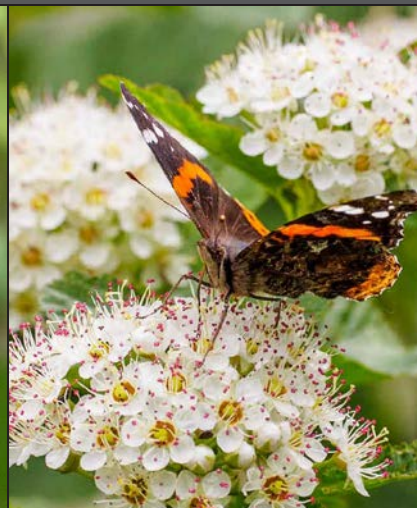


Northeast Region



Highbush blueberry, ninebark, and cardinal flower

The Northeast Region encompasses southern Quebec, New Brunswick, Nova Scotia, the New England states, and eastern New York. High regional variation in topography, soils, and climate translates to tremendous ecological diversity, ranging from the coastal dunes and tidal ecosystems along the Atlantic shoreline, to the spectacularly species-rich deciduous forests and riparian communities of the Appalachian Highlands.

Corresponding to this striking diversity of plant communities is an equally remarkable range of pollinators, including twenty 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 Northeast, several important pollinators, including the yellow-banded bumble bee (*Bombus terricola*) and endangered rusty-patched bumble bee (*B. affinis*), 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.

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, the Biota of North America's North American Plant Atlas (<http://bonap.net/napa>), or the USDA's PLANTS database (<http://plants.usda.gov>) for details on species's distributions in your area.

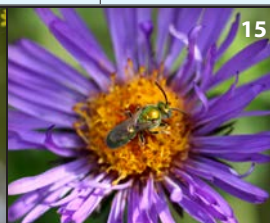
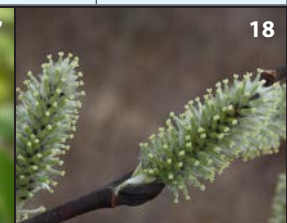
Our **Bring Back the Pollinators** campaign is based on four principles:

1. **Grow** a variety of pollinator-friendly flowers;
2. **Protect and provide** bee nest sites and caterpillar host plants;
3. **Avoid** using pesticides, especially insecticides: *and*
4. **Spread** the word!

You can participate by taking the **Pollinator Protection Pledge** and registering your habitat on our nationwide map at:

www.bringbackthepollinators.org.



						
1		2	3	4	5	6
Bloom Period	Common Name		Scientific Name	Flower Color	Max. Height*	Water Needs
Early	Forbs				(Feet)	L: low; M: medium; H: high
	1	Golden Alexanders	<i>Zizia aurea</i>	yellow	3	H
	2	Wild geranium	<i>Geranium maculatum</i>	pink	3	M
Early–Mid	3	Spiderwort	<i>Tradescantia virginiana</i>	blue	3	M
Mid	4	Blue vervain	<i>Verbena hastata</i>	blue	5	H
	5	Narrowleaf mountain mint	<i>Pycnanthemum tenuifolium</i>	white	3	L–M
	6	Swamp milkweed	<i>Asclepias incarnata</i>	pink	5	M–H
	7	Wild bergamot	<i>Monarda fistulosa</i>	purple	4	M
Mid–Late	8	Boneset	<i>Eupatorium perfoliatum</i>	white	5	H
	9	Cardinal flower	<i>Lobelia cardinalis</i>	red	4	H
	10	Field thistle	<i>Cirsium discolor</i>	purple	6	M
	11	Wild golden glow	<i>Rudbeckia laciniata</i>	yellow	7	H
Late	12	Bottle gentian	<i>Gentiana clausa</i>	blue	2	M
	13	Calico aster	<i>Symphyotrichum lateriflorum</i>	white	3	M
	14	Gray goldenrod	<i>Solidago nemoralis</i>	yellow	2	L
	15	New England aster	<i>Symphyotrichum novae-angliae</i>	purple	6	M
	16	Wrinkleleaf goldenrod	<i>Solidago rugosa</i>	yellow	3	M–H
	Shrubs and Trees					
Early	17	Highbush blueberry	<i>Vaccinium corymbosum</i>	white/ pink	12	M–H
	18	Pussy willow	<i>Salix discolor</i>	yellow/ green	15	M–H
	19	Raspberry, blackberry	<i>Rubus</i> spp.	white	4+	M
Early–Mid	20	American basswood	<i>Tilia americana</i>	cream	60	M
	21	Ninebark	<i>Physocarpus opulifolius</i>	white	8	L
Mid	22	New Jersey tea	<i>Ceanothus americanus</i>	white	4	M
	23	Virginia rose	<i>Rosa virginiana</i>	pink	6	L
Late	24	Buttonbush	<i>Cephalanthus occidentalis</i>	white	12	H
						
13		14	15	16	17	18



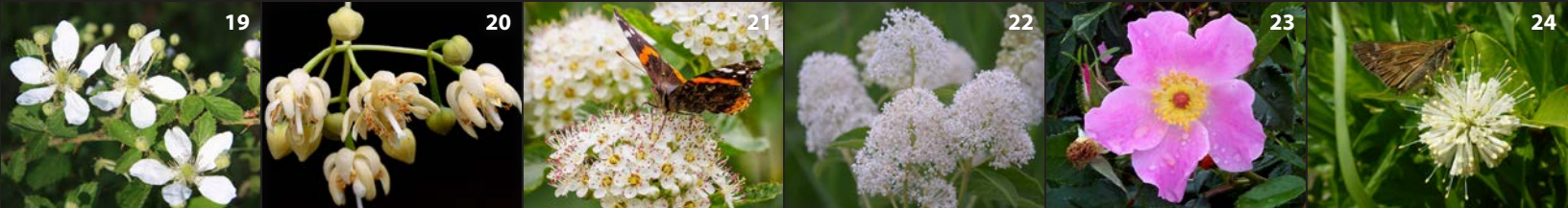
Notes

This list of pollinator plants for the Northeast Region was produced by the Xerces® Society.
For more information about pollinator conservation, please visit www.xerces.org.



All species are perennials, unless otherwise noted. *Max. Height is an average, individual plants may vary.

- Host plant for black swallowtail butterfly; shallow nectaries attract small beneficial wasps, bees, and flies
- Shade-tolerant; provides important spring food for mining, cuckoo, mason, sweat, bumble, and small carpenter bees
- The attractive flowers of this unique iris-relative are frequented by bumble bees and other pollinators; shade tolerant
- A preferred nectar plant for bees, butterflies, hover flies, and bee flies; choose *Verbena stricta* for drier soils
- This and related species have fragrant foliage and nectar-rich flowers; very popular with butterflies, beetles, and more
- Host plant for monarchs; lovely fragrance attracts insects of all kinds; at drier sites use common or butterfly milkweed
- Hawk moths, hummingbirds, and long-tongued bumble bees (such as *Bombus pensylvanicus*) are common visitors
- Flat-topped clusters of fluffy, nectar-rich flowers attract many kinds of insects; tolerant of partial shade and wet soils
- Striking, scarlet-red tubular flowers attract hummingbirds and swallowtail butterflies
- Distinct from invasive, non-native thistles; an important plant for butterflies and bumble bees; grows as a perennial or biennial
- Long bloom period; shade-tolerant; visited by bumble bees and other pollinators; seeds provide food for birds
- This unique fall flower is almost exclusively pollinated by bumble bees, which pry the petals apart to climb inside
- The shallow nectaries attract more insect diversity than some larger-flowered aster species; tolerant of partial shade
- Excellent for poor soils where little else will grow; one of the latest blooming goldenrods; visited by many pollinators
- One of the latest fall-blooming plants; frequented by honey bees and pre-hibernation bumble bee queens
- Goldenrods are frequented by beneficial solitary wasps, pollen-eating soldier beetles, bumble bees, and much more
- Well-loved by humans and also provides food for mining bees, mason bees, and long-tongued bumble bees
- Silky gray catkins open into flowers that provide spring forage for bees; host plant for mourning cloak butterflies
- Hollow canes/ prunings make excellent nest sites for cavity-nesting bees; flowers are pollinated by many kinds of bees
- Also called "bee tree" for its abundance of very fragrant, nectar-rich flowers which are extremely attractive to bees
- Deciduous shrub with attractive foliage, peeling bark, and white flowers; loved by birds, bees, and butterflies
- A magnet for many species of flies, wasps, bees, and butterflies; slow growing and prone to deer browsing
- Foliage is used by leafcutter bees; flowers provide food for many pollinators; exceptional leaf coloration in the fall
- Host plant for numerous moths and butterflies; pincushion-like flowers are very attractive to butterflies and bees



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 *Establishing Pollinator Meadows from Seed* and the Pollinator Habitat Installation Guides listed in the Additional Resources section. For smaller areas like gardens, transplants are usually easier to use and will bloom faster than plants started from seed.

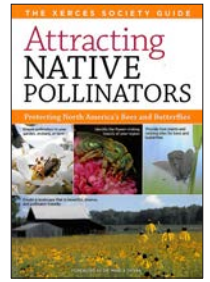
Protect Pollinators from Insecticides

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

Our best-selling book highlights the role of native pollinators in natural ecosystems, gardens, and farms. This comprehensive guide includes information about pollinator ecology, detailed profiles of over 30 common bee genera, and habitat designs for multiple landscapes with over 50 pages of fully illustrated regional plant lists. Available in bookstores everywhere, and through www.xerces.org/books.



The Xerces Pollinator Conservation Resource Center

Our Pollinator Conservation Resource Center includes regional information on pollinator plants, habitat conservation guides, nest management instructions, bee identification and monitoring resources, and directories of native pollinator plant nurseries. www.xerces.org/pollinator-resource-center

Lady Bird Johnson Wildflower Center

The Xerces Society has collaborated with the Lady Bird Johnson Wildflower Center to create lists of plants that are attractive to native bees, bumble bees, honey bees, and other beneficial insects, as well as plant lists with value as nesting materials for native bees. These lists can be narrowed down with additional criteria such as state, soil moisture, bloom time, and sunlight requirements. The Center's website also features image galleries, how-to articles on native plant gardening, and more. www.wildflower.org/conservation_pollinators

Establishing Pollinator Meadows from Seed

These guidelines provide step-by-step instructions for establishing pollinator meadows from seed in areas that range in size from a small backyard garden up to an acre. Topics include: site selection, site preparation, plant selection, planting techniques, and ongoing management. www.xerces.org/establishing-pollinator-meadows-from-seed

Pollinator Habitat Installation Guides

These regional guidelines, developed in collaboration with the USDA's Natural Resources Conservation Service, provide in-depth practical guidance on how to install nectar and pollen habitat for bees in the form of wildflower meadow plantings or linear rows of native flowering shrubs. Region-specific seed mixes and plant recommendations are included in the appendices of each guide. www.xerces.org/pollinator-habitat-installation-guides

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