

# Designing a Bee Garden



*Pollinators like bees support all life....choose life & garden wisely!*

Wildlife-loving gardeners across the world enthuse about planting butterfly gardens, yet relatively few think to design a bee garden even though it will bolster the health of our gardens and help conserve one of nature's treasures.

**Why?** Mention the term 'bee' and 'honey bee' immediately comes to mind even though there are an estimated **4,000 species of native bees** in the United States and more than **400** in Pennsylvania. Honey bees themselves are not indigenous to North America but were imported from central Europe in the seventeenth century. All bees provide essential pollination services which keep ecological systems in balance and offer diversity to our diet. Unfortunately, their numbers are declining worldwide.

More than **80%** of all flowering plants on earth require the help of pollinators such as bees, bats, beetles, butterflies, flies, moths, and hummingbirds. Of these pollinators, bees such as honey bees are the most important in pollinating plants that provide us with food in the form of fruits and vegetables. The Xerces Society notes that about one out of every three bites of food we take is made possible by honey bees.

Planting a well-designed and **pesticide-free**, bee garden provides food and shelter for bees, allowing them to safely increase their population.

**How?** Variety is the spice of life to a bee! The most successful bee gardens provide the following:

- ❖ **10 or more species of bee-preferred plants** such as asters, goldenrods, & mints
- ❖ **Pesticide free habitat** to forage & reproduce successfully
- ❖ **Successional plantings** from March thru October using preferably native plant species
- ❖ **Variety of flowering plants** in all colors, shapes, & sizes
- ❖ **Undisturbed, overwintering sites** November thru March for bee pupae & larvae stage
- ❖ **Water, especially in muddy sites**, where natural minerals & salt is available



**Who?** Bees, whether solitary or social, thrive in gardens that are not extremely manicured. Gardens with scattered plantings do not attract as many visits and therefore receive less pollination because bees expend too much energy flying between locations.

**Choosing Plants:**  **Bees require two food sources to survive: pollen & nectar, provided by plants**

- ❖ Select plants native to your region to meet the needs of native bees.
- ❖ Non native plants such as herbs and old fashioned varieties like nasturtiums, sunflowers, and snapdragons also attract bees, but avoid invasive plant species that threaten wildlife habitat; see DCNR's List: [PA Invasive Plants.pdf](#)
- ❖ Avoid hybridized plants with double flowers or "pollen free" cultivars.
- ❖ Use flowers in purple, blue or yellow colors that are more attractive to bees; bees see red as black and are able to detect ultraviolet colors invisible to human eyes.
- ❖ Exercise tolerance for weeds like dandelions, queen Anne's lace, & chicory that support bees

