Full Sun Rain Garden Native Plant Selections & Design

What is a rain garden?

Rain gardens are typically bowl-shaped landscape features that capture and absorb rainfall and snowmelt. These gardens help improve downstream water quality and recharge groundwater.

Not every plant is suited for rain gardens. Generally, they need plants that thrive during floods and tolerate droughts. This guide provides suggested Illinois native plant species that are suited for these moisture conditions in full sun. It does not cover how to build a rain garden, which can be found by downloading the Southern Lake Michigan Rain Garden Manual.

Rain Garden Plants

Rain gardens have three planting zones: Basin, Slope and Bank.

Basin Zone Plants – This is the lowest zone of a rain garden, where the most moisture-tolerant plant species are located. The depth of your basin will be determined by the amount of stormwater you want to capture.

A few Illinois native plants that work in the basin of full sun rain gardens include:

- Swamp Milkweed (Latin name Asclepias incarnata)
 - Full to part sun.
 - Medium to moist soil.
 - Pink flowers throughout summer.
 - Attracts bees, butterflies, and hummingbirds.
 - Grows 3 to 5 feet tall and 2 to 3 feet wide.
 - Tolerates drought but may yellow and droop.
- Great Blue Lobelia (Latin name Lobelia siphilitica)
 - Part sun.
 - Medium to moist soil.
 - Purplish-blue flowers from mid-summer to mid-fall.
 - Attracts bees, butterflies and hummingbirds.
 - Grows 1 to 4 feet tall and 1 to 2 feet wide.
 - Tolerates drought but may yellow and droop.
- Emory's Sedge (Latin name Carex emoryi)
 - Full to part sun.
 - Medium to moist soil.
 - Green grass-like foliage throughout the growing season.
 - Foliage is consumed by caterpillars and seeds are attractive to various birds.
 - Grows 1 to 3 feet tall and 1 to 2 feet wide.
 - Tolerates drought but may yellow and droop.

Slope Zone Plants – Slopes are the sides of rain gardens, where plants need to be most tolerant of both wet and dry conditions as water levels rise and fall.

A few Illinois native plants that work along the slopes of full sun rain gardens include:

- Columbine (Latin name Aquilegia canadensis)
 - Full to part sun.
 - Medium to dry soil.

- Red and yellow flowers in spring.
- Attracts bees and hummingbirds.
- Grows 1 to 3 feet tall and 1 to 2 feet wide.
- Drought tolerant.
- Purple Joe Pye Weed (Latin name Eutrochium purpureus)
 - Full to part sun.
 - Medium to moist soil.
 - Pink flowers from mid-summer into early fall.
 - Attracts bees and butterflies.
 - Grows 3 to 7 feet tall and 3 to 4 feet wide.
 - Drought tolerant.
- 'Kobold' Blazing Star (Latin name Liatris pycnostachya 'Kobold')
 - Full to part sun.
 - Medium to dry soil.
 - Pink flowers from mid-summer into early fall.
 - Attracts bees and butterflies.
 - Grows 2 to 4 feet tall and 1 to 2 feet wide.
 - Tolerates drought but may yellow and droop.

Bank Zone Plants – This zone exists along the top of the rain garden. Plants in this zone need to be tolerant of dry conditions, as water should not pool in this area.

A few Illinois native plants that work on the banks of full sun rain gardens include:

- Prairie Dropseed (Latin name Sporobolus heterolepis)
 - Full to part sun.
 - Dry soil.
 - Green grassy foliage throughout the growing season that turns golden brown in fall.
 - Seeds are attractive to various birds.
 - Grows 2 to 3 feet tall and 2 to 3 feet wide.
 - Tolerates drought but may yellow and droop.
- Indian Grass (Latin name Sorghastrum nutans)
 - Full to part sun.
 - Medium to dry soil.
 - Green grassy foliage throughout the growing season.
 - Foliage is consumed by caterpillars and seeds are attractive to various birds.
 - Grows 3 to 7 feet tall and 2 to 3 feet wide.
 - Tolerates drought but may yellow and droop.
- White Wild Indigo (Latin name Baptisia alba)
 - Full sun.
 - Medium to dry soil.
 - White flowers in summer.
 - Flowers attract bees and foliage is consumed by caterpillars.
 - Grows 3 to 6 feet tall and 3 to 4 feet wide.
 - Drought tolerant.
- Golden Alexanders (Latin name Zizia aurea)
 - Full to part sun.
 - Medium to dry soil.

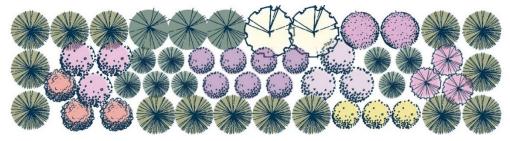
- Yellow flowers in spring.
- Flowers attract bees and foliage is consumed by caterpillars.
- Grows 1 to 3 feet tall and 1 to 2 feet wide.
- Drought tolerant.
- 'Purple Dome' New England Aster (Latin name Aster novae-angliae 'Purple Dome')
 - Full to part sun.
 - Medium to dry soil.
 - Purple flowers in fall.
 - Flowers attract bees and butterflies, and it's foliage is consumed by caterpillars.
 - Grows 2 to 4 feet tall and 2 to 3 feet wide.
 - Tolerates drought but may yellow and droop.

PLANTING DESIGN

Example Design

In this example design for planting a rectangular 6 foot wide by 25 foot long rain garden with a maximum basin depth of 12 inches, you will need:

- **15 Prairie Dropseed** along the **banks**, spaced 2 feet apart. Plant 5 in a single line across the front center of the garden. Plant the right and left sides, each with 5, respectively.
- 2 White Wild Indigo in a single line spaced 3 feet apart and paired together near the bank's central back edge.
- **3 Indian Grass** spaced 2 feet apart in a single line along the **bank's** back edge between the White Wild Indigo to the right and the Prairie Dropseed to the left.
- **2 'Purple Dome' New England Aster** spaced 2 feet apart in a single line along the **bank's** back edge between the White Wild Indigo to the left and the Prairie Dropseed on the right.
- **3 Golden Alexanders** spaced 1 foot apart in a single line along the **bank's** front right between the Prairie Dropseed plantings.
- **3 Columbine** spaced 1½ feet apart in a triangular pattern on the **bank's** front left between the Prairie Dropseed plantings.
- **3 Purple Joe Pye Weed** spaced 2 feet apart in a triangular pattern on the **slope's** left side, with the Columbine planting in front and Prairie Dropseed planting behind and to the left.
- **3 'Kobold' Blazing Star** spaced 1½ feet apart in a triangular pattern on the **slope's** right side, with Prairie Dropseed in front, on the right, and behind.
- **5 Emory's Sedge** spaced 1½ feet apart in two rows in the **basin's** left side, with three in the front row and two in the back row splitting the distance, Indian Grass behind, Prairie Dropseed in front, and Purple Joe Pye Weed to the left.
- 7 Great Blue Lobelia spaced 1½ feet apart in two rows in the middle of the basin, with three in the front row and four in the back row, splitting the distance, Indian Grass and White Wild Indigo behind, Prairie Dropseed in front, and Emory's Sedge to the left.
- **3 Swamp Milkweed** spaced 2 feet apart in a triangular pattern in the **basin's** right side, with Great Blue Lobelia to the left, Prairie Dropseed and Golden Alexanders in front, and White Wild Indigo and 'Purple Dome' New England Aster behind.
- **3 Emory's Sedge** spaced 1½ feet apart in two rows in the **basin's** right side, with Swamp Milkweed to the left, 'Kobold' Blazing Star to the right, Golden Alexanders in front, and 'Purple Dome' New England Aster behind.



Additional Options

If you need a smaller rain garden or are new to rain garden native plants, one strategy is to start out with a limited number of species. More species can always be added later as you learn more about what works best in your space. While suggested plant lists and design templates can help, you can personalize your garden however you like, but be sure to check local municipal or HOA ordinances.

Two options for rain garden native plant combinations that feature only three species are:

Option One:

- Bank Prairie Dropseed
- Slope 'Kobold' Blazing Star
- Basin Swamp Milkweed

Option Two:

- Bank 'Purple Dome' New England Aster
- Slope Great Blue Lobelia
- Basin Emory's Sedge

WHERE TO FIND PLANTS AND MORE INFORMATION

The plant palette is inspired by the Red Oak Rain Garden: https://redoakraingarden.org/. The Illinois Native Plant Society webpage lists sources of native plants: illinoisplants.org. For more information about plants, go to the University of Illinois Extension Horticulture website: extension.illinois.edu/global/horticulture.

PUT YOUR NATIVE PLANT GARDEN ON THE MAP

You can be part of a network of native plantings by registering your Illinois native plant garden or rain garden. This helps build community and encourage native plant use. Add your native plant garden to the map: go.illinois.edu/GardenMap.

ACKNOWLEDGMENTS

Funding provided by Illinois Environmental Protection Agency and Illinois-Indiana Sea Grant.

Produced by C. Eliana Brown, University of Illinois Extension.

Researched and designed by Layne Knoche with contributions from Kate Gardiner, University of Illinois Extension.

Edited and reviewed by Chris Enroth and Travis Cleveland, University of Illinois Extension, Kara Salazar, Purdue University, Irene Miles and Joel Davenport, Illinois-Indiana Sea Grant.









