

Rain Garden Plants

Choose plants that have a variety of heights, textures and bloom times. It is important to select plants that can tolerate both wet and dry conditions, and that are suited to the sun/shade exposure of your garden.



Below are some good examples of plants to use in YOUR rain garden. They are all **NATIVE** to NEW YORK STATE and are able to tolerate periodic flooding.

<i>Andropogon gerardii</i>	<i>Lobelia siphilitica</i>
Big Bluestem	Great Blue Lobelia
<i>Aquilegia canadensis</i>	<i>Mertensia virginica</i>
Columbine	Virginia Bluebells
<i>Asclepias incarnate</i>	<i>Monarda didyma</i>
Swamp Milkweed	Beebalm
<i>Aster novae angliae</i>	<i>Onoclea sensibilis</i>
New England Aster	Sensitive Fern
<i>Chelone glabra</i>	<i>Oenothera fruticosa</i>
White Turtlehead	Narrow Sundrops
<i>Chelone oblique</i>	<i>Osmunda cinnamomea</i>
Pink Turtlehead	Cinnamon Fern
<i>Cimicifuga racemosa</i>	<i>Osmunda regalis</i>
Black Snakeroot	Royal Fern
<i>Eupatorium fistulosum</i>	<i>Panicum virgatum</i>
Joe Pye Weed	Switch Grass
<i>Geranium maculatum</i>	<i>Rudbeckia laciniata</i>
Cranesbill	Green-headed Coneflower
<i>Iris versicolor</i>	<i>Solidago rugosa</i>
Blue Flag Iris	Rough Goldenrod
<i>Lobelia cardinalis</i>	<i>Tiarella cordifolia</i>
Cardinal Flower	Fourflower



How MUCH does it cost?

The cost of a rain garden is based on several factors including:

- The area of the rain garden
- The depth of the rain garden
- Whether or not the soils found on site can be used in the garden (if they are less than 10% clay)
- If curb cuts are required to direct the flow from a roadway or parking lot into the garden
- If the site requires an underdrain (a perforated pipe placed under the rain garden in order to receive a desired discharge rate)
- If you are going to design and install the garden yourself or use contractors

If you grow your own plants or borrow plants from neighbors there can be very little or no cost at all. If you do all the work but use purchased prairie plants, a rain garden will cost approximately \$3 to \$5 per square foot. If a landscaper does everything, it will cost approximated \$10 to \$12 per square foot.

It might seem easiest to sow native wildflower seed over the garden, but experience shows that seeding a rain garden has its problems. Protecting the seeds from wind, flooding, weeds, and garden pests is very difficult, and the rain garden will be mostly weeds for the first two years. Growing plugs from seed indoors or dividing a friend's plants is much better. If you grow plugs, start them about four months before moving them to the rain garden. When the roots have filled the pot and the plants are healthy, they may be planted in the rain garden.



Dutchess County Soil and Water
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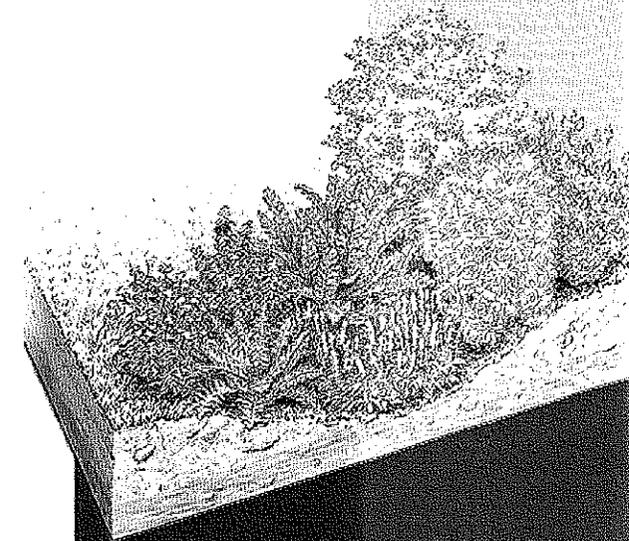
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<http://dutchessswcd.org/>

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Rain Gardens

Gardening with
Water Quality
In Mind



Enhancing *your home* landscape
and improving water quality
in **YOUR** community

What IS a Rain Garden?

A rain garden is a natural or dug shallow depression designed to capture and soak up stormwater runoff from your roof or other impervious areas around your home like driveways, walkways, and even compacted lawn areas. They can be used as a buffer to shoreline areas to capture runoff from the home landscape before it enters a lake, pond, or river. The rain garden is planted with suitable trees, shrubs, flowers, and other plants allowing runoff to soak into the ground and protect water quality.

Rain is natural; stormwater isn't.

Stormwater runoff is considered one of the main sources of water pollution nation-wide. Stormwater runoff can result in:

- Overall reduction in groundwater charge
- Long-term lowering of groundwater tables and loss of stream flow during dry weather
- Increased erosion
- Increased water quality impacts caused by pollutants in stormwater runoff
- Flooding—especially more frequent “flash flooding”

Rain gardens are an inexpensive, simple to implement and environmentally sound solution to urban stormwater runoff.



A rain garden will:



- Filter runoff pollution
- Recharge local groundwater
- Conserve water
- Improve water quality
- Protect rivers and streams
- Remove standing water in your yard
- Reduce mosquito breeding
- Increase beneficial insects and eliminate pest insects
- Reduce potential of home flooding
- Create habitat for birds and butterflies
- Survive drought seasons
- Reduce garden maintenance
- Enhance sidewalk appeal
- Increase garden enjoyment

Knowing the basics to building a rain garden

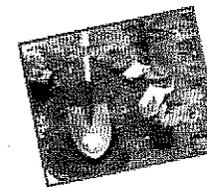
- **Before you dig the garden call the power company!** Or call Dig Safe NY (1-800-962-7962) to locate any underground utility lines!
- **Put the garden at least 10 feet from the house to keep your foundation dry.**
 - A low area can work. Native plants will break up the soil and allow infiltration.
 - Border gardens are usually more attractive than circular gardens in the middle of the yard.
- **Make the garden 150-300 square feet**
 - Aesthetics and maintenance should determine the size of a home garden. Even an undersized garden will do a lot

of work to infiltrate water.

- If the soil is clay, the garden should be large and shallow; If the soil is sandy, any size or depth is okay.
- Rule of thumb for sizing a rain garden: Make the garden 30% of the roof area if the soil is clay, 20% if sand.
- **Make the bottom of the garden flat.**
 - It should look like a saucer, not like a bowl. This allows infiltration everywhere and reduces the likelihood of standing water.
 - If you know someone with a surveyor's level, that'll make the job much easier.
- **Make a low berm around the garden to hold water.**
 - The garden only needs to be about 3-inches deep.
 - Think about where the garden will overflow during the heaviest rainfall. It should empty away from the house, not toward it.
- **On slopes you may need a small terrace wall.**
 - The downslope wall should be half as high as the rise to the top of the slope.
 - On steep slopes, plant natives directly on the hill without digging a depression. The plants will infiltrate runoff. A tall retaining wall can fail *catastrophically* if it gets too wet.
- **Water transport.**
 - If your garden is in a natural low area, just direct your downspouts toward the garden.
 - You can dig small swales that lead from the downspout to the garden. Plant the swales with grass or line with rocks.
 - Buried pipe from the downspout to the garden is another option.



- **Digging the garden.**
 - It's usually not too expensive to hire someone to prepare the site.
 - If you dig by hand, take your time and enjoy the work.
 - Mix in compost if you feel like it. Compost



absorbs water, but it can encourage too-tall plants.

- **Use native plants.** The long roots infiltrate water.
 - 1 plant per square foot.
 - 15 different species, or more. Avoid cultivars (i.e., named varieties).
 - 30-50% sedge (some grasses work, too). They help the plants stand up.
 - Choose plants mostly based on their height and on their light requirements.
- **Maintenance.**
 - Cover with wood chip mulch the first year.
 - Water the first year.
 - Weed the first 2-3 years. Minor weeding thereafter.
 - In winter, leave the dry stems for habitat and seeds. Cut them down in April and compost them.
- **Enjoy!**
 - Your garden will not only infiltrate and clean stormwater, but provide wildlife habitat, too.

