

2016 Search for Excellence Awards—*Demonstration*—2nd Place Winner

CREATING A POLLINATOR GARDEN AT THE DAWES ARBORETUM

Nestled in the rolling hills of Licking County, Ohio, is an environmental treasure —The Dawes Arboretum. Within this historic landmark site, seven Licking County Master Gardener Volunteers planned for, developed and planted a native plant habitat to serve the declining population of pollinators and provide educational opportunities on pollinator needs to the 250,000 youth and adults who annually visit the Arboretum.



EDUCATIONAL IMPACT

Volunteers conduct scheduled garden tours and, in the past few months, have taught several Dawes programs including for the Ohio Sustainable Landscape Symposium, Pollinator Garden Tour, *Using Native Plants to Attract Pollinators*; presentation for the public, *Welcoming Wildlife to the Garden*. In addition, several programs involving the garden have been held for the Family Nature Investigation Program including *Monarch Butterfly Release and Tagging*; *Building a Beehouse and Pollinator Paradise*; *Creating a Habitat for Birds, Bees, & Butterflies*. Neither individuals nor families have to pay a visitor's fee to visit any part of Dawes Arboretum, albeit a handful of programs require a very modest participation fee.

Sarah Mill, Education Director at the Dawes Arboretum, states, "This garden is a valuable addition to educational programming at this Dawes Arboretum. Educators and other staff can regularly be found in the garden, guiding participants in activities, searching for bees and caterpillars, releasing butterflies or simply finding their own inspiration and respite in nature."

Because of the successful collaboration between the Licking County Master Gardener Volunteers and The Dawes Arboretum, plans are in the works to expand the Pollinator Garden and its educational programming. Luke Messinger, Executive Director for the Dawes Arboretum states, "The garden provides education opportunities to over 250,000 visitors to the Arboretum each year. The potential of these gardens truly would not have been realized without the vision, leadership and hard work of Master Gardener Volunteers who have and continue to care for this unique garden. We are truly thankful for their efforts and ongoing support."

THE PROJECT

A small group of Licking County Master Gardener Volunteers—who routinely volunteer at the Dawes Arboretum—equally shared a dismay about the alarming decline in bees' loss of habitats and the plight of Monarch butterflies. They decided to ask about creating a new pollinator garden at Dawes to attract bees and butterflies and reach as many people in the community as possible to make them aware of this environmental crisis. The administrators at Dawes were interested and enthusiastic, particularly because the birdwatching garden, created and maintained by Licking County Master Gardener Volunteers, is a favorite site for Dawes visitors. Dawes gave the volunteers the freedom to plan for, execute, and manage this new habitat.

THE METHOD

Gather research. Led by Kathy Stout, a long-serving Master Gardener Volunteer, six other volunteers—Mary Beth Matthews, John Kaufmann, Elaine Boaz, Dave Proctor, Linda Bishop, and Catherine Williams—all agreed the first step was to teach themselves about bees and butterfly habitats. They met weekly from winter into spring to share knowledge from their individual research studying authoritative books, attending lectures and professional seminars, and conferences to learn more about pollination, bees and habitat design. The LCMGV learned how to attract pollinators, the varieties of pollinators (bees, butterflies, wasps, and flies), the importance of diversity, habitat design, the significance of using native plants, plant selection, plant bloom succession, plant maintenance, host plants, and nesting and egg-laying sites.

SET GOALS

Once the volunteers felt confident they knew how to proceed, they set the goals of the project.

1. Create a garden that meets the requirements for certification as a Pollinator Habitat
2. Offer the community a model pollinator garden so people can observe how the use of native plants can provide the diversity important for bees, butterflies, and other pollinating insects to thrive
3. Provide educational opportunities for adults and children to learn about the importance of pollinators and ways to replicate meeting pollinator needs in their own gardens

Work as a Partnership. Dawes personnel and the seven Master Garden Volunteers set expectations for this partnership. The volunteers emptied an underutilized 300 ft space allotted them for the new pollinator habitat. Situated in full sun, the space did not require a great deal of soil modification although some herbaceous, invasive, and woody plants were removed. Master Gardener Volunteers then choose the new plants, went to nurseries to buy new plants, planted them, weeded, and observed the plants to maintain growth. Dawes provided a budget to pay for the new plants, provided mulch, composted weeds, and assisted with watering (although native plants require little watering and no fertilization).

More than 30 native species were chosen for the habitat based on favorite bloom colors of bees, e.g., blooms that are white, yellow and blue (as well as lavender and pink), bloom time succession, and host plants that would support egg-laying and larval growth. The shape of plant blossoms were carefully considered to ensure short and long-tongued bees would be accommodated. Clustered plantings were set up to attract pollinators of different sizes and meet the needs of pollinators who have shorter flight patterns—all to make nectar and pollen gathering more accessible. Rock clusters and weathered logs were placed among plant clusters to meet the needs for shelter, nesting, and overwintering. Wide, shallow dishes were placed in the garden for water. No pesticides were used. Paths were created and garden seating included so visitors to the new pollinator garden are drawn in and invited to observe the pollinators at work.

THE RESULTS

The new pollinator garden at Dawes meets Xerces Society criteria and is now certified as a designated and official Pollinator Garden. It also meets the criteria to be designated as a Monarch Way Station. The Master Gardener Volunteers, who work in the garden weekly, spark the interest of the frequent visitors who stop by the garden and ask questions. The volunteers share fascinating anecdotes about bees, their decline, and encourage visitors to create a garden for pollinators using native plants.

"The garden serves as a natural classroom to share and teach our guests about the importance of pollinator habitats."

Sarah Mill, Education Director, Dawes Arboretum



NATIVE PLANTS FOR POLLINATORS

Golden Alexanders	Grey-Headed Coneflowers
False Indigo	Swamp Milkweed
Hardy Geranium	Rattlesnake Master
Long-Sepaled Beardtougue	Wild Bergamot
Culvers Root	Culvers Root
Aromatic Aster	Aromatic Aster
Wild Quinine	Goldenrod
Monarda	Little Blue Stem
Brown-Eyed Susan	Prairie Dropseed
Joe Pye Weed	Grass
Blue Wood Delphinium	



HELPFUL RESOURCES

H. Holm. (2014). *Pollinators of Native Plants: Attract, Observe, and Identify Pollinators and Beneficial Insects with Native Plants*. Pollination Press LLC, Minnetonka, MN.

D. W. Tallamy. (2009). *Bringing Nature Home: How You Can Sustain Wildlife with Native Plants*. Timber Press. Portland, OR.

The Xerces Society Guide. (2011). *Attracting Native Pollinators: Protecting North America's Bees and Butterflies*. Storey Publishing LLC, North Adams, MA.

www.pollinator.org/index.html
<http://u.osu.edu/beelab/>

