinators. The Strategy identifies three major goals:

- Reduce honey bee colony losses/overwintering mortality to no more than 15% within 10 years
- Increase the Eastern population of the monarch butterfly to 225 million butterflies through domestic/international actions and public-private partnerships
- Restore or enhance 7 million acres of land for pollinators over the next 5 years through Federal actions and public/private partnerships



For many years, Davey Resource Group has incorporated pollinator-friendly, native plant species into many of our ecological restoration projects. These projects have included a 2-acre wildflower garden installation at the Cleveland Clinic Twinsburg campus; a bioswale/pollinator garden at the Nestle USA Building in Solon, Ohio; the installation of four pollinator gardens for a company in Lebanon, Ohio; and installation of pollinator plants in projects, volunteer activities, and research efforts, Davey Resource Group is working on the front lines of this issue to be part of the solution to this growing, global problem. Three of our more recent pollinator-focused projects are highlighted below.

Through project design and construction, volunteer efforts, educational outreach, and research, Davey Resource Group has become a leader in addressing the decline of pollinators in the United States

For the past several years, Ohio Department of Transportation (ODOT) has experimented with the establishment of pollinator habitats along its roadways. In 2016, ODOT retained Davey Resource Group to work with the agency and the Ohio Pollinator Habitat Initiative to develop GIS mapping that will identify suitable areas for pollinator habitat restoration within highway rights of way throughout the state. Guidelines are also being developed to assist ODOT Districts and Local Planning Agencies that wish to restore various types of pollinator habitats in these areas. Restoration measures will be developed for various soil conditions, slopes, topography, solar exposure, and other factors. The restoration of pollinator habitat will have the added benefit of reducing maintenance costs for mowing along our state's roadways.

In May, 2016, Davey Resource Group partnered with the Ohio Turnpike Commission, Keep Ohio Beautiful, and students from the Lorain County Joint Vocational School to plant educational pollinator gardens on two of the busiest rest stops along the Ohio Turnpike. Senior biologists from Davey Resource Group volunteered their expertise and time to design plans for the pollinator garden sites. Seventeen plant species that are adapted to grow within the gardens were selected. Davey Resource Group also provided training and oversight for planting the gardens, and developed educational signs that inform travelers about the benefits of pollinator habitats.

Researchers at the Bio-ecological Laboratory of the Davey Institute, the research division of the Davey Tree Expert Company, are also developing effective strategies to establish sustainable pollinator plantings in a variety of habitats. Efforts include development of customized seed mixes that contain native plants that will bloom at various stages throughout the growing season and standardized pollinator health care programs that include cost-effective monitoring and maintenance methods.

