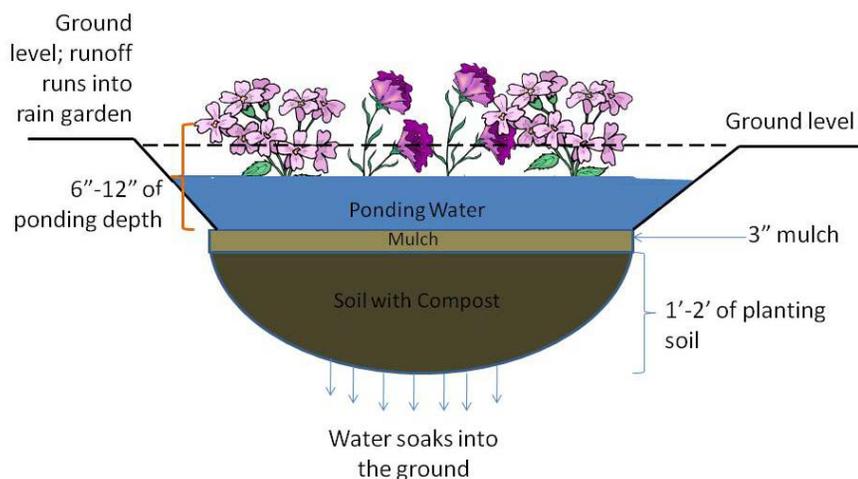


Rain Gardens

Rain gardens are a cost effective option to solve drainage problems and reduce runoff from your yard. Rain gardens allow rain water and snow melt to infiltrate into the ground. The garden's mulch and plants slow down and absorb the runoff flow, and remove pollutants before the water reaches a storm drain. A typical rain garden is designed to collect and filter the first $\frac{1}{2}$ to 1 inch of rain.

The cross section below shows some of the standard measurements for a residential rain garden. The rain garden is made up of sandy soil and mulch, and has a bowl-shape with a ponding area for runoff. Runoff enters from above ground, sometimes through a pipe connected to a downspout. Sometimes a layer of gravel is added below the planting soil to increase the ability of the rain garden to store water.



Rain gardens can treat smaller spaces, like this residential rain garden (top), or large areas like the Fairlington Community Center rain garden (middle). Rain gardens attract wildlife such as the Monarch butterflies pictured (bottom).

Top banner: Rain garden at The Arlington Condominium

To install a rain garden:

1. Select the location and size. The size is based on the amount of water that will drain to the garden, and the location should be at least 10 feet from your home's foundation, in an area with good drainage, and not under any trees.
2. Loosen the soil and dig out a low depression at the rain garden location. Some soil may be removed, or existing soil can be amended with leaf mulch. The surface of the rain garden should be slightly lower than the surrounding area, so there is 6-12 inches of ponding depth in the garden.

3. Test your rain garden by observing it in a rainstorm before planting. Does the water soak into the soil following the storm within 48 hours? If it does, you are ready to plant!
4. Select and plant appropriate native plants for your rain garden.

Rain garden maintenance is similar to that of other gardens. For the first year after the garden is installed, you may need to water the new plants if it doesn't rain for an extended period of time. Once the native plants are established, they should be able to survive dry periods. Adding leaf mulch 1-2 times per year will nourish the plants and minimize the growth of weeds. Rain gardens often thrive without the addition of fertilizers or pesticides because the native plants are well suited for this area. Remove any weeds that do appear in the rain garden by hand pulling.

Learn more about rain gardens at www.fairfaxcounty.gov/nvswcd/raingardenbk.pdf

Arlington's StormwaterWise Landscapes Program
www.arlingtonva.us/stormwaterwise



Wild bergamot attracts butterflies and birds.



Rain gardens are opportunities to add color to your yard throughout the year. Chokeberry (above) and winterberry (below) have bright red berries that add color to your yard in fall and winter and provide food for birds and mammals.



Rain Garden Plants

One of the benefits of a rain garden is that it allows you a lot of flexibility to create a beautiful and wildlife-friendly landscape while also addressing runoff from your property. We strongly encourage the use of native plants in your rain garden. Native plants:

- Are relatively low maintenance.
- Tend to be pest and disease-free relative to conventional landscapes.
- Are adapted to this climate.
- Reduce runoff from your home, which can help alleviate drainage or runoff problems in your yard.
- Attract wildlife such as birds and butterflies.

When purchasing native plants from your nursery, use the botanical name. Carefully research suggested substitutions before making a purchase.

Native trees can be planted at the perimeter of the rain garden. Prior to purchasing and planting new trees, research the tree and learn its ultimate mature size and characteristics.

- *Betula nigra*—River Birch
- *Carpinus carolinia*—American Hornbeam
- *Magnolia virginiana*—Sweetbay Magnolia
- *Nyssa sylvatica*— Black Gum
- *Quercus bicolor*—Swamp White Oak
- *Acer rubrum*—Red Maple
- *Amelanchier laevis*—Allegheny Serviceberry
- *Aesculus pavia*—Red Buckeye



Butterflies are attracted to many rain garden plant options.

Pictured: Common buckeye butterfly



Purple coneflower (middle), and wild bergamot (purple flowers), black-eyed susans, and ox-eye sunflowers (bottom).

Native shrubs provide erosion control and absorb a lot of water. Consider the color of the leaves and flowers when making your selection.

- *Aronia abutilifolia*—Red Chokeberry
- *Aronia melanocarpa*—Black Chokeberry
- *Calycanthus floridus*—Sweetshrub
- *Cornus amomum*—Silky Dogwood
- *Ilex verticillata*—Winterberry
- *Itea virginica*—Virginia Sweetspire
- *Sambucus canadensis*—Elderberry
- *Vaccinium corymbosum*—Highbush Blueberry

Ferns, grasses, and perennials provide seeds and nectar for wildlife throughout the year. They can be planted as borders near the periphery of the garden where there aren't any trees or shrubs.

- *Osmunda regalis*—Royal Fern
- *Osmunda cinnemomea*—Cinnamon Fern
- *Heliopsis helianthoides*—Ox-eye Sunflower
- *Eupatorium fistulosum*—Joe Pye Weed
- *Physostegia virginiana*—Obedient Plant
- *Rudbeckia hirta*—Black-eyed Susan
- *Hibiscus moscheutos*—Marsh Mallow
- *Iris versicolor*—Blue Flag
- *Monarda fistulosa*—Wild Bergamot
- *Monarda didyma*—Beebalm
- *Verbena hastata*—Blue Vervain
- *Vernonia noveboracensis*—Ironweed
- *Echinacea purpurea*—Purple Coneflower

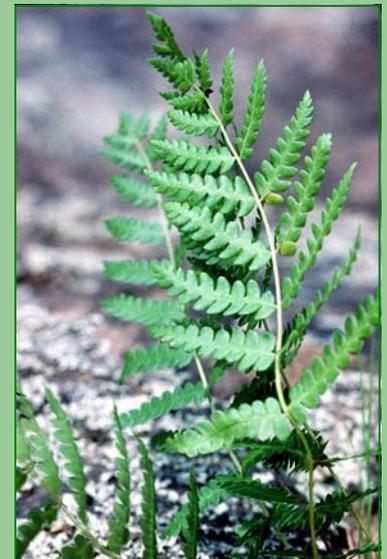
Learn more about recommended rain garden plants for our region at www.fairfaxcounty.gov/nvswcd/raingardenbk.pdf



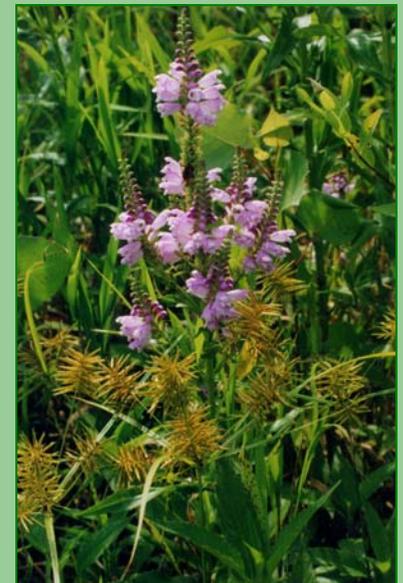
Department of Environmental Services
2100 Clarendon Blvd, Arlington VA 22201
703/228-4488/TTY/TDD 703/228-4611
des@arlingtonva.us



Sensitive Fern. Photo Credit: Robert H. Mohlenbrock. USDA-NRCS PLANTS Database/USDA SCS. 1991.



Cinnamon Fern. Photo Credit: Robert H. Mohlenbrock. USDA-NRCS PLANTS Database/USDA SCS. 1991.



Obedient Plant. Photo Credit: Jennifer Anderson. USDA-NRCS PLANTS Database.