

# RAIN GARDENS

*How to design and construct a successful rain garden*



**WVCA**

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## NATIVE PLANTS FOR RAIN GARDENS



**SUN / PART SUN**

### Shrubs

*Mountain laurel*  
*High bush blueberry*  
*Spice bush*  
*Inkberry*  
*Sweet pepperbush*

### Grasses

*Canada wild rye*  
*Bottle bush grass*

### Perennials

*Cardinal flower*  
*Purple cone flower*

### Ferns

*Hay-scented fern*



**PART SUN/ PART SHADE**

### Grasses

*Blue wood sedge*  
*Virginia wild rye*

### Perennials

*Butterfly weed*  
*New England aster*  
*Wild snakeroot*  
*Wild bergamot*  
*Blue-eyed grass*  
*Solomon's seal*  
*Black-eyed Susan*  
*Wild pink*  
*Yellow flag iris*  
*St. johns wort*

*Day lily*

*Hosta*

*Grass-leaf blazing star*



**SHADE**

### Ferns

*Rattle snake fern*



## RAIN GARDENS



Building a rain garden in your own yard is probably the easiest and most economical thing you can do to reduce your contribution to stormwater pollution. By capturing rain-water from your roof, driveway, and sidewalks and diverting it into a rain garden, it can slowly soak into the ground, filter contaminants and keep quantities of clean water from going down the sewer system. You'll have a great looking garden that puts water in its place.

### What is a Rain Garden?

A rain garden uses native landscaping to soak up rain water from your downspout. The middle part of the garden holds several inches of water, allowing it to slowly infiltrate into the ground instead of being delivered to the storm drain all at once.

### Choosing the Right Spot

Your property has an existing drainage pattern (even though it may not be very noticeable), and it will usually be easiest to take advantage of that. Note the direction of runoff and low spots where water collects. If you are not sure where these are, and it's not raining, find them by placing a water hose on the ground and watch to see where the water collects. If these spots are away and downhill from your building foundation, they will be good places for your rain garden. If there is a spot on your property where standing water collects, this area has poor infiltration. You may think it is thus the wrong spot for your rain garden. However, if you could collect water anywhere on your property, these areas would likely have poor infiltration also. This is because soil is compacted during construction in order to prevent sinkholes and to support building foundations and other structures. This general compaction of building site soils makes the need for your rain garden even more critical. If you have many low spots, you can choose those that are closest to the downspouts from your roof or nearest to a paved driveway.

### Hints for Choosing a Spot

**Avoid creating a rain garden too close to building foundations; this may lead to a leaky basement.** If you can locate it at least 10 feet and downslope from the building, that should be good. Also, you must stay away from the drain field if you have a septic system.

**Be aware of right of ways and underground service lines or utilities.** Avoid excavating or planting in these areas (this includes the drainage ditch in front of your house). You don't want to accidentally dig up your phone line, and there may be restrictions to activities in right of ways. **Call before your dig: Miss Utility West Virginia—24 hours a day, toll free 800.245.4848** and have the area flagged. Hint: take pictures of the flagged areas so you have a record of underground utility locations.

### Dig the Garden

To enable the rain garden to hold several inches of water during a storm, you'll have to dig a hole 3-4 inches deep across the entire surface of the garden. If the soil lacks organic material, you can improve it by digging the hole 5-6 inches deep and adding 2-3 inches of humus or other organic material. Make sure the bottom is level. Next, test how the garden will hold water during a storm by letting water flow into the rain garden from a hose placed at the downspout. Based on this test, make any necessary adjustment (i.e., create a berm on the lower side of the garden using the diggings, or use a downspout extension or shallow ditch to direct the water into the garden).



### Add the Plants

Choose drought-tolerant plants that won't require much watering, but make sure they can withstand wet soils for up to 24 hours. A list of native plants that meet these criteria is provided on the back panel. Also take into account how much sun your garden receives. It is often helpful to draw out a planting plan before you start, and mark planting areas within the garden with string. After planting, weeding may be required until the plants become more established. You may need to periodically prune some of the plants to let others grow. In the winter, leave dead or dormant plants standing and cut back in the spring. Your garden may need a bit more maintenance than a lawn in the beginning, but in the long run it will be easier to care for and provide many benefits.



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