

## Illinois Pollinators Trunk





## Native Plants

## Why do we need native plants?

Native plants developed with their native pollinators. Their blooming time coordinates with the activity time of their pollinators. Their shape is developed for their specific pollinators, too. This cooperative effort ensures the success of both groups of organisms, as long as both groups of organisms are available and available at the right time of year. Native plants provide food and shelter for pollinators and are important to more than one part of the pollinator's life cycle.

Nonnative plants and those plants that have been bred for traits important to humans (flower color, length of blooming period, size of flower, etc.), often do not provide much or any pollen and nectar for native pollinators. You can have a yard full of blooming plants that will provide little food and nectar for any pollinators. These types of plants may also only provide one feature needed for a pollinator's life cycle. For example, butterfly bush (*Buddleja davidii*) is often planted in home landscaping. This species is native to Asia. It will attract pollinators, but it does not provide support for their entire life cycle. Some nonnative plants are invasive, spreading and taking away habitat from native species.

Adding native plants to your landscape can be done simply. Plant them between other plants in your garden. Plant them along a fence or next to a garage. You can also use them in container and raisedbed gardens. A small native butterfly or pollinator garden can be added to many home landscapes with little expense. Even small patches of native plants can provide big benefits for pollinators.

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## **Pollinator-friendly Flowers**

For animal-based pollination to work, the plants must bloom when their pollinators are active, and the pollinators must be adapted to the structure of the flowers. There are pollinators that are most active in spring, and others that develop later in the year. Flowers that rely on pollinator animals are often colorful, large, have a scent that may be pleasing, or offensive, to humans, produce a good amount of nectar and may have special arrangements of pollen that are easily seen by insects. These traits are used to attract pollinators.

Flat, shallow flowers are best for many types of pollinators, especially those with short tongues, to land on and drink from. Native sunflowers (*Helianthus spp.* and *Heliopsis helianthoides*), asters (*Symphiotrichum spp.*) and many other members of the aster family are examples.

Flowers with elongated, tube-shaped blooms and nectar deep inside are visited by long-tongued pollinators. Beardstongue (*Penstemon spp.*), false dragonhead/obedience plant (*Physostegia virginiana*) and columbine (*Aquilegia canadensis*) are among the species with tubular flowers. They may include a landing platform for pollinators on the bottom of the tube. Ruby-throated hummingbirds (*Archilochus colubris*) prefer red, tube-shaped flowers with no landing platform. Some moths are attracted to white or dull-colored, tubular flowers that are open at night.

Beetles are attracted to bowl-shaped flowers with strong fruit odors.

Other pollinators are generalists and visit all types of blooms.

Some flowers do not need pollinators to fertilize them. There are flowers that self-fertilize. Windpollinated flowers are often small, with no petals and dull-colored. Water is used to pollinate other flowers. Some flowers produce little pollen and nectar, often because of selective breeding by horticulturists that has been used to enhance their color, flower size, blooming period, disease resistance or other factors. They may look pretty in your garden, but they do not attract and are not helping native pollinators.

When planning your pollinator garden, try to include a variety of flower shapes as well as colors. Watch the flowers over the growing season to see which ones are visited regularly by pollinators and which ones are ignored. Try changing species the following year, if needed, to include more flowers that are friendly to pollinators.