

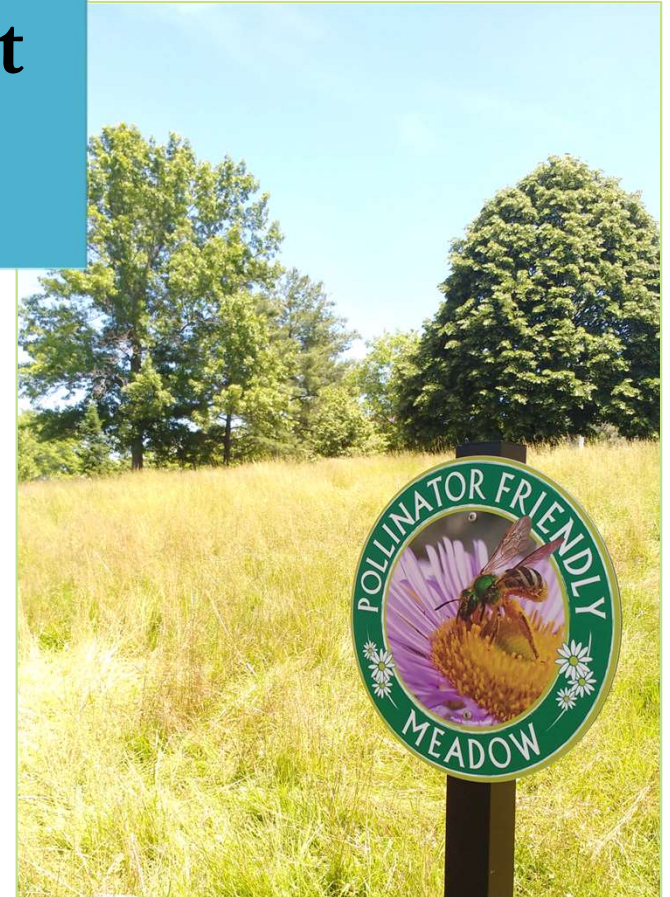
Pollinator Habitat Plant List:



Plants chosen for this list are pollinator-supporting species native to our ecoregion (northeastern United States). Size at maturity, bloom time, and ideal site conditions are listed.

Selection criteria is based on:

- Hardiness and suitability to the site conditions
- Ability to support a range of native insect pollinators
- Aesthetic qualities, such as showy flowers or bright fall color



Large Shade Trees for Sunny, Open Areas with Well-draining Soils

Common name	Botanical name	Size	Sun preference	Soil Moisture	Bloom time	Supports
American Basswood	<i>Tilia americana</i>	~60'	full sun to part shade	medium	June	bees, moths, flies, wasps
Eastern Hop Hornbeam	<i>Ostrya virginiana</i>	25'-40'	full sun to part shade	medium	wind-pollinated	moths
Sourgum	<i>Nyssa sylvatica</i>	30'-50'	full sun to part shade	medium to wet	May to June	bees, moths
American Beech	<i>Fagus grandifolia</i>	50'-60'	full sun to part shade	medium	wind-pollinated	many moth caterpillars
Chestnut Oak	<i>Quercus montana</i>	50'-70'	full sun	dry to medium	wind-pollinated	katydids, beetles, butterflies, walking stick bugs, gall wasps, moths
Red Oak	<i>Quercus rubra</i>	50'-75'	full sun	dry to medium	wind-pollinated	katydids, beetles, butterflies, walking stick bugs, gall wasps, moths
White Oak	<i>Quercus alba</i>	50'-80'	full sun	dry to medium	wind-pollinated	butterfly and moth caterpillars
White Pine	<i>Pinus strobus</i>	50'-80'	full sun	medium	wind-pollinated	butterfly and moth caterpillars, sawflies
Sweet gum	<i>Liquidambar styraciflua</i>	60'-80'	full sun	medium	wind-pollinated	luna moth caterpillar
Shagbark hickory	<i>Carya ovata</i>	70'-90'	full sun to part shade	medium to wet	wind-pollinated	moths and butterflies
Sugar Maple	<i>Acer saccharum</i>	40' – 80'	full sun to part shade	medium	wind-pollinated	moths and butterflies
Tuliptree	<i>Liriodendron tulipifera</i>	80'-140'	full sun to part shade	medium to wet	May to June	bees, beetles

Large Shade Trees for Full Sun



Oak trees (genus *Quercus*) support a huge range of different species: katydids, beetles, walkingstick bugs, gall wasps, deer, raccoons, woodpeckers, chickadees, turkeys, mice, owls, squirrels, and wrens all benefit when an oak is planted.

Over 500 species of moths and butterflies eat oak leaves while in their caterpillar form. We are lucky to have many mature and healthy oaks on campus, including a very old, majestic white oak at the back of the Route 32 parking lot.

The **sassafras** tree (*Sassafras albidum*) supports a range of native butterflies and thrives in moist, shady spots, especially on the forest edge. It has vivid fall color and unusual leaf shapes.



Sourgum (*Nyssa sylvatica*) has gorgeous red fall color and is an excellent nectar source for bees.



The **basswood** tree (*Tilia americana*) is also known as the bee tree. It offers nectar-rich flowers early in the spring, and the bees love it. We have several basswood trees on campus, but there is room for more.



Trees for Sites with Wet Soils

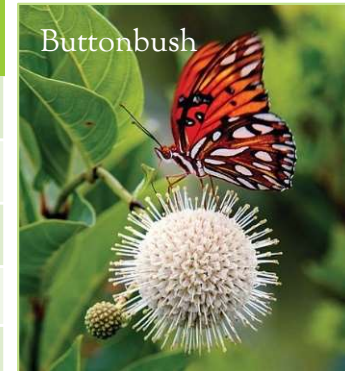
Common name	Botanical Name	Site	Size	Sun Preference	Soil Moisture	Bloom Time	Supports	Notes
Black Willow	<i>Salix nigra</i>	pond/stream side	30'-60'	full sun	medium to wet	March to April	bees, butterflies, moths	fast growing, (roots seek water; don't plant near buildings or pipes)
River birch	<i>Betula nigra</i>	pond/stream side	40'-70'	full sun to part shade	medium to wet	wind-pollinated	moths and butterflies	attractive peeling bark, fast growing, loves wet soils
Sweetbay magnolia	<i>Magnolia virginiana</i>	pond/stream side or decorative spot, near a building/pathway	10'-35'	full sun to part shade	medium to wet	May to June	beetles, bees, flies	Beautiful, fragrant spring flowers
Sourgum	<i>Nyssa sylvatica</i>	pond/stream side or open areas with well-draining soil	30'-50'	full sun to part shade	medium to wet	May to June	bees	gorgeous red fall color, excellent nectar for bees

Other Pollinator- Friendly Trees

Common name	Botanical Name	Type	Site	Size	Sun Preference	Soil Moisture	Bloom Time	Supports
Eastern Redbud	<i>Cercis canadensis</i>	flowering tree	decorative spot, near a building/pathway	20'-30'	full sun to part shade	medium to wet	April	bees
Serviceberry	<i>Amelanchier spp.</i>	flowering tree	decorative spot, near a building/pathway	6'-25'	full sun to part shade	medium	April to May	bees
Sassafras	<i>Sassafras albidum</i>	understory tree	forest edge or shady spot	35'-50'	full sun to part shade	medium	April to May	butterflies
Hawthorn	<i>Crataegus sp.</i>	flowering tree	open areas with well-draining soils	~25'	full sun	medium to wet	June	moths, butterflies
Eastern hemlock	<i>Tsuga canadensis</i>	understory tree	shady spots with acidic soils	40'-70'	part shade to full shade	medium	wind-pollinated	moths

Pollinator-Friendly Shrubs for Wet Sites

Common name	Botanical name	Size	Sun preference	Soil Moisture	Bloom time	Supports
Winterberry holly	<i>Ilex verticillata</i>	6'-10'	full sun to part shade	medium to wet	June to July	bees
Buttonbush	<i>Cephalanthus occidentalis</i>	5'-12'	full sun to part shade	medium to wet	June	bees, butterflies
Elderberry	<i>Sambucus canadensis</i>	5'-12'	full sun to part shade	medium to wet	June to July	butterflies
Highbush Blueberry	<i>Vaccinium corymbosum</i>	4'-8'	full sun to part shade	medium to wet	May	bees, butterflies
Redtwig dogwood	<i>Cornus sericea</i>	4'-8'	full sun to part shade	medium to wet	May to June	bees, wasps, flies, butterflies
Sweetspire	<i>Clethra alnifolia</i>	3'-8'	full sun to part shade	medium to wet	July to August	bees, butterflies
Inkberry	<i>Ilex glabra</i>	5'-8'	full sun to part shade	medium to wet	May to June	bees
Pussy Willow	<i>Salix discolor</i>	6'-15'	full sun to part shade	medium to wet	March to April	bees, butterflies, moths



Pollinator-Friendly Shrubs for Medium-Moisture Sites

Common name	Botanical name	Size	Sun preference	Soil Moisture	Bloom time	Supports
Sweetshrub	<i>Calycanthus floridus</i>	6'-10'	full sun to part shade	medium	April to July	bees, beetles, flies
Witch hazel	<i>Hamamelis virginiana</i>	15'-20'	full sun to part shade	medium	October-December	moths, bees
Arrowwood	<i>Viburnum dentatum</i>	6'-10'	full sun to part shade	medium	May to June	butterflies
New Jersey Tea	<i>Ceanothus americanus</i>	3'-4'	full sun to part shade	medium	May to July	butterflies, bees, wasps, flies
Spicebush	<i>Lindera benzoin</i>	6'-12'	full shade to part shade	medium	March	butterflies



Perennial Plants for a Wet Meadow or a Water's Edge, Full Sun to Part Shade

Common name	Botanical name	Type	Size	Bloom time	Supports
White Turtlehead	<i>Chelone glabra</i>	perennial forb	2'-3'	August to October	bees, butterflies, hummingbirds
Swamp Milkweed	<i>Asclepias incarnata</i>	perennial forb	4'-5'	July to August	bees, hummingbirds, Monarch butterfly larvae and adults
Wild Mint	<i>Mentha arvensis</i>	perennial forb	1'-2'	May to October	flies, wasps, small bees
Cardinal flower	<i>Lobelia cardinalis</i>	perennial forb	2'-4'	July to September	hummingbirds, butterflies
Great Blue Lobelia	<i>Lobelia siphilitica</i>	perennial forb	2'-3'	July to September	bumble bees
Joe Pye Weed	<i>Eupatorium maculatum</i> (<i>Eutrochium purpureum</i>)	perennial forb	5'-7'	July to September	bees, butterflies, hummingbirds
Marsh Marigold	<i>Caltha palustris</i>	perennial forb	1'-2'	April to June	bees, flies
Swamp Vervain	<i>Verbena hastata</i>	perennial forb	2'-6'	July to September	bees, butterflies
Sweetflag	<i>Acorus americanus</i>	perennial rush	2'-3'	wind pollinated	moth and butterfly caterpillars
Water Sedge	<i>Carex aquatilis</i>	perennial sedge	1'-4'	wind pollinated	moth and butterfly caterpillars
Common Rush	<i>Juncus effusus</i>	perennial rush	2'-4'	wind pollinated	sawfly larvae



Perennial Plants for a Sunny Meadow or Garden

Common name	Botanical name	Type	Size	Soil Moisture	Bloom time	Supports
Common Milkweed	<i>Asclepias syriaca</i>	perennial forb	2'-3'	dry to medium	June to August	bees, beetles, butterflies, flies
Butterfly weed	<i>Asclepias tuberosa</i>	perennial forb	1'-3'	dry to medium	June to August	bees, beetles, butterflies, flies
Yarrow	<i>Achillea millefolium</i>	perennial forb	2'-3'	dry to medium	June to September	bees, butterflies, wasps
Gray Goldenrod	<i>Solidago nemoralis</i>	perennial forb	0.5'-2'	dry to medium	August to September	bees, wasps, butterflies, moths, flies
Stonecrop	<i>Hylotelephium telephium</i>	perennial forb	1.5'-2'	dry to medium	August to October	bumble bees, butterflies
Ox-eye Sunflower	<i>Heliopsis helianthoides</i>	perennial forb	3'-6'	dry to medium	June to August	bees, butterflies
Sweet Clover	<i>Melilotus officinalis</i>	perennial forb	2'-7'	dry to wet	July to September	bees, butterflies, moths, flies
New York Aster	<i>Symphotrichum novi-belgii</i>	perennial forb	3'-6'	medium	August to September	bees, beetles, butterflies
Sneezeweed	<i>Helenium autumnale</i>	perennial forb	3'-5'	medium to wet	August to October	bees, wasps, flies, butterflies, beetles
Bushy Bluestem	<i>Andropogon glomeratus</i>	perennial grass	3'-6'	medium to wet	wind pollinated	butterflies, nesting sites for bumble bees
Pennsylvania Sedge	<i>Carex pennsylvanica</i>	perennial grass	1'	dry to medium	wind pollinated	butterflies, nesting sites for bumble bees
Wild Rye	<i>Elymus canadensis</i>	perennial grass	2'-5'	dry to medium	wind pollinated	butterflies, nesting sites for bumble bees
Purple Love Grass	<i>Eragrostis spectabilis</i>	perennial grass	1'-2'	dry to medium	wind pollinated	butterflies, nesting sites for bumble bees
Switchgrass	<i>Panicum virgatum</i>	perennial grass	3'-6'	medium to wet	wind pollinated	butterflies, nesting sites for bumble bees
Little Bluestem	<i>Schizachyrium scoparium</i>	perennial grass	2'-4'	dry to medium	wind pollinated	butterflies, nesting sites for bumble bees
Indiangrass	<i>Sorghastrum nutans</i>	perennial grass	3'-5'	dry to medium	wind pollinated	butterflies, nesting sites for bumble bees

Perennial Plants for a Sunny or Partly Shaded Meadow or Garden

Common name	Botanical name	Type	Size	Sun Preference	Soil Moisture	Bloom time	Supports
Wild Bergamot	<i>Monarda fistulosa</i>	perennial forb	2'-4'	full sun to part shade	medium	July to September	bees, butterflies, hummingbirds
New York Ironweed	<i>Vernonia novaboracensis</i>	perennial forb	4'-6'	full sun to part shade	medium to wet	August to September	bees, butterflies, hummingbirds
Black-eyed Susan	<i>Rudbeckia hirta</i>	perennial forb	2'-3'	full sun to part shade	dry to medium	June to September	bees, beetles, butterflies
Goldenrod	<i>Solidago spp.</i>	perennial forb	4'-5'	full sun to part shade	dry to wet	August to October	bees, beetles, butterflies, flies
Blue False Indigo	<i>Baptisia australis</i>	perennial forb	3'-4'	full sun to part shade	dry to medium	May to June	bees
Beardtongue	<i>Penstemon digitalis</i>	perennial forb	3'-5'	full sun to part shade	dry to wet	April to June	bees, moth caterpillars
Eastern Bluestar	<i>Amsonia tabernaemontana</i>	perennial forb	2'-3'	full sun to part shade	medium	May	moths, bees, hummingbirds
Mountain Mint	<i>Pycnanthemum muticum</i>	perennial forb	1'-3'	full sun to part shade	medium	July to Septemeber	bees, flies, wasps, butterflies
Purple Coneflower	<i>Echinacea purpurea</i>	perennial forb	2'-5'	full sun to part shade	dry to medium	June to August	bees, butterflies, flies
White Clover	<i>Trifolium repens</i>	perennial forb	6"	full sun to part shade	medium	May to June	bees, butterflies, moths
Blue Scilla	<i>Scilla siberica</i>	perennial bulb	3"-6"	full sun to part shade	medium	April	spring mason bees
Cranesbill	<i>Geranium maculatum</i>	perennial forb	1.5'-2'	shade	medium	April to May	flies, bees, beetles

Plant Information Sources

- Missouri Botanical Garden Plant Finder online tool
www.missouribotanicalgarden.org/plantfinder/plantfindersearch.aspx

- Morton Arboretum Plant Finder online tool
<https://www.mortonarb.org/trees-plants/tree-plant-descriptions>

The screenshot displays the Missouri Botanical Garden website interface. At the top, there is a navigation menu with options: Visit, Things To Do, Learn & Discover, Gardens & Gardening (highlighted), Sustainability, Plant Conservation, Plant Science, and About. Below the navigation is a breadcrumb trail: Gardens & Gardening > Your Garden > Plant Finder. The main content area features a green sidebar on the left with 'Gardening Help' and a list of links: Plant Finder, Lawn, Landscape & Garden Design, Edible Gardening, Advice, Tips & Resources, Plants of Merit, Sustainable Gardening, Gardening Education & Classes, Visit the Center for Home Gardening, and Gardening Help Site Map. The main content area is titled 'Clethra alnifolia' and includes a photograph of the plant. To the right of the photo is a list of plant characteristics: Common Name: sweet pepperbush, Type: Deciduous shrub, Family: Clethraceae, Native Range: Eastern North America, Zone: 3 to 9, Height: 3.00 to 8.00 feet, Spread: 4.00 to 6.00 feet, Bloom Time: July to August, Bloom Description: White, Sun: Full sun to part shade, Water: Medium to wet, Maintenance: Low, Suggested Use: Hedge, Naturalize, Rain Garden, Flower: Showy, Fragrant, Leaf: Good Fall, Attracts: Birds, Butterflies, Fruit: Showy, and Tolerate: Heavy Shade, Erosion, Clay Soil, Wet Soil. Below the photo is a 'Gardening Help Search' box and a 'Search' button. There are also buttons for 'Join our Horticulture Staff', 'Determine Your Growing Zone', and 'Plant Finder'. A 'Culture' section at the bottom provides detailed growing instructions: 'Easily grown in average, medium to wet soils in full sun to part shade. Prefers part shade and consistently moist, acidic, sandy soils. Soils should not be allowed to dry out. Tolerates clay soils. Tolerates full shade. Promptly remove root suckers unless naturalized look is desired. Propagate by cuttings. Prune if needed in late winter.'