

Pollinator General Information.

Many of us enjoy the beauty of flowers and shrubs in our backyard and community gardens. Growing native plants adds beauty and important habitats for wildlife, especially pollinators. Even a small backyard garden can make a big difference.

Almost all flowering plants need to be pollinated. Some plants are pollinated by wind or water; some are even self-pollinating. Most flowering plants however depend on bees, butterflies and other animals for pollination. Pollinators are vital to maintaining healthy ecosystems – they are essential for plant reproduction, and produce genetic diversity in the plants they pollinate.

Insects and other animals pollinate one-third of the food we eat – all kinds of fruits, vegetables, grains, nuts, and beans (even coffee beans). The economic value of insect pollination worldwide has been estimated at \$217 billion; \$18 to \$27 billion in the United States alone.

Pollinator Types

Let's BEE Happy

Bees, butterflies, moths, hummingbirds, beetles, wasps and even flies pollinate flowers, but bee species pollinate flowers more often than any other group, including birds and butterflies. Bees are a diverse group of insects that include approximately four thousand species native to North America. Bees are by far the most effective pollinators because they feed only on flowers.

The bird is the word

Hummingbirds specialize on nectar feeding and play an important role in pollination. These colorful migratory birds serve as a link between plant populations by visiting flowers and moving pollen over great distances. To attract hummingbirds to your garden, provide them with

nectar starting in early spring. It's thought that hummingbirds prefer red-colored flowers; however they will feed on any flower that produces abundant nectar.

Butterflies and moths

From large monarchs and swallowtails to smaller fritillaries, butterflies add delicate motion to the garden. By growing a bounty of native flowering plants in your garden, you can attract a variety of the hundreds of species of butterflies and moths that are found in Wisconsin. By planting some “moth-friendly” plants, you can also add some motion to the garden after dark.

Selecting Plants

Pollinators are looking for two things when they forage in your garden – the nectar and pollen found in blooming plants provides them with carbohydrates and protein they need to thrive and produce their offspring. Think about “staging” the menu of blooms in your garden from early spring through fall by planting a wide range of flowering plants. Plants that bloom very early or late in the season are often the most important food sources for pollinators as there are not many other resources available during this time. Incorporating flowering trees and shrubs will also provide a food source as well as places for the pollinators to rest, hide from predators and build nests to raise their young. By carefully choosing woody and herbaceous plants that bloom during different times of the year and at different heights, along with thoughtful selection and placement of herb, bulbs and annuals you are not only enriching the available sources of food for pollinators, but enhancing your enjoyment as well.

Bees prefer blue, purple, and yellow flowers and sweet fragrances. Certain bees like composite flowers – Erigeron, Gaillardia, coneflowers and asters. Hawthorns, serviceberrys, apple and crabapple trees are also important food sources.

Butterflies favor platform-shaped sunflowers and asters, but will feed on a diversity of nectar rich flowers from violets to serviceberry shrubs. They prefer red, purple or yellow flowers with sweet scents.

Natives versus Cultivars

Pollinators have evolved with native plants, which are best adapted to the local growing season, climate and soils. Most pollinators feed on specific plant species or flower types. Non-native plants may not provide pollinators with enough nectar or pollen or may even be inedible to butterfly or moth caterpillars. Cultivars of native plants have been selected by growers for one or more desirable characteristics – fall color, larger flowers, growth habit, etc. These traits tend to make the plant desirable to the gardening public. These plants generally keep the same “native qualities” as the ancestral plant and could be considered for use in a pollinator garden.

Pesticides

Insecticide use in general can take a toll on honeybees, native bees and other pollinators when they are exposed to high enough concentrations. One class of insecticides, called neonicotinoids, is highly toxic to bees and other pollinators. Even sublethal exposure to this class of insecticides causes significant problems for bee health, including disruptions in mobility, navigation and feeding. Even a product as innocuous as Insecticidal Soap is toxic to bees if sprayed on them (residual contact with Insecticidal Soap however is non-toxic to bees). If you must spray, choose an insecticide that is safer to beneficials and spray in early evening when most pollinators are less active.

Planning a Pollinator Garden

“Think Like A Pollinator”

- **Go Native** – Pollinators are “best” adapted to local, native plants which often need less water than ornamentals.
- **Bee Sunny** – Pick a location that gets full sun.
- **Bee Bountiful** – Plant big patches of each plant species (better foraging efficiency).
- **Bee Diverse** – Plant a diversity of flowering species with abundant pollen and nectar; and specific plants for feeding butterfly and moth caterpillars.
- **Bee Showy** – Flowers should be blooming somewhere in your garden throughout the growing season.
- **Bee a Little Messy** - Most of our native bee species nest underground, so avoid using weed cloth or heavy mulch.
- **Bee Chemical Free** – Pesticides and herbicides kill pollinators.
- **Bee Homey** – Make small piles of branches to attach chrysalis or cocoons; provide hollow twigs for nesting bees. Build bee nesting boxes and butterfly houses to provide sanctuary for pollinators (plans available at websites online).
- **Bee Patient** - It takes time for native plants to grow and for pollinators to find your garden.

Pollinator Plants

Woody Trees and Shrubs:

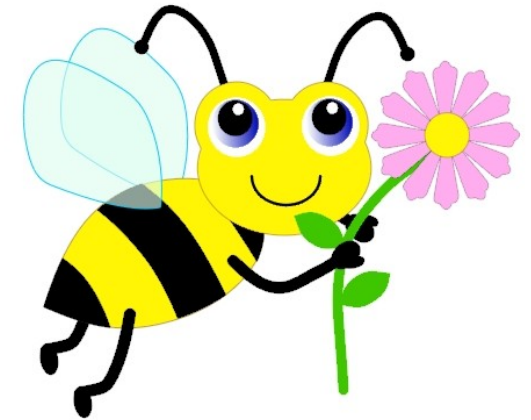
Amelanchier (Serviceberry)
Cornus sericea (Red twig dogwood)
Crataegus crus-galli (Cockspur hawthorne)
Diervilla lonicera (Dwarf bush honeysuckle)
Malus (Apples and Crabapples)
Any fruit trees and / or small fruits

Annuals (A) - Perennials (P) – Herbs (H)

P - Achillea millefolium (Yarrow)
P - Aquilegia canadensis (Columbine)
P - Aruncus dioicus (Goatsbeard)
P - Asclepias syriaca (Common Milkweed)
P - Asclepias tuberosa (Butterfly Weed)
P - Aster novae-angliae (New England Aster)
P - Baptisia australis (Blue Wild Indigo)
P - Coreopsis lanceolata (Coreopsis)
P - Echinacea purpurea (Purple Coneflower)
P - Eupatorium maculatum (Joe Pye weed)
P - Lobelia cardinalis and L. syphilitica (Cardinal flower and Great Blue Lobelia)
P - Liatris sp. (Gayfeather, Blazing Star)
P - Lupinus (Lupine)
P - Monarda (Beebalm)
P - Penstemon (Beardstongue)
P - Ratibida pinnata (Yellow Coneflower)
P - Solidago sp. (Goldenrod)
A - Alyssum, Cosmos, Dahlia, Dianthus, Impatiens Marigold
A - Millionbells, Petunia, Salvia, Viola, Zinnia
H - Basil, Borage, Broccoli Flowers, Cilantro, Dill, Fennel,
H - Lavender, Mint, Parsley

This is far from a comprehensive list. Please ask for additional suggestions for pollinator plants.

Pollinator Friendly Plants



WG Winter
Greenhouse
growing with you...

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**ALWAYS TRY TO PLANT NATIVE SPECIES
IN YOUR POLLINATOR GARDEN!**

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