



Rain Garden Installation

The shape of the rain garden is an important feature that will allow the space to function as intended. Installing a rain garden requires excavation of the site by digging down approximately 10 to 12 inches. The removed soil can be used to create a berm along the edge of the rain garden. The berm is a mound along the outer edges that is up to six inches high and up to 12 inches wide. Dips in the berm can be reinforced with river rock and serve as inlets, channeling water into the rain garden. The depressed shape of the rain garden and berm around the outer edges will help to hold water in the rain garden during a rain event, allowing time for infiltration.

Once the rain garden is shaped, amend the rain garden soil with compost and sand, creating a mix that is approximately 20–30 percent parent soil, 20–30 percent compost, and 50–60 percent sand. The mix will resemble a salt and pepper appearance; the sand will assist with infiltration, and the compost will provide for healthy soils where plants and beneficial microbes will thrive. The rain garden's established plants and healthy soil will do the heavy lifting of trapping and removing various forms of pollution found in stormwater runoff.

When selecting plants for the rain garden, choose from small trees, shrubs, perennials, and grasses. Consider plants native to South Carolina as these species are well adapted to local climates, which can be extremely wet or dry, much like a rain garden. After planting, apply three to four inches of hardwood mulch; avoid pine straw or pine bark mulch as these materials will float. Mulch helps to retain moisture in the rain garden during times of drought, moderates soil temperature, and serves as a weed barrier.

Maintenance

Maintain the rain garden by irrigating during periods of drought and during plant establishment. It is not necessary to fertilize the rain garden. Be sure to maintain plants by regularly pruning and removing weeds. Remove debris such as litter, leaves, and sticks from the rain garden to prevent clogging. If the rain garden fills in and is no longer a depression, remove the upper layer of material and reshape. Add fresh mulch as necessary.

Local Rain Gardeners

Karen Piret and her husband, John, recently installed a small




five- by eight-foot rain garden at a rental home they own in Mount Pleasant. Rain was causing erosion around the back porch, washing away landscaping mulch and preventing grass from growing in spots of the backyard, Karen Piret said. The small rain garden was a simple and inexpensive fix, she said. “There are no more water issues,” said Piret, who graduated from Clemson Extensions’ Master Gardener program. “We are really happy this solved our problems because then we didn’t have to dig a drain and run tubing. That would have been a lot of work.”

George Aaron, also a Master Gardener, installed two rain gardens near his home—one about 10 by 18 feet and a second six by eight feet—to pull water away from his home and also rid his yard of puddles after rainfall. “I live on the marsh, so

we also wanted to keep the runoff out of the marsh,” Aaron said.

Rain Garden Resources

To learn more about rain gardens, find the Clemson Extension “Carolina Rain Garden Initiative” at www.clemson.edu/raingarden. Resources include:

- Virtual Rain Garden, a step-by-step video tutorial on rain garden design and installation
- The Clemson Extension “A Guide to Rain Gardens in South Carolina” manual 2016
- Listing of upcoming rain garden programs and workshops
- Demonstration rain gardens throughout South Carolina
- Links to Carolina Yards plant database and more. 

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