Natural Lands

LAND MANAGEMENT RESOURCE:

plight of the pollinators

Photo Credit

Pollinators are essential to life as we know it. In fact, one of every three bites of food eaten worldwide depends on them, especially bees. Yet, in the last few decades, the number of native bumble bees in the U.S. has dropped by 96 percent and one species, Franklin's bumble bee, is believed to be extinct. North American monarch butterfly populations have declined by 90 percent, prompting scientists to push for the butterflies to be classified as "threatened" under the U.S. Endangered Species Act.

What can you do to help?

make your yard pollinator friendly

Consider converting a section of lawn to native wildflower meadow. Or add pollinator plants to your garden beds. In addition to supporting bees and wasps, many of the plants listed here attract butterflies, moths, and hummingbirds. Some are host plants for butterfly and moth caterpillars.

need more garden guidance?
Download our simple pollinator garden plan:
natlands.org/plantingplans

Photo Credit

don't mulch as much

Seventy percent of native bees nest in the ground, forming small, non-aggressive colonies. They are some of the earliest pollinators to emerge in spring, making them vital to pollination of fruit trees as well as other flowering trees, shrubs, and spring ephemerals.

Access to bare earth is essential to these small bees. To help them out, only mulch the first couple of feet from the bed's visible edge. Or consider using shredded leaves, which is much easier for the bees to penetrate, instead of wood chips or shredded bark mulch.

hollow habitat

Many species of bees lay their eggs in cavities, such as holes in dead wood or hollow stems. By including certain plants in your landscape, you'll provide more choices for these cavity-nesters. Native black raspberries (Rubus occidenatlis), Joe Pye weed (Eutrochium spp.), American elderberry (Sambucus nigra spp. canadensis), and several types of hydrangeas are all good choices. Cavity-nesting bees will make nests in the dried stems and twigs from previous years' growth, so don't aggressively cut back or clean up these plants.

take a pass on pesticides

Pesticides can be important tools for protecting crops and controlling invasive species, however most lawn and garden pest problems can be solved without such chemicals. Keep in mind that even "organic-approved" insecticides can harm pollinators and other wildlife. Herbicides, while usually not directly lethal to insects, can reduce plant diversity, including the diversity of weedy, noninvasive wildflowers that provide essential pollen and nectar for bees, butterflies, and hummingbirds.

pollinator plants

Bloom Period	Common Name	Scientific Name	Flower Color	Max. Height	Water Needs	Notes
Forbs				(Feet)	L: low M: medium H: high	All species are perennials, unless otherwise noted. Max. Height is an average, individual plants may vary.
Early	Lanceleaf coreopsis	*Coreopsis lanceolata*	yellow	2	M	This early bloomer can hold its own among grasses and taller species; bees and syrphid flies are common visitors
	Smooth penstemon	*Penstemon digitalis*	white	2	M	Semi-evergreen; prolific nectar producer; visited by many butterflies, moths, and bees, including honey bees
Early - Mid	Wild indigo	*Baptisia tinctoria*	yellow	3	L	Fixes nitrogen that can be used by other plants; attracts a wide diversity of pollinators, including the beautiful Io moth (*Automeris io*)
Mid	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
	Great blue lobelia	*Lobelia siphilitica*	blue	3	H	An exceptional bumble bee plant; excellent for rain gardens; tolerates heavy shade
	Joe Pye weed	*Eutrochium fistulosum*	pink	7	H	Both *E. maculatum* and *E. fistulosum* (pictured above) attract butterflies and bees, prefer moist soils, and tolerate partial shade
	Mountain mint	*Pycnanthemum spp.*	white	3	M	Mountain mints have fragrant foliage, and are visited by blue and copper butterflies, bees, and more
	Purple coneflower	*Echinacea purpurea*	purple	4	M	Visitors include bees in the genera *Bombus*, *Melissodes*, and *Svastra*, and the leafcutter bee (*Megachile pugnata*)
	Wild bergamot	*Monarda fistulosa*	purple	4	M	Hawk moths, hummingbirds, and long-tongued bumble bees (such as *Bombus pensylvanicus*) are common visitors

pollinator plants *cont.*

Bloom Period	Common Name	Scientific Name	Flower Color	Max. Height	Water Needs	Notes
Forbs				(Feet)	L: low M: medium H: high	All species are perennials, unless otherwise noted. Max. Height is an average, individual plants may vary.
Mid - Late	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
	Marsh blazing star	*Liatris spicata*	purple	4	M	Blazing stars support a broad community of butterflies; including monarchs, swallowtails, skippers, and sulfurs
	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	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
	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
	New York ironweed	*Vernonia noveboracensis*	purple	7	H	Tall, upright plant, great for back borders; attracts many butterflies and bees, including some specialist long-horned bees
	Seaside goldenrod	*Solidago sempervirens*	yellow	6	L	Highly attractive to bumble bees, monarchs, and other butterflies, especially when planted in large clumps; tolerates high salinity
	Sneezeweed	*Helenium autumnale*	yellow	2	H	Striking flowers with domed centers and distinctive tri-lobed rays; attracts leafcutter bees, bumble bees, and honey bees
	Wrinkleleaf goldenrod	*Solidago rugosa*	yellow	4	M	Goldenrods are frequented by beneficial solitary wasps, pollen-eating soldier beetles, hover flies, and much more

pollinator plants *cont.*

Bloom Period	Common Name	Scientific Name	Flower Color	Max. Height	Water Needs	Notes
Shrubs and Trees				(Feet)	L: low M: medium H: high	All species are perennials, unless otherwise noted. Max. Height is an average, individual plants may vary.
Early	Cockspur hawthorn	*Crataegus crus-galli*	white	20	L	Tough native tree that attracts bumble bees, honey bees, and mining bees (*Andrena* spp.), as well as songbirds
	Eastern redbud	*Cercis canadensis*	pink	30	M	Showy flowers create a dramatic display in spring; pollinated primarily by long-tongued bees
	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
	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	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	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

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