






















## Native Plants Appropriate for Bioretention Areas and Rain Gardens in Central and Southern Indiana





### Flowering perennials

Common Name	Scientific Name	Bloom Color/season	Light Requirements	Comments	
Columbine	<i>Aquilegia canadensis</i>	Orange, yellow/spring	Partial sun-shade	Tolerates moist or dry soil. 2'	
New England Aster	<i>Aster novae-angliae</i>	Purple/fall	Sun-partial sun	Tolerates saturated to dry soil. 1-6'	
Smooth Aster	<i>Aster laevis</i>	Blue/fall	Sun-partial sun	Moist to dry soil. No mildew. 2-5'	
Pink Turtlehead	<i>Chelone obliqua</i>	Pink/late summer	Partial sun	Prefers moist soils with abundant organic matter. 1-3'	
Tall Coreopsis	<i>Coreopsis tripteris</i>	Yellow/summer	Sun-partial sun	Tolerates moist to dry conditions in well-drained soils. 4-6'	
Purple Coneflower	<i>Echinacea purpurea</i>	Purple/summer	Sun-partial sun	In full sun, prefers moist, well-drained soils. 3-5'	






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Spotted Joe-Pye-Weed	<i>Eupatorium maculatum</i>	Pink/summer	Sun	Prefers moist, well-drained soils. 1-6'	
Sweet Joe-Pye-Weed	<i>Eupatorium purpureum</i>	Pink/summer	Partial sun	Prefers moist soil; tolerates poorly-drained soils. 4-6'	
Queen-of-the-Prairie	<i>Filipendula rubra</i>	Pink/summer	Sun	Prefers well-drained, evenly moist. 4-6'	
Wild Geranium (Cranesbill)	<i>Geranium maculatum</i>	Lavender/spring	Partial sun-shade	Prefers moist, well-drained soil. Red foliage in cold weather. 8-18"	
Autumn Sneezeweed	<i>Helenium autumnale</i>	Yellow/fall	Sun-partial sun	Tolerates moist to dry soils. 3-5'	
False Sunflower	<i>Heliopsis helianthoides</i>	Yellow/summer	Sun-partial sun	Prefers well-drained soil. 2-4'	

Common Name	Scientific Name	Bloom Color/season	Light Requirements	Comments	
Dense Blazing Star	<i>Liatris spicata</i>	Purple/summer	Sun	Corm. Prefers well-drained soil, but tolerates moist to dry conditions. 2-3'	
Cardinal Flower	<i>Lobelia cardinalis</i>	Red/summer	Sun-shade	Prefers moist, well-drained soil. 2-4'	
Great Blue Lobelia (Blue Cardinal Flower)	<i>Lobelia siphilitica</i>	Blue/summer	Partial sun-shade	Prefers moist, well-drained soil, but more tolerant of dry conditions than Cardinal Flower. 2-3'	
Sweet Black-Eyed Susan (Sweet Coneflower)	<i>Rudbeckia subtomentosa</i>	Yellow/summer	Sun	Prefers average moisture, well-drained soils. Does not tolerate drought. 3-5'	
Blue Vervain (Swamp Vervain, Simpler's Joy, Wild Hyssop)	<i>Verbena hastate</i>	Blue-violet/summer	Sun	Prefers moist soils and marshy conditions. 4'.	







Common Name	Scientific Name	Bloom Color/season	Light Requirements	Comments	
Butterfly Milkweed	<i>Asclepias tuberosa</i>	Orange/summer	Sun	Grows in clumps from deep woody root – host for Monarch butterfly. Likes dry conditions. 18-30”	
Swamp Milkweed	<i>Asclepias incarnata</i>	Light purple/summer	Sun	Prefers wet soil but tolerates drought once established. 2-4’	
Foxglove Beardtongue	<i>Penstemon digitalis</i>	White/summer	Sun	Dry to medium wet soil 3-5’	
Stiff Goldenrod	<i>Solidago rigida</i>	Yellow/late summer	Sun	Dry soil. Birds love the seed. (does not cause hay fever) 30-48”	

Common Name	Scientific Name	Bloom Color/season	Light Requirements	Comments	
Rosinweed	<i>Silphium integrifolium</i>	yellow/summer-fall	Sun (tolerates some shade)	Medium moisture – develops taproot. 2-6’.	
Obedient Plant	<i>Physostegia virginiana</i>	Pink, white	Sun	Medium wet soil. Spreads, prune in spring to reduce height. 3-4’	
Ironweed	<i>Vernonia altissima</i>	Purple/late summer-fall	Sun to partial shade	Medium to wet soil. Prune in summer to reduce height. 5-8’	
Bergamot	<i>Monarda fistulosa</i>	Pink, lavender/summer	Sun to partial shade	Dry to medium wet soil. Attracts bees & butterflies 2-4’	






## Shrubs

Common Name	Scientific Name	Bloom Color/season/fruit	Light Requirement	Comments	
Black Chokeberry	<i>Aronia melanocarpa</i>	White, red/spring/black berries	Sun-partial shade	Tolerates dry to wet soils. 4-10'	
Wild Senna	<i>Cassia hebecarpa</i>	Yellow/summer	Sun-partial shade	Prefers wet, clayey soils. Yields large, showy flower clusters in summer and attractive seed pods in fall which attract wildlife. 4-6'.	
Buttonbush	<i>Cephalanthus occidentalis</i>	White, tan/summer	Sun	Prefers moist to very wet soil. 6-10'	
Common Winterberry	<i>Ilex verticillata</i>	White/summer	Sun	Prefers wet soil. 6-12'	
Spicebush	<i>Lindera benzoin</i>	Yellow/spring/red berries	Sun-shade	Tolerates wet to dry soils. 6-12'	 <small>LINDERA BENZOIN SPICE BUSH</small>
Fragrant Sumac	<i>Rhus aromatica</i>	Yellow/summer/Red fruit	Full sun-partial shade	'Gro-low' variety is a good groundcover.	
Common Name	Scientific Name	Bloom	Light	Comments	


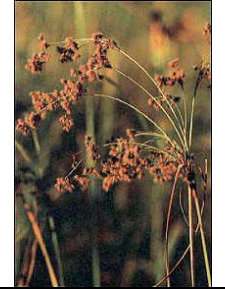




		Color/season/fruit	Requirement		
Shining Sumac	<i>Rhus glabra</i>	Yellow/summer/red fruit	Sun	Prefers dry, sandy soil. 20'	
Staghorn Sumac	<i>Rhus typhina</i>	Yellow/summer/red fruit	Sun	Tolerates wet to dry soils. Adaptable. 15-25'	
Arrowwood	<i>Viburnum dentatum</i>	White/late spring/blue berries	Sun-partial shade	Tolerates wet to dry soils. 8-10'	
Nannyberry	<i>Viburnum lentago</i>	White/spring/edible black berries	Sun-partial shade	Adaptable. Prefers moist, well-drained soil. Can be pruned into a small tree. 8-15'	
Blackhaw	<i>Viburnum prunifolium</i>	White/spring/black berries	Sun-partial shade	Tolerates dry to wet soils. Slow-growing shrub. 8-15'	
American Cranberry Bush	<i>Viburnum trilobum</i>	White/spring/edible red berries	Sun-partial shade	Prefers moist to wet soil. 8-12'	





## Grasses, sedges, and rushes

Common Name	Scientific Name	Light Requirements	Soil Preference	
Common Sweet Flag (Calamus)	<i>Acorus calamus</i>	Sun	An adaptable, tall plant with lemon-scented leaves. Prefers emergence in shallow water, but tolerates drying as well. 1-4'.	
Big Bluestem (Turkeyfoot)	<i>Andropogon gerardii</i>	Sun	Very adaptable: tolerates acid, sandy soil, drought and flooding. Also provides erosion control. Purple flower. 3-7'	
Fox Sedge	<i>Carex vulpinoidea</i>	Sun	Forms grassy clumps. Prefers moist, clayey soils. Often found in ravines, swales, and the edges of ponds. Flowers May-June. 1-3'	
Torrey's Rush	<i>Juncus torreyi</i>	Sun	Prefers shallow water, but will tolerate drying. Blooms June-August. 2-3'.	
Switch Grass	<i>Panicum virgatum</i>	Sun	Adaptable: tolerates wet to well-drained soil; tolerates flooding. Slow spreading. Erosion control. 3-6'	





Little Bluestem	<i>Schizachyrium scoparium</i>	Sun	Virtually an indestructible, low-maintenance grass that can survive a huge variety of conditions. Drought to flood, hot to cold, alkaline to acid. Gets 2-4 feet tall. Colorful foliage varies on conditions. Prefers sloping ground. Hardy to Zone 3.	
Woolgrass Bulrush	<i>Scirpus cyperinus</i>	Sun-partial shade	A densely tufted sedge with a grass-like appearance. Prefers sandy, moist soils and tolerates drying. 4-5'.	
Indian Grass	<i>Sorghastrum nutans</i>	Sun-partial shade	Dry or moist soil. Erosion control. Grows rapidly. 5-7'	
Giant Burreed	<i>Sparganium eurycarpum</i>	Sun	Prefers shallow water, but will tolerate drying. Blooms June-August. 3-6'.	







## Groundcovers



Common Name	Scientific Name	Light Requirement	Soil Preference	
Canada Anemone	<i>Anemone canadensis</i>	Sun-partial shade	Prefers moist, organic soil. 1-3".	
Wild Ginger	<i>Asarum canadense</i>	Partial sun-full shade	Spreads rapidly. Hardy and low maintenance. Less than 1'.	
Pennsylvania Sedge (Common Oak Sedge)	<i>Carex pensylvanica</i>	Full sun-full shade	A lawn alternative. Prefers dry, open woodland conditions, but quite adaptable. 5-7"	
Creeping Phlox (Moss Phlox)	<i>Phlox subulata</i>	Full sun-partial shade	Forms mats; good for hillsides and rocky areas. 3-5"	




## Ferns

Common Name	Scientific Name	Light Requirements	Soil Preference	
Cinnamon Fern	<i>Osmunda cinnamomea</i>	Sun-shade	If in full sun, needs constant watering. 2-3'	
Ostrich Fern (Shuttlecock Fern)	<i>Matteuccia struthiopteris</i>	Partial shade	Needs constant moisture. Turns brown and dies back in winter. 2-3'	

## Trees

Common Name	Scientific Name	Light Requirement	Comments	
Red Maple	<i>Acer rubrum</i>	Sun-shade	Moist or dry soil. Shallow roots. 60-90'	
Redbud	<i>Cercis canadensis</i>	Partial sun-shade	Tolerates full sun if soil is kept moist. Tolerates irregular inundation. Life of about 15 years. 20-30'	
Red-Osier Dogwood (Red Twig Dogwood)	<i>Cornus sericea</i> ( <i>Cornus stolonifera</i> )	Shade-partial sun	Requires wet soils. 3-10'	
Green Hawthorn	<i>Crataegus viridis</i>	Sun-shade	Tolerates wet soils. 20-35'	
White Ash	<i>Fraxinus americana</i>	Sun-partial shade	Tolerates short-term flooding. 50-80'	
Sycamore	<i>Platanus occidentalis</i>	Sun-partial shade	Tolerates occasional flooding; tolerates drought. 75-100'	

Common Name	Scientific Name	Light Requirement	Comments	
Bur Oak	<i>Quercus macrocarpa</i>	Sun	Tolerates some flooding; tolerates drought. 75-100'	
Pin Oak	<i>Quercus palustris</i>	Sun	Tolerates some flooding, but not consistently wet sites. 60-80'	

Common Name	Scientific Name	Light Requirement	Comments	
(Northern) Red Oak	<i>Quercus rubra</i>	Full sun-partial shade	Tolerates drought. 40-70'	
Bald Cypress	<i>Taxodium distichum</i>	Full sun-partial shade	Prefers moist soils and thrives in wet conditions, but will tolerate dry soils as well. 50-100'	
Eastern Hemlock	<i>Tsuga canadensis</i>	Shade-partial sun	Prefers moist soil and cool temperatures. 40-70'	



### Invasive non-natives species to avoid

Common Name	Scientific Name
Norway Maple	<i>Acer platanoides</i>
Garlic Mustard	<i>Alliaria petiolata</i>
Oriental Bittersweet	<i>Celastrus orbiculatus</i>
Crown Vetch	<i>Coronilla varia</i>
Russian Olive	<i>Elaeagnus augustifolia</i>
Silverberry	<i>Elaeagnus pungens</i>
Autumn Olive	<i>Elaeagnus umbellata</i>
Common privet	<i>Ligustrum vulgare</i>
Japanese Honeysuckle	<i>Lonicera japonica</i>
Amur Honeysuckle	<i>Lonicera maackii</i>
Morrow Honeysuckle	<i>Lonicera morrowii</i>
Tartarian Honeysuckle	<i>Lonicera tatarica</i>
Purple Loosestrife	<i>Lythrum salicaria</i>
Reed Canary Grass	<i>Phalaris arundinacea</i>
Common Reed or Phragmites	<i>Phragmites australis</i>
Buckthorn	<i>Rhamnus cathartica, Rhamnus frangula</i>

### SOURCES

“ClearWater Conservancy’s rain garden plant list,” *Environmental Outreach: Rain Gardens*. ClearWater Conservancy, at [http://www.clearwaterconservancy.org/watershed\\_wise\\_raingardens.htm](http://www.clearwaterconservancy.org/watershed_wise_raingardens.htm).

Department of Environmental Resources, Programs and Planning Division. 2002. *The Bioretention Manual*. Prince George’s County, MD.

DuluthStreams. 2004. *Reduce runoff with a rain garden*, at [http://www.duluthstreams.org/citizen/wet\\_garden.html](http://www.duluthstreams.org/citizen/wet_garden.html).

Homoya, Michael A. 2003. *Landscaping with Plants Native to Indiana: Recommended Plants and their Sources*. Indiana Native Plant and Wildflower Society.

MacKenzie, Jill. 1998. “Perennials for Moist Soils,” *Yard and Garden Brief*. University of Minnesota Extension Service, Minneapolis, MN.

Rozumalski, Fred. 2001. “Impervious surface reduction parking lot design: Rainwater gardens plant list,” *Minnesota Urban Small Sites BMP Manual*. Barr Engineering Company, for Metropolitan Council Environmental Services, St. Paul, MN.

Produced by the Monroe County Highway Department, Monroe County Courthouse, Room 323, Bloomington IN, 47404. <http://www.co.monroe.in.us/stormwaterquality/bioretention.html>. Revised 4/18/07