POLLINATOR PLANTS

Mid-Atlantic Region

New England aster, pussy willow, and Helen's flower.

The Mid-Atlantic Region encompasses North Carolina, Virginia, West Virginia, Maryland, Washington, D.C., Delaware, New Jersey, and Pennsylvania. High regional variation in topography, soils, and climate has resulted in tremendous ecological diversity, ranging from the salt marshes and wetlands of the eastern Coastal Plain, to the spectacularly species-rich deciduous forests and riparian communities of the Piedmont foothills and Appalachian Mountains.

Corresponding to this striking diversity of plant communities is an equally remarkable range of pollinators, including nineteen bumble bee species and thousands of other species of native bees, butterflies, hover flies, flower-visiting beetles, wasps, and moths. As a group, these and other pollinators maintain healthy, productive plant communities, provide food that sustains wildlife, and play an essential role in crop production. In the Mid-Atlantic, several important pollinators, including the rusty-patched bumble bee and the bronze copper butterfly, are threatened by habitat loss, including dramatic declines in native plant communities needed to support these animals.

Providing wildflower-rich habitat is the most significant action you can take to support pollinators. Adult bees, butterflies, and other pollinators require nectar as their primary food source. Female bees also collect pollen as food for their offspring. Native plants, which are adapted to local soils and climates, are usually the best sources of nectar and pollen for native pollinators. In addition, native plants often require less water than non-natives, do not need fertilizers, and are less likely to become weedy. Incorporating native wildflowers, shrubs, and trees into any landscape promotes local biological diversity and provides shelter and food for a diversity of wildlife.

This guide features regional native plants that are highly attractive to pollinators and are well-suited for small-scale plantings in gardens, on business and school campuses, in urban greenspaces, and in farm field borders. In addition to supporting native bees and honey bees, many of these plants attract nectar-seeking butterflies, moths, and hummingbirds, and some are host plants for butterfly and moth caterpillars. With few exceptions, these species occur broadly across the region and can be purchased as seed or transplants. Please consult regional floras or the Biota of North America Program's web-based North American Plant Atlas for details on species' distributions in your specific area.

BRING BACK THE POLLINATORS
A Xerces Society Conservation Campaign

Our Bring Back the Pollinators campaign is based on four principles: grow pollinator-friendly flowers, protect bee nests and butterfly host plants, avoid pesticides, and spread the word. You can participate by taking the Pollinator Protection Pledge and registering your habitat on our nationwide map of pollinator corridors.

www.bringbackthepollinators.org

Bloom Period		Common Name	Scientific Name	Flower Color	Max. Height (feet)	Water Needs	Notes
		Forbs				L: low; M: med.; H: high	All species are perennials, unless otherwise noted
Early	1	Foxglove beardtongue	*Penstemon digitalis*	white	3	M	Semi-evergreen; prolific nectar producer; visited by many butterflies, moths, and bees, including honey bees
Early – Mid	2	Lance-leaved coreopsis	*Coreopsis lanceolata*	yellow	3	L	This early bloomer can hold its own among grasses and taller species; bees and syrphid flies are common visitors
	3	Wild indigo	*Baptisia tinctoria*	yellow	3	L	Fixes nitrogen that can be used by other plants and attracts a wide diversity of pollinators including the beautiful Io moth
Mid	4	Blazing star	*Liatris spicata*	purple	4	M	Blazingstars support a broad community of butterflies; including monarchs, swallowtails, skippers, and sulfurs
	5	Butterfly milkweed	*Asclepias tuberosa*	orange	3	L	Host plant for monarchs and a nectar source for many bees; swamp and common milkweed are also recommended
	6	Great blue lobelia	*Lobelia siphilitica*	blue	3	H	An exceptional bumble bee plant; excellent for rain gardens; tolerates heavy shade
	7	Mountain mint	*Pycnanthemum* spp.	white	3	M	Mountain mints have fragrant foliage, and are visited by blue and copper butterflies, bees, and more
	8	Purple coneflower	*Echinacea purpurea*	purple	4	M	Visitors include bees in the genera *Bombus*, *Melissodes*, and *Svastra*, and the leafcutter bee (*Megachile pugnata*)
	9	Wild bergamot	*Monarda fistulosa*	purple	4	M	Hawk moths, hummingbirds, and long-tongued bumble bees (such as *Bombus pensylvanicus*) are common visitors
Mid – Late	10	Helen's flower	*Helenium autumnale*	yellow	5	M – H	Striking flowers with domed centers and distinctive tri-lobed rays; attracts leaf-cutter bees, bumble bees, and honey bees
	11	Joe Pye weed	*Eutrochium maculatum*	pink	7	H	Both *E. maculatum* and *E. purpureum* (pictured above) attract butterflies and bees, prefer moist soils, and tolerate partial shade
	12	Wingstem	*Verbesina alternifolia*	yellow	6	H	A major honey producer and great as a shade-tolerant rain garden or wetland edge plant; may be hard to find in nurseries
Late	13	Bottle gentian	*Gentiana andrewsii*	blue	2	M	Pollinated almost exclusively by bumble bees, which pry open the closed flowers and climb inside to collect pollen
	14	Field thistle	*Cirsium discolor*	purple	6	M	Not to be confused with non-native thistles; a now uncommon but important plant for butterflies and bumble bees
	15	New England aster	*Symphyotrichum novae-angliae*	purple	6	M	One of the latest fall-blooming plants; frequented by honey bees and pre-hibernation bumble bee queens
	16	New York ironweed	*Vernonia noveboracensis*	purple	7	H	Tall upright plant, great for back borders; attracts many butterflies and bees, including some specialist longhorn bees
	17	Seaside goldenrod	*Solidago sempervirens*	yellow	6	L	Highly attractive to monarchs and other butterflies, especially when planted in large clumps; tolerates high salinity
	18	Wrinkleleaf goldenrod	*Solidago rugosa*	yellow	3	M – H	Goldenrods are frequented by beneficial solitary wasps, pollen-eating soldier beetles, hover flies, and much more
		Shrubs and Trees					
Early	19	Cockspur hawthorn	*Crataegus crus-galli*	white	20	L	Tough native tree that attracts bumble bees, honey bees, and mining bees (genus: *Andrena*), as well as songbirds
	20	Eastern redbud	*Cercis canadensis*	pink	30	M	Showy flowers create a dramatic display in spring; pollinated primarily by long-tongued bees
	21	Highbush blueberry	*Vaccinium corymbosum*	white/pink	12	M – H	Well-loved by humans, and also provides food for mining bees, mason bees, and long-tongued bumble bees
	22	Pussy willow	*Salix discolor*	yellow/green	15	M – H	Silky gray catkins open into flowers that provide spring forage for bees; also a host plant for mourning cloak butterflies
Early – Mid	23	Basswood	*Tilia americana*	cream	60	M	Also called "bee tree" for its abundance of very fragrant, nectar-rich flowers that are extremely attractive to bees
Mid	24	New Jersey tea	*Ceanothus americanus*	white	4	M	Pollinator magnet that attracts many species of flies, wasps, bees, and butterflies; slow growing and prone to deer browsing

Planting for Success

Sun Exposure

Most pollinator-friendly plants prefer sites that receive full sun throughout most of the day and are mostly open, with few large trees. A southern exposure can provide the warmest habitat, but is not required.

Plant Diversity

Choosing a variety of plants with overlapping and sequential bloom periods will provide food for pollinators throughout the seasons.

Habitat Size and Shape

Habitat patches that are bigger and closer to other patches are generally better than those that are smaller and more isolated from one another. However, even a small container garden can attract and support pollinators!

Planting Layout

Flowers clustered into clumps of one species will attract more pollinators than individual plants scattered through a habitat patch. Where space allows, plant clumps of the same species within a few feet of one another.

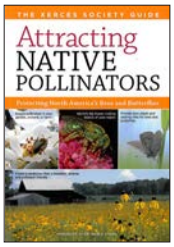
Seeds or Transplants

It is usually cheaper to establish large habitat areas from seed; however, seeding native wildflowers on a large-scale is an art unto itself. For step-by-step instructions, see the Pollinator Habitat Installation Guides (listed in the Additional Resources section). For smaller areas like gardens, transplants are usually easier to use, and plants will bloom faster than when started from seed.

Protect Pollinators from Insecticides

Although dependent on timing, rate, and method of application, all insecticides have the potential to poison or kill pollinators. Systemic insecticides in particular have received significant attention for their potential role in pollinator declines (imidacloprid, dinotefuran, clothianidin, and thiamethoxam are examples of systemic insecticides now found in various farm and garden products). Because plants absorb systemic insecticides as they grow, the chemicals become distributed throughout plant tissues and are sometimes present in pollen and nectar. You can help protect pollinators by avoiding the use of these and other insecticides. Before purchasing plants from nurseries and garden centers, be sure to ask whether they have been treated with insecticides. To read more about threats to pollinators from pesticides, please visit: www.xerces.org/pesticides.

Additional Resources



Attracting Native Pollinators: Protecting North America's Bees and Butterflies

Our best-selling book highlights the role of native pollinators in natural ecosystems, gardens, and farms. Introductory sections explore the natural history and habitat needs of bees, butterflies, pollinating beetles, and much more. Advanced sections provide guidance on conserving pollinators in multiple landscapes. The book also includes a first-of-its-kind guide to all common native bee genera of North America. Available in bookstores everywhere, and through www.xerces.org/books.

Xerces' Pollinator Conservation Resource Center

Our Pollinator Conservation Resource Center is an online database of additional pollinator plant recommendations, guidelines on establishing and protecting pollinator habitat, and a directory of native plant nurseries for every region of the United States and Canada. www.xerces.org/pollinator-resource-center/

Ladybird Johnson Wildflower Center

The Ladybird Johnson Wildflower Center has developed a collection of pollinator-friendly native plants as part of their extensive native plant database. Along with this special pollinator plant collection, the Center's website features image galleries, how-to articles on native plant gardening, and more. www.wildflower.org/collections

Pollinator Habitat Installation Guides

These how-to guides, developed in collaboration with the USDA Natural Resources Conservation Service, provide in-depth, step-by-step instructions for developing a large-scale wildflower meadow for bees and a list of regional native seed vendors and native plant nurseries. www.xerces.org/pollinator-conservation/agriculture/pollinator-habitat-installation-guides

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