Master Gardeners educate Maryland residents about effective and sustainable horticultural practices that build healthy gardens, landscapes and communities.
RAIN GARDENS

Why do I want a rain garden?
A RAIN GARDEN

• Is a landscaped depression
• Stores rain water for a brief period of time
• Uses native plants to aid in absorption
Howard County Conservancy
Rain garden with perennials only
Rain garden with mature trees and bushes
Why do I want a rain garden?

To share in the responsibility to keep storm water on my property
To reduce flooding and drainage problems such as erosion.
To protect streams from pollutants carried by storm water.
Other reasons to have a rain garden

To increase the amount of water that filters into the ground

To enhance your yard’s beauty

To provide habitat for birds, butterflies and beneficial insects

To receive a reduction in my storm water assessment
How does a rain garden work?

- Rain gardens collect runoff.
- The soil and plants filter the runoff.
- Native plants and microorganisms in the soil remove the pollutants.
Rain garden in Prince George’s County using only 4 plant varieties
Features of the rain garden

• A buffer zone around the garden slows the flow of water.
• A mulch layer is home for microorganisms and keeps soil moist.
• Native plants are used to best absorb water and nutrients.
• A depression stores the runoff.
• A berm is the dam that helps pond the water.
How will the garden be created?

- A hole will be dug to the needed depth.
- Amended soil will be added.
- A berm will be formed on 3 sides of the garden. It will be highest at the downhill side.
- The center will be a flat, level depression.
- The water will be directed into the garden.
Note the berm and downspout
Where should I put the garden?

• Make a drawing of your property.
• Note where the water flows on it.
• Indicate high and low elevations.
• Note all buildings and impervious areas.
• Integrate present landscapes.
Placement guidelines

- Put it outside the drip line of any tree.
- Place it at least 10 feet from the house.
- Place it upslope from an area where water ponds.
- Don’t locate it over a septic system or well.
- Locate it on a fairly flat area (no more than 12% slope).
- Place it in full or partial sun.
Rain comes from lower left, moves through curb cut & slowed by rock.
What size will my garden be?

• The typical size is 200-400 sq. feet.
• Size depends on:
  Depth (usually 6-36 inches deep)
  Soil type
  Area drained (roof and lawn)
What will the garden look like?

• It should be wide enough to spread water evenly over the area.
• It should have a wide variety of native plants.
• It should have an aesthetic appearance.
Building the rain garden

• Call Miss Utility before you dig.
• 410-712-0056
Plant location

The plants are placed in areas dependent on their moisture requirements.

• Deepest are wet-loving.
• Middle require average moisture.
• Upper rim are dry-loving.
Selection of plants

• Working with Master Gardeners or Columbia Association personnel, you will choose a template of native plants for the design.

• Consider height, bloom time, color and texture.

• Incorporate sedges, rushes, and grasses with flowering species.
Why native plants

- They are best adapted to local climate.
- Many are deep rooted and drought resistant. They reduce erosion.
- They are attractive to a diverse group of pollinators.
- They provide habitat, food, protection, and a place to raise young for native wildlife.
You will need to do some maintenance.

• Water 1 inch per week when nature does not do it for you.

• Weed for the first two years or until plants are well established.

• After each growing season leave seedheads and stems to encourage wildlife.
Resources


Rain Gardens Across Maryland;
www.co.worcester.md.us
http://www.co.worcester.md.us/drp/natres/rain_gardens_across_md.pdf
This program was brought to you by volunteers from Howard County Master Gardeners, University of Maryland Extension 410-313-2707

It is the policy of the University of Maryland, Agricultural Experiment Station, and University of Maryland Extension, that no person shall be subjected to discrimination on the grounds of race, color, gender, religion, national origin, sexual orientation, age, marital or parental status, or disability.
NOTES

• Slide 1-Presentation updated January, 2013. Sylvia Huestis

• Slide 2-This presentation is intended for use with groups wanting general information about rain gardens.

• Slide 4-This slide shows a rain garden at the Howard County Conservancy, 10520 Old Frederick Rd (Route 99), Woodstock, MD 21163. The plants include: Virginia sweetspire (Itea virginica), med to wet; Blue flag iris (Iris versicolor), med to wet; Sweetbay (Magnolia virginiana), med to wet.
NOTES

- Slide 6-This is the river birch rain garden at Adams Academy in Annapolis. The plants include: Tussock sedge (Carex stricta) med to wet; Foxglove beardtongue (Penstemon digitalis) dry to med; Swamp milkweed (Asclepias incarnata) med to wet; Switchgrass (Panicum virgatum) dry, med, wet; Blue-eyed grass (Sisyrinchium augustifolium) med; River birch (Betula nigra) med; Common Elderberry (Sambucus nigra) med

- Slide 13-The buffer zone is often made of rock to slow the water down. The berm should have an outflow point made of rock to slow the water in case there is a severe storm.

- Slide 17-This slide is a sample. Note the four arrows coming off the house. They are the downspouts.
NOTES

• Slide 20-It can be 30% smaller than calculated size and still control almost 90% of the annual runoff.

• Slide 23-Use plants that are 1-2 years old. Dig holes twice as wide. Mulch. Plant shrubs 3 feet apart, annuals and perennials 1 foot apart, trees 15 ft. apart.

• Slide 30-Homeowners can arrange for a visit from Master Gardeners (call 410-313-1913) and we will provide advice and information.