

# A Few Common Native Rain Garden Plants



## GRASSES

- Big Bluestem (*Andropogon gerardii*)
- Blue-joint Grass (*Calamagrostis canadensis*)
- Fowl Manna Grass (*Glyceria striata*)
- Indian Grass (*Sorghastrum nutans*)
- Little Bluestem (*Schizachyrium scoparium*)
- Prairie Cordgrass (*Spartina pectinata*)
- Prairie Dropseed (*Sporobolus heterolepis*)
- Switchgrass (*Panicum virgatum*)
- Virginia Wild Rye (*Elymus virginicus*)

## SEDGES

- Burr Sedge (*Carex grayii*)
- Crested Sedge (*Carex cristatella*)
- Fox Sedge (*Carex vulpinoidea*)
- Frank's Sedge (*Carex frankii*)
- Pointed Oval Sedge (*Carex tribuloides*)
- Porcupine Sedge (*Carex hystericina*)
- Riverbank Tussock Sedge (*Carex emoryi*)
- Tussock Sedge (*Carex stricta*)
- Yellow Fox Sedge (*Carex annectans xanthocarpa*)

## TREES/SHRUBS

### Small (Under 30 Feet)

- Alder (*Alnus incana*)
- American Bladdernut (*Staphylea trifolia*)
- American Hornbeam (*Carpinus caroliniana betulaceae*)
- Buttonbush (*Cephalanthus occidentalis*)
- Gray Dogwood (*Cornus racemosa*)
- Hawthorn Species (*Crataegus*)
- Paw-Paw (*Asimina triloba*)
- Red-Osier Dogwood (*Cornus sericea*)
- Silky Dogwood (*Cornus amomum*)
- Spicebush (*Lindera benzoin*)
- Serviceberry (*Amelanchier*)

### Medium (30 to 50 Feet)

- American Arborvitae (evergreen) (*Thuja occidentalis*)
- American Hornbeam (*Carpinus caroliniana*)
- Black Willow (*Salix nigra*)
- Ohio Buckeye (*Aesculus glabra*)
- River Birch (*Betula nigra*)
- Serviceberry (*Amelanchier arborea*)
- White Birch (*Betula pubescens*)

### Large (50 to 120 Feet)

- Bald Cypress (*Taxodium distichum*)
- Bur Oak (*Quercus macrocarpa*)
- Eastern Hemlock (*Tsuga canadensis*)
- Pin Oak (*Quercus palustris*)
- Red Maple (*Acer rubrum*)
- Shellbark Hickory (*Carya laciniosa*)
- Swamp White Oak (*Quercus bicolor*)
- Sycamore (*Platanus occidentalis*)

## WILDFLOWERS (FORBS)

- ~ 0 Autumn Sneezeweed (*Helenium autumnale*)
- \* Blue Flag (*Iris virginica shrevei*)
- \* Boneset (*Eupatorium perfoliatum*)
- ~ 0 Bottle Gentian (*Gentiana andrewsii*)
- 0 Cardinal Flower (*Lobelia cardinalis*)
- \* Culver's Root (*Veronicastrum virginicum*)
- ~ 0 Dense Blazing Star (*Liatris spicata*)
- \* ~ 0 Flat-topped Aster (*Aster umbellatus*)
- ~ 0 Foxglove Beardtongue (*Penstemon digitalis*)
- Golden Alexanders (*Zizia aurea*)
- Golden Ragwort (*Senecio aureus*)
- ~ 0 Great Blue Lobelia (*Lobelia siphilitica*)
- \* Hollow Joe-Pye Weed (*Eupatorium fistulosum*)
- \* ~ 0 Marsh Milkweed (*Asclepias incarnata*)
- \* ~ Monkeyflower (*Mimulus ringens*)
- \* Mountain Mint (*Pycnanthemum virginianum*)
- \* New England Aster (*Aster novae-angliae*)
- \* Pink Turtlehead (*Chelone obliqua*)
- \* Purple Coneflower (*Echinacea purpurea*)
- ~ 0 Queen of the Prairie (*Filipendula rubra*)
- ~ 0 Riddell's Goldenrod (*Solidago riddellii*)
- Shining Aster (*Aster firmus*)
- ~ 0 Showy Black-Eyed Susan (*Rudbeckia fulgida speciosa*)
- ~ 0 Smooth Ironweed (*Vernonia fasciculata*)
- ~ 0 Smooth Penstemon (*Penstemon calycosus*)
- ~ 0 Spotted Joe-Pye Weed (*Eupatorium maculatum*)
- ~ Swamp Aster (*Aster puniceus*)
- ~ 0 Sweet Black-Eyed Susan (*Rudbeckia subtomentosa*)
- ~ White Turtlehead (*Chelone glabra*)
- ~ 0 Wrinkled Goldenrod (*Solidago rugosa*)

### SYMBOL KEY

- \* Areas that may stand in water over 24 hours
- ~ Areas that always drain within 24 hours
- 0 Areas that drain in less than 1 hour after a rain event

### Want More Information?

- Soil & Water Conservation District Offices and Purdue Extension Service Offices in Boone, Brown, Hamilton, Hancock, Hendricks, Johnson, Marion, Monroe, Morgan, and Shelby Counties. To located an office near you, go to: <http://www.iaswcd.org> or <http://www.ces.purdue.edu/counties.html>
- Williams Creek Consulting, Inc. — [www.williams creek.net](http://www.williams creek.net)
- Spence Restoration Nursery, Inc. — [www.spencenursery.com](http://www.spencenursery.com)
- USDA-Natural Resources Conservation Service — [www.in.nrcs.usda.gov](http://www.in.nrcs.usda.gov)
- National Plants Database — <http://plants.usda.gov>
- Indiana Native Plants & Wildflowers Society — [www.inpaws.org](http://www.inpaws.org)

Hoosier Heartland Resource Conservation & Development Council's Urban Committee thanks the dedicated partners who made this project possible — Megan Scott, Williams Creek Consulting; Jessica Norcross Hendricks County SWCD; Brooke Moore, Hendricks County Surveyor's Office; Myrene Brown and Karen Burroughs, Boone County Master Gardeners; Kevin Tungesvick, Spence Restoration; John South, Hamilton County SWCD; Ron Lauster, Marion County SWCD; Bill Hosteler, Soils Consultant; Mike Cox, NRCS State Conservation Engineer; Brian Neilson, EMH&T Engineers; Dan Duten, Indiana State Department of Agriculture; Ron Dixon, Natural Resources Consulting; Ken Remenschnider, Remenschnider Associates. A very special thank you to the Boone County Master Gardeners for a grant to help print this brochure!

Build your own

# Rain Garden



A *Rain Garden* is a shallow landscaped area in your yard planted to wildflowers, grasses, shrubs, and other native vegetation.



A *Rain Garden* collects, dissipates the water through soil and plants, and filters rain water from your roof, driveway, sidewalks, and lawn before it enters a storm drain or nearby stream. It is dry between precipitation events.



A *Rain Garden* can be your personal contribution to cleaner water and an improved environment!

# 1 Site Requirements

- The site must be 10 feet from structures (home, shed, patio, etc.) that could be damaged by soil moisture.
- The site can not be over a septic field.

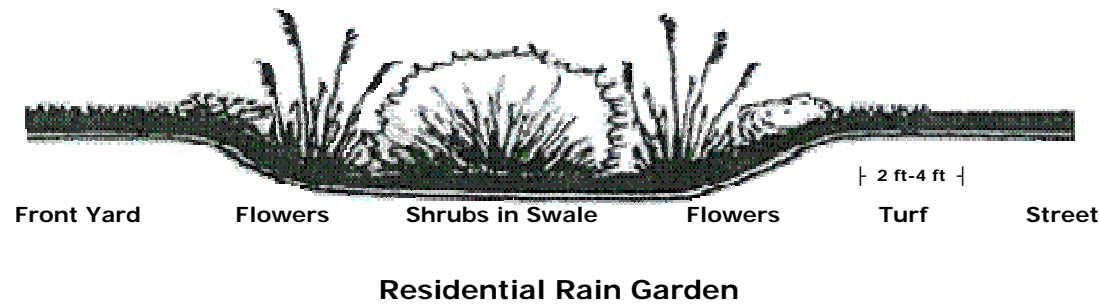
Ideally, your site should be

- Full to partial sun.
- Quick draining soil of high organic content. See Step 2.
- Close to the source of runoff.
- Flat or bowl-shaped to minimize digging during construction of your garden.
- An existing site where water naturally pools after rain events, *but dries up in 24 hours*. It can be a site where it receives water from an impervious surface (roof, patio, driveway) by way of a swale or drainage pipe will lead.\*\*



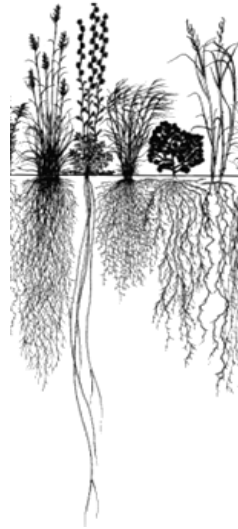
# 2 Soil Infiltration

- Dig a hole the size of a coffee can and saturate the soil with water. The best time to complete this activity is late winter to early spring.
- Fill the hole with water and measure the depth, returning in 4 hours to measure again.
- The difference in water depth after 4 hours should equal or exceed 1 inch. If the difference is less than 1 inch, seek professional assistance before building your rain garden.
- Indiana has high water tables, so be careful of the placement of the rain garden.



# 3 Size Calculation

- Measure the area of the impervious surfaces (roof, concrete, patio) that will drain to the rain garden.
- For a rain garden that is 6 inches deep, multiply the impervious surface area by 25% to determine the size of your garden.
- Most rain gardens are about 4 to 8 inches deep.
- Observe your garden after rain events. The garden needs to drain within 48 hours. If it doesn't, make adjustments to the size, overflow area, density and type of plantings, or the amount of runoff being sent to the garden.



**Native Plant Root Diagram**

# 5 Excavation

- Call 1-800-382-5544 two days before you dig to locate any underground utilities.
- Remove the existing sod or plants.
- Dig a 6 inch depression (or bowl) with a level bottom. Build a small berm *opposite* the side of water entry using soil excavated from the garden. Allow a low point for water over 6 inches deep to escape.
- Some rain gardens may require a subsurface drain pipe. Consult a professional.\*\*
- Now is the time if you need or want to add organic matter or other amendments to the soil.

# 4 Design

- Select the shape and the dimension that are appropriate for the area you need.
- Select appropriate quantities of native plants for the located site.
- Remember, this is your garden, so pick plants that you find attractive.
- A rock wall or other edging can be used to define the rain garden's boundaries, but it is important that it is placed in a location that will not interfere with water flow.
- Rain gardens are designed to be dry between storm events. With proper drainage, mosquito larva will not be a problem.

# 6 Installation and Maintenance

- Plant choice is important for your site. Install recommended rain garden plants (trees, shrubs, sedges, grasses, wildflowers). See back page for ideas.
- Group the same plants together in clumps of at least 3 for best effect.
- Use grasses to help support flowers as they grow taller.
- Install and care for plants as you would in other new landscaping. Plants will need to be watered until growth is established. Remember, that all plants need water in drought conditions.
- Rain gardens may require weeding until plants are of sufficient size to out-compete weeds. To help keep weeding to a minimum, use a shredded hardwood mulch around your plants. It is also recommended to label your new plantings to avoid confusion with weeds.
- Keep the trash and sediment out.
- If your rain garden has a subsurface drain it will require additional maintenance. Consult a professional.\*\*
- Remember, native plants do not require fertilizer, herbicides or pesticides.



\*\* Some sites may require more extensive planning to address topography and drainage. Consult a professional.