

# Green your landscape with rain gardens



KIM COUNTS MORGANELLO

American beautyberry grows well in shady rain gardens.

## Native plants suited for S.C. rain gardens

**River oats** (*Chasmanthium latifolium*) – Grows well in full sun to part shade; beautiful seed head; pretty fall color

**Milkweed** (*Asclepias spp.*) – Support Monarch butterflies and their larvae; swamp milkweed (*A. incarnata*) has pink flowers, tolerates more shade; butterfly milkweed (*A. tuberosa*) has bright orange flowers, resows from seeds in pods

**Cardinal flower** (*Lobelia cardinalis*) – Bright-red flowers along a tall spike attract bees and hummingbirds; tolerates periods of drought; full sun to partial shade

**American beautyberry** (*Callicarpa americana*) – Easy to grow; bright, magenta berries in fall; chartreuse-yellow fall color

**Buttonbush** (*Cephalanthus occidentalis*) – Shrub with unusual round flowers that attract pollinating insects as well as hummingbirds; salt tolerant

**Swamp azalea** (*Rhododendron viscosum*) – sweetly fragrant blooms; tolerates partial shade

**GARDENERS HELP MAKE THE WORLD greener** not only with what they grow, but with “green” practices—composting, rain barrels, native plants, butterfly gardens and mulching lawn mowers. What if there were one ecofriendly landscape feature that could protect downstream water quality, showcase beautiful native plants and support pollinating insects, all while using virtually no fertilizer, pesticides or irrigation?

While it may sound too good to be true, rain gardens deliver all these ecological services. They’re also a “green” solution for storm-water-related issues like soil erosion and occasional flooding.

Unfortunately, rain gardens have an image problem. The name conjures visions of watery bogs and mosquito-breeding ponds, even though mosquito eggs need standing water for 7-10 days to hatch, while rain gardens are typically designed to drain within 24 hours.

Rain gardens look like gardens planted in a shallow depression. Their



This mature rain garden contains a mixture of grasses and colorful flowers, such as cone flower.

shape, their location in the landscape and the way the soil is amended make them a natural storm drain. Instead of water sheeting across the yard, it’s directed to the rain garden, where it slowly infiltrates the soil.

As storm water moves across driveways, sidewalks and roofs in our neighborhoods, it picks up pollutants, such as fertilizer, pesticides, pet waste and motor oil. A rain garden acts like a sink with a slow-moving drain, filtering the water downward through layers of soil and rock, where pollutants are naturally removed by soil organisms before re-entering underground aquifers and nearby waterways.

Another misconception about rain gardens is that they are filled with weedy, unattractive plants. But rain gardens can be planted with small trees, shrubs and flowering plants, even attracting butterflies and hummingbirds. Most gardeners opt for



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Volunteers at Camp St. Christopher on Seabrook Island.

## Demonstration rain gardens in South Carolina

Demonstration rain gardens are sites in public spaces where gardeners can learn more about what these gardens look like and how they work, as well as get ideas for plants and designs to use in their own landscapes.



easy-to-grow native plants, because they tolerate dry conditions between influxes of storm water. You can plant any combination of native or well-adapted non-native plants in your rain garden, where they'll grow quickly from the nutrient-rich water flowing to their roots with every rain shower.

Installing a rain garden is easy, but before you break out the shovel, learn the basics at Clemson Extension's Rain Garden Initiative ([clemson.edu/raingarden](http://clemson.edu/raingarden)), a one-stop resource where gardeners can visit a virtual rain garden, find nearby demonstration gardens to visit and sign up for hands-on workshops.

Make sure the soil in your yard drains fast enough for a rain garden. Perform a simple percolation, or "perc," test by digging a 6-inch-by-6-inch hole, filling it with water and

observing how quickly it drains. If no water remains after 24 hours, your soil is perfect for a rain garden.

Next, determine where to place your rain garden and how big it should be to capture storm water. Start by following the path of rain-water as it moves across your yard. Locate your garden between where that path starts and where it ends (e.g., a storm drain, ditch or road). Downspouts and overflow from rain barrels can also be directed to this spot. Place your garden at least 10 feet from the foundation of your home and at least 25 feet from a septic-system drain field. To calculate the size, you'll need to consider your available space, soil type and the size of hard surfaces that will contribute runoff to the garden (such as a rooftop, sidewalks or driveway). Step-by-step

instructions for this are available on the Rain Garden Initiative website.

Once you find the right spot, dig down 10–12 inches to create a slight depression, or "sink." Use the soil you excavate from the garden to build a small berm around it, with a gap in the berm to allow water to enter. Amend the remaining soil with about 20 to 30 percent compost to support your plants and about 50 to 60 percent sand to improve drainage.

When the rain garden is shaped and the soil prepared, choose a variety of native plants to fill it, and mulch with a hardwood mulch that won't float when it's inundated with water. ☺

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