

Rain Gardens (Published 05_11_2024)

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What a beautiful spring we are having here in the Tri-cities! Perfect weather and beautiful spring flowering gardens are a source of inspiration for many of us. If you are interested in adding a feature in your garden that also has a practical aspect and promotes environmental stewardship, you might consider a rain garden, also known as rainscaping.

Rain gardens are essentially giant filters in a depressed area in your landscape that collect storm water runoff from your yard. Because this water runs off of man-made hard surfaces such as roofs, downspouts, and streets, it can carry pollutants. The rainwater and pollutants are then allowed to soak into the designated rain garden area through layers of mulch, soil, and plant roots to finally dissipate naturally. A well-built rain garden will keep your yard free of standing water, your mulch in the flowerbeds and provide a beautiful spot with a practical function.

A rain garden is a good idea if you have an available area at the bottom of a slope that is situated at least 10 feet away from buildings or utility lines. The area chosen for rainscaping needs to be flat and in the path of water runoff. If your yard doesn't meet these criteria, don't despair. There are other options such as terracing or bog gardens.

Once you have established that rainscaping will work for you, it's time to calculate the size and layout of the garden. You will also need to do an infiltration test to determine if the area is fast or slow draining. There is a link at the end of this article to a publication from the University of Tennessee (UT) Agriculture Extension that lists step by step instructions for all necessary tests, calculations and building instructions for your rainscaping project.

When you have figured out the size of the rain garden, it's time to start digging a depression in that area 8 inches deep. This part of the project can be labor intensive, and you can mitigate some of the work by using tillers or appropriately scaled excavation equipment.

When you have removed 8 inches of soil, save any good topsoil on a tarp separate from clay soil that may have been in the depression. You will use the clay soil to build a berm or low wall on the downside slope of the garden and return the topsoil to the garden after setting in your plant choices. Till the bottom of the area again about 3 to 6 inches to help loosen the soil for planting. Add a layer of the removed topsoil or leaf litter before staging your plants. Cut a foot long section out of the berm side and dig the section out about an inch down. Place a flat stone here and this will be your overflow spillway. On the intake side of the rain garden, place some stones to slow down the water intake and keep erosion down. Place your plant selections into the topsoil you filled in earlier but don't plant them too deep. Now cover all exposed soil with 3 inches of hardwood mulch and give it a good watering right away.

When choosing plants for your rain garden consider using local native perennials. They generally have larger root systems that will soak up more amounts of water and will quickly form plant communities that support local wildlife and pollinators. Some UT-recommended varieties are

cinnamon fern, bee balm, switch grass, blue flag iris, rose mallow, joe pye weed and mountain mint.

Use shrubs that can take getting their feet wet before drying out. Some native varieties that will work in a rain garden are buttonbush, redbud, ninebark, elderberry, pawpaw tree, beautyberry, witch hazel, Carolina spicebush, Virginia sweetspire, smooth and oakleaf hydrangeas.

Unfortunately, a local favorite tree, flowering dogwood, will not work as it does not like wet feet. The native shrub gray dogwood will work, or you can try a weeping birch, an interesting specimen tree with branches that sweep to the ground.

Base your selections on how much sun and shade your rain garden will receive and where you'll place the plants. The area can be divided into 3 sections of concentric circles. The higher outside ring will stay the driest, the middle will be sloped and be the transition area, and the center ring will lie lowest and hold moisture the longest.

A well-planned and executed rain garden can be a labor-intensive project but it is also rewarding by reducing flooding, erosion, and downstream pollution. The use of native plants in the rainscaping ensures food and shelter for wildlife for years to come and you have the satisfaction of knowing you have contributed as an environmental steward.

This link will take you to Tennessee Smart Yards where you can download Rain Garden Builders Guide from UT Ag Extension and a planting chart to help with your selections.

<https://tnyards.utk.edu/raingardens/>

How do I ask a question?

If you have a question for the Master Gardeners, submit them to us on our website at www.netmga.net. Click the link at the top of the page, "ASK A MASTER GARDENER" to send in your question. Questions that are not answered in this column will receive a response from a Master Gardener to the contact information you provide.