

Tips for Planning and Installing a Rain Garden



Before beginning your project, consider the following:

- Nothing beats firsthand experience, which can be acquired by participating in a hands-on rain garden workshop, or by volunteering with a community or school rain garden installation project. Instructional videos are also helpful, and rain garden and rain barrel installation videos are featured on the Video Gallery page at www.RainScaping.org.
- When designing your rain garden, consider keeping it simple. While rain gardens can have several species of plants, they can also have bold impact with just three or four plant species. If you decide to use several herbaceous flowering perennials and grasses, moist meadows (unlike formal planting arrangements) allow more freedom with plant selection and maintenance (less concern about plants migrating to where they weren't originally planted).
- When creating the rain garden design, place trees first, shrubs second, then place perennials. Be thoughtful with tree and shrub placement. Place them in appropriate growing conditions, and allow enough room for them to grow. You can easily thin perennials later, however, large trees and shrubs are not as easy to move.
- Go native! Native plant benefits include:
 - Best adapted to local conditions, for example, no need to use chemical fertilizers.
 - Water conservation, that is, once plants are established in the right place, no need for supplemental watering.
 - Reduced maintenance over the long run. While native plants are not maintenance-free, if they are placed in the landscape based on their preferred growing conditions, they require less care than non-native species.
 - Won't harm natural areas, e.g., won't become invasive.
 - High habitat value provides food, shelter, and nesting areas for wildlife.
 - Great variety of species for all conditions and creates a "sense of place."
- Take time to become familiar with the native plants you plan to install in order to select and place plants in their preferred growing conditions for light, moisture, and soil requirements.
- Be sure to use the botanical or scientific Latin names (and not just common names) when purchasing native plants to make sure you obtain what you intend to purchase.
- Plan ahead and pre-order plants, especially if you have a large project or require certain species.
- Regarding maintenance, consideration should be given to using herbaceous perennials versus woodies, that is, trees and shrubs. Rain gardens with woodies are often easier to maintain. And woodies soak up and filter a lot of water. By definition, a garden is a man-made landscape that requires maintenance.
- People sometimes needlessly assume soil needs to be amended (with sand, topsoil, and compost) and create unnecessary work for themselves. After selecting a site for your rain garden, conduct a percolation test to see how permeable the soil is. It may or may not need to be amended. Also, test the soil's pH level.

- Be sure to allow enough time for site preparation, which will vary depending on whether it's done by hand, and whether you smother vegetation or use glyphosate to kill turf grass and weeds. Glyphosate may need to be applied more than once with two to three weeks in between applications to allow for re-growth; or you'll need to smother vegetation for a full growing season.
- Tilling the soil can stir up and bring to life a lot of dormant weed seeds, and is not recommended unless necessary, that is, to amend compacted soil.
- Excess soil can be used for a berm on the low side of the rain garden and/or it can be mounded in an area for a dry planting arrangement (or xeriscape). Mounds tend to be drier by design; and swales tend to be more moist by design. Think of it as yin and yang gardening and creating contours in the landscape.
- Stone berms often work well when berms need to be placed within the rain garden to slow down stormwater runoff, for example, in a long and narrow sloped rain garden. Biologs or coir logs also work well, however, they will biodegrade after a few years and may need to be replaced.
- Before planting, test the depression you've created by adding water from a hose to check that it's a fairly level saucer-shaped depression.
- Plan for an overflow area in case the rain garden over-fills during heavy downpours. Use stone to create a stable overflow area.
- Many hands make light work! Invite friends and family to help with site preparation and planting. Food and drinks always helps!
- Plant, mulch, water. Install plants correctly. The planting hole should generally be twice as wide and no deeper than the root ball. Loosen the root ball with your hand or a trowel, and place the plant in the soil at the same level it was growing in the pot. Firmly press or tamp the ground around the plant with your hands or feet to remove air pockets. If you are unsure about proper planting techniques, ask an expert. Once the plants are installed, add a top dressing of approximately 2 inches of pine bark or hardwood mulch. Remember to keep mulch away from the base of shrubs and trees and avoid the use of too much mulch. Water well right after planting; and give plants additional water until they are established.
- If you are installing a community rain garden, engage the community as much as possible in planning and planting the rain garden. Notably, volunteers tend to enjoy planting; and it's a great learning opportunity for youngsters and adults alike. Also, if community members are engaged, they will have more ownership of the project and be encouraged to assist with maintenance. If possible, add an educational rain garden sign next to the garden. Visit the signage page at www.RainScaping.org for downloadable rain garden and other conservation landscaping signs.
- A simple rain garden—typically 3 to 6 inches deep—is not difficult to install. Home rain gardens should not be confused with more extensive bioretention installations. A rain garden is a type of bioretention installation, however, "bioretention" generally refers to installations that are designed and engineered to be more complex than home rain gardens in order to mitigate larger amounts of runoff. They are deeper and often have underdrains.
- Installing a rain garden incorporates both science and art. Your rain garden may or may not work perfectly right after installation is completed. Fret not, it's often part of the process to make adjustments over time as needed, based on your site conditions.

"Don't stress too much over it. The rain garden does not have to be perfect to do its job, and it will change over time—that's one of the things that makes it so rewarding: it's a living, dynamic system. Dig a hole, relax, and let nature take its course. Observe and have fun!" -Spencer Rowe, Wetland Scientist

Visit www.RainScaping.org for information on [rain gardens](#), [rain barrels](#), [permeable surfaces](#), and [native plants](#).