

Creating a Pollinator-Friendly Garden

Pollinator gardens give pollinators a place to feed and raise their young while providing hours of enjoyment for the gardener.

General Guidelines for a Pollinator Garden:

- **Choose the right location.** Many pollinator-friendly plants need at least six hours of sun each day.
- **Create the best environment. Provide the following:**
 - Layers of trees, shrubs, perennial and annual flowers as well as some wild grasses and dead wood.
 - Water sources within the garden.
 - Areas of bare ground for ground-nesting bees.
 - A butterfly puddling area. Mix a little sand, a pinch of Sea Salt (this provides valuable minerals for egg development) and water.
- **Plant a diversity of flowering species that bloom in succession from spring through fall.** Choose plants that are rich in pollen and nectar as well as host plants for butterfly and moth caterpillar growth and development.
- **Choose native plants already adapted to the local environment.** Hybrid and double flowering plants may not provide enough nectar or pollen and may be inedible to butterfly or moth caterpillars.
- **Plant in drifts of a minimum of three plants of each species.** This helps pollinators find the plants easily.
- **Be chemical-free whenever possible.** Pesticides and herbicides kill pollinators.
- **Be patient.** It may take a few seasons for your plants to reach maturity and for pollinators to find your garden.

Pollinator Garden Perennials and Annuals by Sun/Shade Conditions: These are some examples of common plants that are easy to acquire and grow. Note bloom times to plant for a succession of blooms from April-October.

For Sun/ Medium-Dry Conditions:

- Wild Columbines (*Aquilegia Canadensis*)- April-May
- Wild Blue Phlox (*Phlox divaricata*)- April-June
- Butterfly weed and Milkweeds (*Asclepias spp.*)- July-August
- Blazing Star (*Liatris spicata*)-July-August
- Bee balm (*Monarda didyma*)- July-August
- Purple Coneflowers (*Echinacea purpurea*)- July-August
- Brown-eyed Susans (*Rudbeckia triloba*)- July-August
- Perennial Sunflower (*Helianthus spp.*)- July-August
- Purple Giant Hyssop (*Agastache scrophularii folia*)- July-August
- Yarrow (*Achillea millefolium*) – July-August
- Goldenrod- (*Solidago spp.*) August-October
- Black-eyed Susans (*Rudbeckia hirta*) – September-October

Annuals: Cosmos (*Cosmos bipinnatus*), Marigold (*Tagetes*), Lantana (*Lantana camara*), Cleome (*Cleome spp.*)

For Sun/Moister Conditions:

- Joe Pye weed (*Eutrochium spp.*)-July-August
- Obedient Plant (*Physostegia virginiana*)- July-August
- Cardinal Flower (*Lobelia cardinalis*)- July-August
- New England and NY Asters (*Symphotrichum novae-angliae* and *novi-belgii*)- Sept.-October

Annuals: Zinnia (*Zinnia elegans*)

For Partial Sun/Shade/Moister Conditions:

- Violets (*Viola spp.*)- April-May
- Jacob's Ladder (*Polemonium reptans*)– April-June
- Wild Ginger- (*Asarum canadense*) groundcover- small blooms-April-June
- Foamflower (*Tiarella cordifolia*)- April-June
- Wild Geranium-(*Geranium maculatum*) April-July

Annuals: Lobelia (*Lobelia erinus*), Begonia (*Begonia boliviensis*), Wishbone flower (*Torenia fournieri*), Fuchsia (*Fuchsia*), Impatiens or New Guinea impatiens (*Impatiens spp.*)

Pollinator-Friendly Gardens by Size

A Pollinator Garden Can Vary in Size. It can be a decorative planter with a mix of a few native flowers and annuals, a small perennial flower bed, a vegetable garden interspersed with flowers, or it can be an entire yard. Start small as you can always expand the garden later as time, budget and space allows.

Decide whether you will use seeds, established plants or a combination of the two. Using only seeds is budget-friendly but can take a few seasons for the garden to mature.

Container Gardens: Place the container in a sunny spot and fill the pot with rich, well-drained soil. Use native perennials whenever possible and supplement with non-natives and annuals.

Always read plant labels or seed packets. Plants in containers should have similar water, soil and light requirements. NOTE: Plants in containers may require more water than plants in a garden as they tend to dry out faster.

Some examples- Choose any combination from the following:

- **For butterflies:** Flat-leaf and curly Parsley, Dill, Calibrachoa, Coneflowers, Yarrow.
 - Butterflies prefer blooms with flat landing pads where they can easily land to sip nectar. Both butterflies and hummingbirds are attracted to brightly colored flowers (red, purple, pink or yellow flowers) with high sugar contents.
- **For hummingbirds:** Lantana, Petunia, Salvia, Sage, Coneflower, and Fuchsia. A simple container could have tall Salvia in the center with mid-sized purple coneflower next to it and 'Wave' petunias spilling over the edge.
 - Hummingbirds tend to be very territorial and will chase other hummingbirds away from their favorite flowers. To attract more hummingbirds, place containers in different areas of the yard.
- **For bees:** Pentas, Zinnias, New England or NY Aster, Snapdragons, Salvias.
 - Avoid double flower plants as these can confuse bees and make it impossible for them to attain nectar.

Small Gardens: Consider using mature plants or immature plugs as your budget allows. Using plants instead of seeds will mean quicker establishment, flowers, and visits from pollinators. Add any of the following to the lists above:

- **For butterflies:** Butterfly weed, Coneflowers, Black-eyed Susan, Phlox, Butterfly weed, Blazing Star, Bee balm, Agastache.
- **For hummingbirds:** Yarrow, Agastache, Wild Columbine, Coral Bells, Bee balm, Black-eyed Susan, Blue sage, Beardtongue, Cardinal flower.
- **For bees:** Marigolds, Bee balm, Agastache, Blazing Star, Obedient plant.
 - Avoid using weed barriers or heavy amounts of mulch which can hamper many ground-nesting bees.

Large Gardens: Consider using seed instead of, or in addition to, plants. Add any of the following to the lists above:

- **For butterflies:** Joe Pye weed, Ragweed, Milkweed, Goldenrod.
- **For hummingbirds:** Honeysuckle (trellis able to support heavy vines needed).
- **For bees:** Phlox, Sunflowers, Joe Pye weed.
- **For bats and moths:** Nicotiana (flowering tobacco), Cleome, Honeysuckle, French marigolds, Wild Columbine, Evening primrose, Morning glory (trellis or support needed).

Adding layers of shrubs and trees (as your space allows) will create a beneficial habitat. For a full listing of pollinator-friendly native species for this area, go to: <http://monroe.cce.cornell.edu/master-gardeners/pollinator-friendly-garden-certification/native-plant-lists>

Resources:

- Cornell Cooperative Extension, Monroe County, NY: <https://www.monroe.cce.cornell.edu>.
- Gardening for Pollinators- U.S Forest Service: <https://www.fs.fed.us>.
- Pollinator Partnership-Enter your zip code for information specific to your area: <https://www.pollinator.org>.
- NY Flora Atlas: <https://www.newyork.plantatlas.usf.edu>.

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