



# Rain Gardens

## Benefits of rain gardens:

- Increase the amount of water that filters into the ground, which recharges local and regional aquifers.
- Help protect communities from flooding and drainage problems.
- Help protect streams, rivers, and lakes from pollutants carried by urban stormwater (lawn fertilizers and pesticides, oil and other fluids that leak from cars, and numerous harmful substances that wash off roofs and paved areas).
- Enhance the beauty of yards and neighborhoods.
- Provide valuable habitat for birds, butterflies and many beneficial insects.

## What is a rain garden?

A rain garden is a shallow depression (typically 6-8 inches deep) in your yard that is planted with native wildflowers and grasses. This popular type of perennial garden is strategically located to capture runoff from impervious surfaces such as roofs, driveways, and patios. The garden holds water allowing it to infiltrate into the ground, then dries up in 24-48 hours.

## Why install a rain garden?

These landscaping features are not only beautiful but they absorb water and pollutants, reduce runoff, protect water quality, and prevent flooding. A rain garden on your property helps prevent stormwater pollution. Rain gardens absorb hundreds of gallons of rain that would otherwise wash pollutants from your lawn and roof down the street into the nearest river, stream or lake. Even small rain gardens can absorb a lot of rain water!

## Where to build a rain garden?

Most home rain gardens are simply a depression in the ground, with no fancy pipes or special soil. If a depressional area is not already present, determine where the water from downspouts, driveways or other impervious surfaces flows and plan to install your rain garden where it will capture the most rainwater runoff. To help decide where to put a rain garden, consider these points:

- Before beginning any project, check homeowner association covenants, as well as local and county ordinances. Do not work in a drainage, utility, or other easement without the proper permits. Also call the Indiana Underground Plant Protection Service (1-800-382-5544) to identify any buried utilities.
- The rain garden should be at least 10 feet from a structure with a basement and 4 feet from a slab foundation or sidewalk so infiltrating water does not damage infrastructure.
- Do not place the rain garden directly over a septic system.
- We would highly recommend performing a percolation test on your proposed site before finalizing your choice to ensure your garden will drain in 24-48 hours. See our "Build Your Own Rain Garden" brochure for information on doing a percolation test.
- Installing a garden in full sun will allow it to dry more quickly and will give you more plant options, but planting in the shade is absolutely possible. When digging and planting near large trees you will also have to watch out for and avoid tree roots.
- Putting the rain garden in a flatter part of the yard will make digging much easier. The steeper the slope, the deeper the garden must be to be level.



### **Choose native plants**

Native plants are ones that were growing in Indiana long before we settled here. These species are tolerant of Indiana's climate, benefit our native wildlife, and are less maintenance than their exotic counterparts. There are dozens of native choices for rain gardens - the species you choose should be based on your site conditions for light, moisture, and soils. Use your personal preference for plant structure, height, flower characteristics, and attracted wildlife.

Once the garden is dug, plants can be installed from May to mid-September. However, summer plantings may need frequent watering. Seedlings should be planted 12 to 18 inches apart with flood tolerant species toward the bottom and drought tolerant species towards the edge.

Make sure your plantings receive at least one inch of water a week for the first two months, until they show that they are growing and well established. Once the plants are established, they'll thrive without additional watering. Fertilizers are not necessary and only minimal weeding will be needed once the initial weeds that appear have been removed.

**Several nurseries offer native rain garden plant "packages" that make plant selection a breeze!**

### **Possible Challenges**

Urban soils are often extensively altered and heavily compacted during development. This is one reason your soil could fail the percolation test mentioned earlier. Compacted soils may need to be excavated and replaced with a mixture of 50% sand, 30% compost, and 20% soil. You may also need to install a tile drain under the garden; the tile will lower the water table and allow water to percolate through an amended soil profile. There are several other ways to remedy poorly draining soils; consult our "Build Your Own Rain Garden" brochure for more information.



## **Native Plants for Rain Gardens**

### **Wildflowers**

Swamp Milkweed	<i>Asclepias incarnate</i>
Turtlehead	<i>Chelone glabra</i>
Spotted Joe-Pye Weed	<i>Eupatorium maculatum</i>
Common Boneset	<i>Eupatorium perfoliatum</i>
Sneezeweed	<i>Helianum autumnale</i>
Western Sunflower	<i>Helianthus occidentalis</i>
False Sunflower	<i>Heliopsis helianthoides</i>
Blue Flag Iris	<i>Iris virginica shrevei</i>
Marsh Blazing Star	<i>Liatris spicata</i>
Cardinal Flower	<i>Lobelia cardinalis</i>
Great Blue Lobelia	<i>Lobelia siphilitica</i>
Monkey Flower	<i>Mimulus ringens</i>
Common Ironweed	<i>Vernonia fasciculata</i>

### **Grasses**

Sweet Flag	<i>Acorus calamus</i>
Big Bluestem	<i>Andropogon gerardii</i>
Bottlebrush Sedge	<i>Carex lurida</i>
Brown Fox Sedge	<i>Carex vulpinoidea</i>
Wool Grass	<i>Scirpus cyperinus</i>
Little Bluestem	<i>Shizachyrium scoparium</i>
Indian Grass	<i>Sorghastrum nutans</i>

### **Shrubs**

Buttonbush	<i>Cephalanthus occidentalis</i>
Silky Dogwood	<i>Cornus amomum</i>
Winterberry	<i>Ilex verticillata</i>
Swamp Rose	<i>Rosa palustris</i>
Highbush Cranberry	<i>Viburnum trilobum</i>

**(This is not a complete list.)**

Contact the Hamilton County Soil and Water Conservation District for more information, assistance in designing your rain garden, supplier info, and info on possible cost share assistance:

1717 Pleasant St.

Noblesville, IN 46060

317.773.2181

[www.hamiltonswcd.org](http://www.hamiltonswcd.org)

