

Help the Pollinators: Plant a Native Garden



Who are our local pollinators?

Insects such as bees and butterflies, and hummingbirds.

Why are they important?

Three fourths of all plants need pollinators to reproduce, including 35% of food crops.

Why are they in trouble?

More than half of North American native bee species are declining and 19% of U.S. butterflies are at risk of extinction. Their threats are due to changes in land use, intensive agricultural practices and pesticide use, alien invasive species, diseases and pests, and climate change.

<https://ipbes.net/article/press-release-pollinators-vital-our-food-supply-under-threat>

Native Plants Provide Food for Pollinators!

Most of our pollinator species are native, and they co-evolved with native plants. According to the Xerces Society, native plants attract four times more pollinators than non-native plants. Many butterflies will only lay eggs on native species. Planting natives gives an added bonus of supporting the insects that birds need to reproduce.

Here are some tips for creating a garden that will nurture pollinators AND people.

PLAN

The best pollinator gardens provide food and shelter for a variety of pollinating insects through the seasons and their life cycles. Bees and butterflies feed on nectar (and sometimes pollen) from flowers, while butterfly caterpillars feed on specific host plants. For example, the host plants for monarch caterpillars are milkweeds. Bees need nest sites, and any insect that does not migrate needs a sheltered spot to overwinter.

Choose a site for your garden that gets full sun from at least mid-morning to mid-afternoon. Determine if your soil is sand, loam, or clay, and if it is wet, mesic, or dry.

You will now need to choose which plants will grow best in the sun exposure and soil conditions of your garden space. These websites can help you: <https://www.possibilityplace.com/plant-finder> <https://www.prairiemoon.com/pollinator-favorites/>

Your plant list should have enough varieties to provide blooms from spring through fall. If your site is large enough, consider including shrubs. For small sites, your list should have mainly flowers and some native grasses or sedges.

Give some thought to the edge of your garden. Will it be surrounded by lawn grass? If so, a strip of paving stones, mulch, or a root barrier edging will help keep the grass roots from creeping into your garden. A larger garden benefits from a path for access.

Plan on one plant per square foot, (using plugs, half-pint or 3-inch pots), Shrubs should be given enough room to reach their mature size. Arrange plants by height with shorter plants in the front and along path edges. Clump at least 3 plants of the same species together.

Plant Sources:

Natives Haven Nursery nativeshaven.com

Prairie Moon Nursery prairiemoon.com

Prairie Nursery prairienursery.com

Possibility Place Nursery possibilityplace.com

Taylor Creek Restoration Nurseries

taylorcreeknurseries.com

Agrecol Native Nursery agrecol.com

This site lists northern IL native plant sales:

<https://chicagolivingcorridors.org/native-plant-sales/>

PLANT

Existing vegetation needs to be removed or killed before planting your plants. Here are several methods:

- **Mechanical** – Hand dig existing plants by the roots. Rent a sod cutter to remove lawn. Don't rototill; it causes seeds and rhizomes of weeds to sprout.
- **Smothering** - Cut existing plants down and lay down black plastic or heavy landscape fabric anchored with staples, bricks or rocks. Lawn grass will be killed in about 6 weeks. Other plants will take several months. Remove the plastic before planting.
- **Sheet mulch** - Cut existing plants down. If soil is dry, give it a good watering. Lay down sheets of cardboard (recycled corrugated cartons) or 6 layers of newspaper, overlapping at least 6 inches. Water it well. Spread 2 inches of wood or leaf mulch. Cut through the cardboard or newspaper to make a hole just big enough to plant.

Native plants can be planted spring through fall. No soil amendments or fertilizer are necessary. Be sure the plant sits at the same soil level as it was in its pot. Water your plants well and apply a two-inch layer of wood or leaf mulch. If you are planting any shrubs, you can sow seed of annual Partridge Pea or Black Eyed Susan around them to fill in the space until they grow to mature size.

MAINTAIN

For the first growing season after planting your garden, it will need about 1 inch of water per week, whether from rainfall or irrigation. After that, it should need little or no irrigation. Hand weeding will be necessary, especially in the first year as the plants grow. After that, weeds will have a more difficult time competing with your plants, but will still need to be removed as they show up.

Do not use pesticides in or near your garden. Even organic insecticides like Bt are deadly to caterpillars. Herbicides used nearby can drift and harm native plants.

In fall, when the plants turn brown, do not cut them down. Non-migrating insects need stalks and leaf litter to hide in over the winter. The dry stems and seed heads will provide beauty throughout the winter and attract birds. When spring comes, cut back standing stems to leave a 12-15" stubble. (Some small bees will lay their eggs in these vertical stems.) Place the cut stems and leaves onto the soil by the plant. New leaves will soon grow around the dry stems and leaves, and the overwintering insects will emerge during spring and summer to find their host plant.

WATER AND SHELTER

- A shallow dish of sand and gravel, kept moist, makes a good water source for pollinating insects.
- Butterflies like flat rocks for basking in the sun.
- Leave some areas of bare soil for ground nesting pollinators
- Leave dead wood and hollow stems for tunnel-nesting pollinators.
- <https://xerces.org/pollinator-conservation/nesting-resources> has more info for providing nesting places.

ENJOY

As you observe the pollinators visiting your garden, you will be amazed at their variety. This website will help you get to know them better: <https://ipollinate.illinois.edu/identifying-pollinators/> These websites can help you identify the caterpillars, chrysalises and butterflies that you may discover in your garden: www.butterfliesandmoths.org www.naba.org

SPREAD THE WORD

Let your neighbors and friends know about your garden, and the pollinators that you are providing a home for. Encourage them to do the same. Together we can give our pollinators the food and shelter they need to thrive and to play their important role in the web of life upon which our lives depend.

Native Flowers for Pollinators

Wild Columbine *Aquilegia canadensis*
Swamp Milkweed *Asclepias incarnata*
Common Milkweed *Asclepias syriaca*
Butterfly Weed *Asclepias tuberosa*
Wood Mint *Blephilia*
Prairie Coreopsis *Coreopsis palmata*
Prairie Clover *Dalea*
Purple Coneflower *Echinacea*
Rattlesnake Master *Eryngium yuccifolium*
Wild Strawberry *Fragaria virginiana*
Joe-Pye Weed *Eutrochium*
Early Sunflower *Heliopsis helianthoides*
Blazing Star *Liatris*
Cardinal Flower *Lobelia cardinalis*
Great Blue Lobelia *Lobelia siphilitica*
Wild Bergamot *Monarda fistulosa*
Stiff Goldenrod *Oligoneuron rigidum*
Beardtongue *Penstemon*
Wild Quinine *Parthenium integrifolium*
Prairie Phlox *Phlox pilosa*
Jacob's Ladder *Polemonium reptans*
Mountain Mints *Pycnanthemum*
Yellow Coneflower *Ratibida pinnata*
Black-Eyed Susan *Rudbeckia*
Wild Petunia *Ruellia humilis*
Rosinweed *Silphium integrifolium*
Compass Plant *Silphium laciniatum*
Smooth Blue Aster *Symphotrichum laeve*
Spiderwort *Tradescantia ohioensis*
Ironweed *Vernonia*
Culver's Root *Veronicastrum virginicum*
Common Blue Violet *Viola sororia*
Golden Alexanders *Zizia aurea*

Note: Cultivars of native plants may not be as beneficial to pollinators as pure natives. Cultivars have names in quotation marks, such as *Echinacea* "Pink Double Delight".

Some Butterflies and their Host Plants

Black Swallowtail - Golden Alexanders *Zizia aurea*, Heart-leaved Alexanders *Zizia aptera*
Little Yellow – Partridge Pea *Chamaecrista fasciculata*
Pearl Crescent, Sulphur – Asters *Symphotrichum*
Monarch - Milkweeds *Asclepias*
American Lady – Pussytoes *Antennaria*
Sleepy Orange, Cloudless Sulfur – Wild Senna *Senna hebecarpa*
Fritillaries – Violets *Viola*
Skippers, Common Wood Nymph, Little Wood Satyr – Prairie Dropseed Grass *Sporobolus heterolepus*, Little Bluestem Grass *Schizachyrium scoparius*
Buckeye – Wild Petunia *Ruellia humilis*
Dogface Sulphur –Prairie Clover *Dalea*

Native Shrubs for Pollinator Gardens

Serviceberry *Amelanchier*
Lead Plant *Amorpha canescens*
False Indigo *Amorpha fruticosa*
Chokeberry *Aronia melanocarpa*
New Jersey Tea *Ceanothus americanus*
Buttonbush *Cephalanthus occidentalis*
Dogwoods *Cornus*
St. John's Wort *Hypericum prolificum*
Spicebush *Lindera benzoin*
Willows *Salix*
Viburnums *Viburnum*



Caterpillar of Variegated Fritillary Butterfly on Common Blue Violet



Small Waters Education is a nonprofit organization promoting mutually beneficial relationships between humans and the rest of the natural world. We provide this information to help you create your own pollinator garden. We are also available to help schools, churches, and community groups create native gardens as educational tools.

small waters education

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