

Rain Garden Myths.....

- A rain garden is not a pond or wetland, as it only holds water for 1-2 days after a rainfall event
- A rain garden is not a breeding ground for mosquitoes, which need 7-12 days in standing water to reproduce.
- A rain garden is not expensive to construct. It only cost's \$6-8 per square foot and is an excellent method for capturing and filtering storm water runoff from your yard or driveway.

Rain Gardens: A mosquito trap!

Rain gardens only contain standing water for 1-2 days, whereas the mosquito reproduction cycle takes 7-12 days to complete. As water filters into the ground and the rain garden dries up, any mosquito eggs are destroyed before they ever have a chance to mature into larvae. Also, rain gardens attract dragonflies, which eat mosquitoes.

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Rain Garden Network

COLES COUNTY SOIL AND WATER CONSERVATION DISTRICT

RAIN GARDENS OF CENTRAL ILLINOIS



Rain Gardens.....

- Come in all shapes and sizes*
- Can be designed for any site*
- Are easy to install and maintain*
- Are beautiful landscaping features*
- Attract birds and butterflies*

Continued from DIGGING YOUR RAIN GARDEN sections with only one string at a time. Start digging at the uphill side of the string. Measure down from the string and dig until you reach the desired garden depth. This soil that you are removing will be used to form the berm around three sides of the rain garden to hold the water following a storm. Work on 5 foot sections at a time. If the lawn is almost flat, the depth throughout the garden will be uniform. If the lawn is sloped, the high end will need to be dug out considerably more than the low end and some of the soil from the upper end will be added to the lower end to make the garden level. Continue digging and filling one section at a time across the length of your garden until it is as level as possible. If you are adding compost, now is the time to mix it in the garden. You will need to remove more soil if adding compost, if you add 2" of compost, remove an extra 2" of soil.

The berm will need to be highest on the downhill side. Up the sides of the garden the berm will become lower and taper out. After shaping the berm into a smooth ridge about a foot across, stomp on it. It is very important to have a well compacted berm, so stomp hard. To prevent erosion cover the berm with mulch or plant grass. You can also plant dry

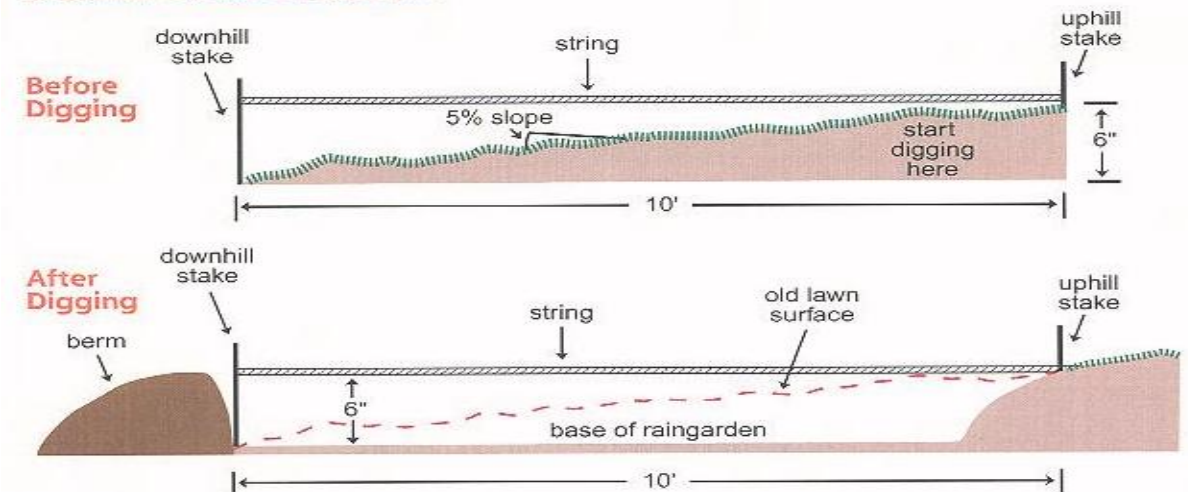
tolerant prairie rain garden plants on the berm, such as prairie dropseed, little bluestem and shooting star. If the downspout is a few feet away from the entry to the garden, make sure water runs into the garden by either digging a shallow grass swale or attaching an extension to the downspout.

PLANTS

Rain gardens should be an attractive part of your yard. When choosing native plants for the garden, it is important to consider the height of each plant, bloom time and color. When laying out plants out, randomly clump individual species in groups of 3 to 7 plants to provide bolder color. Make sure to repeat these individual groupings to create repetition and cohesion in a planting. You will need to mulch the first year, but keep the mulch off the plant crowns. Mulch should be a heavy hardwood type and 2" thick. Weeding will become less needed as the garden matures.

The SWCD has a rain garden guide available to landowners free of charge. Each spring the SWCD has a native prairie plant sale, these plants are excellent for rain gardens. Please call the office with any questions.

a. Between 3% and 8% slope lawn



RAIN GARDENS OF CENTRAL ILLINOIS



Rain Gardens are landscaped areas planted to wild flowers and other native vegetation that soak up rain water.

The rain garden fills with a few inches of water after a storm and then the water slowly filters into the ground rather than running off to creeks or storm drains. Up to 70% of water pollution in our area is carried by stormwater. Much of this pollution comes from things we do in our own yards and gardens!

Water was not meant to run off our land.

Nature’s original plan is for rainwater to soak into the soil then replenish groundwater supplies, be absorbed and filtered by plants and then enter our surface waters as clean water. As populations grow and replace forests and agricultural land, increased storm-water runoff from impervious surfaces causes flooding, carries pollutants from streets, parking lots, and lawns into our rivers and lakes.

Getting started is easy, start in the spring for easy digging and healthy plants.

CHOOSE A LOCATION

- Construct your rain garden at least 10’ away from your house or your neighbors foundation to prevent basement seepage.
- Don’t locate the garden over a septic system or wells and stay away from mature tree roots.
- The outlet of a downspout, sump pump or off a hard surface, like driveways or patios makes a great source of water.
- Try to choose an area with full to partial sun exposure.
- Existing low areas are not good locations, infiltration is too slow, if you choose such a site be prepared to modify the soil.
- Pay attention to views from inside the house and proximity to gathering spaces and play areas.

MEASURE THE DRAINAGE AREA

- As the size of the area draining into the garden increases, so does the size of your garden.
- For gardens less than 30’ from a downspout, all the water will come from that spout. Walk around the house and determine what percent of the roof feeds that downspout.
- Multiply your homes length and width to determine the area of the roof, then multiply by the percent that feeds the downspout.
- If a significant lawn area drains into the rain garden, add this lawn area to the roof area.

HOW DEEP?

A typical rain garden is between four and eight inches deep. A rain garden more than eight inches deep will pond water too long. No matter what the depth, the goal is to keep the garden level. The slope of the lawn should determine the depth of the garden. If the slope is less than 4%, build a 3 to 5 inch deep rain garden. Slopes between 5-7% build the garden 6 to 7 inches deep, for slopes 8-12% build a garden 8 inches deep.

HOW BIG?

Although a rain garden can be almost any size, construction time and cost are important factors. Typical sizes range from 100 to 300 square feet. The size of the garden depends on how deep the garden will be, what type of soil is predominant and how much drainage area drains in to the garden.

Table to determine size of rain gardens:

Table 1 Rain gardens less than 30 feet from downspout.				Table 2 Rain gardens more than 30 feet from downspout.	
	3-5 in. deep	6-7 in. deep	8 in. deep	Size Factor, for all depths	
Sandy soil	0.19	0.15	0.08	Sandy soil	0.03
Silty soil	0.34	0.25	0.16	Silty soil	0.06
Clayey soil	0.43	0.32	0.20	Clayey soil	0.10

1. Find the size factor for the soil type and rain garden depth.
2. Multiply the size factor by the drainage area. This number is the recommended rain garden area.
3. If the recommended rain garden area is much more than 300 square feet, divide it into smaller rain gardens.

PREPARE YOUR SOIL

Dig a hole about 6” deep in the proposed rain garden location and fill the hole with water. If the water takes more than 24 hours to soak in, the soil is not suitable for a rain garden. Gardens with well draining soil will need about 2-3” of compost mixed in when digging up the area. If you have a large amount of clay near the surface you will need to dig the clay out 1-2” and add a mix of 30% construction sand, 50% topsoil and 20% compost.

SHAPE

Crescent, kidney and teardrop shapes work well for rain gardens. It must be as level as possible so water will spread out evenly allowing infiltration. The longer side of the garden should face upslope and be perpendicular to the slope and downspout. This way the garden catches as much water as possible. The rain garden should be about twice as long as it is wide. Minimum width 10’, maximum 15’.

DIGGING THE RAIN GARDEN

Lay a string around the perimeter of the rain garden. You will make a berm or low wall around 3 sides of the garden. Put stakes on the uphill and downhill sides every 5 feet. Starting at one end of the rain garden, tie a string to the uphill stake at ground level. Tie it to the stake directly downhill so that the string is level. Work in 5 foot wide