

## “The Low Down on Rain Gardens”

A rain garden is a shallow depression that is planted with native wetland or wet prairie wildflowers and grasses and also allows rain water to collect and filter naturally into the ground. Rather than letting rainwater wash pollutants into local water bodies, a rain garden captures that water and slowly filters out those pollutants. Nutrients are used by the plants and pesticides are broken down by microorganisms in the soil. Rain gardens allow 30% more water to soak into the ground than a lawn. They also attract birds, butterflies, and mosquito-eating dragonflies.

Rain gardens are best planted in the spring time for ease of plant establishment. Planting in the summer will work, but requires more care and watering for plant establishment to take place.

Next, pick a site that has good drainage, at least 10 feet away from the house, not over a septic system, and has a slope between 1% and 10%. Full sun will allow the most selection of plants. There are options for part sun to part shade as well. Also, keep in mind that in the Fox Valley, we tend to have clay soils with more alkalinity than acidity. A soil test will let you know exactly what you have. To determine drainability, do a percolation test: dig an 8 inch deep hole and fill with water, allow to drain and refill, if it drains again within two hours, the drainability is acceptable.

Before digging, call digger’s hotline: #811 or 1-800-242-5811.

Rain gardens can run anywhere from 100-300 square feet. A 10 foot by 10 foot by 6-8 inch garden works well in sandier soil. A 10 foot by 20 foot by 2-6 inch garden works well in heavy clay soils. The size and number of beds will depend on how much surface area there is to collect from, so observe the movement of water in your yard. Generally, rain gardens are placed on the perimeter of a yard to capture rain (or sump pump) water before it washes into a roadway.

Use native hardy perennials that can survive in wet and dry conditions. Rain gardens are not supposed to be flooded all of the time. They are obviously very wet in spring, but will dry out in the summer months. Plants should bloom at different times, and be of varied heights, shapes, and textures. Here is just a sample plant list of the many combinations that can be created:

Spotted Joe Pye (*Eupatorium maculatum*)

Prairie Blazing Star (*Liatris pycnostachya*)

Cardinal Flower (*Lobelia cardinalis*)

Ironweed (*Vernonia fasciculata*)

Culver’s Root (*Veronicastrum virginicum*)

Sneezeweed (*Helenium autumnale*)

Wild Blue Flag Iris (*Iris virginica shrevei*)

Fox Sedge (*Carex vulpinoidea*)

Palm Sedge (*Carex muskingumensis*)

Plant spacing is relatively tight in rain gardens so that water uptake can happen more quickly and the good plants crowd out the weeds. Dig the area to desired depth and use the extra soil to build a berm around the lower perimeter. Plants should be watered twice a week after planting until established (about one growing season).

Once rain gardens are established, they are very low maintenance, requiring only to be cut back in early spring to about 6-8 inches. While establishment is taking place, weeding is crucial. The idea is that the desired plants will grow, spread, and crowd out the weeds. Some plant varieties may not do well and should be replaced with plants that have proven themselves. Fertilizing should not be necessary since native plants thrive without it and nutrients are already being carried into the bed by runoff. It would also defeat the purpose of installing the rain garden. When cutting back the bed, it is also important to remember to leave the seed heads in the bed to further discourage the establishment of weeds.

One of the many functions of soil is to filter water. Let it do its job and help us clean our water.

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Sources:

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- 2.) Applied Ecological Services, Inc. "Build your own Rain Garden", Perennial Garden Design Sheet #1, 2005. <http://www.appliedeco.com/Projects/Rain%20Garden.pdf>
- 3.) Wisconsin Native Plants for Rain Gardens, <http://www.dnr.wi.gov/runoff/pdf/rg/RaingardenPlantlist.pdf>
- 4.) Prairie Nursery, 2009 Catalog and Growing Guide. [www.prairienursery.com](http://www.prairienursery.com)