Creating a Rain Garden: Two Designs and Plant List

🌣 almanac.com/rain-garden-design-and-plants



Body

With a rain garden, use—don't lose—the torrent of rainwater that falls on your paved areas and roof. As a bonus, many plants suited to a rain garden are natives, which attract local pollinators. Learn more about rain gardens—plus, find two rain garden plant lists and designs featuring plants for both sun and shade.

These designs come from The Old Farmer's Almanac Garden Guide. Get the latest edition here!

What Is a Rain Garden?

A **rain garden** is a shallow, bowl-shape area that collects water runoff from impervious surfaces such as downspouts, sump pumps, paved areas, roofs, driveways, walkways, and lawns. Often, the heavy rain from a thunderstorm comes down so quickly that the water doesn't have time to soak into the ground, which means the water isn't even available in the soil for thirsty plants to take up. A rain garden creates a "trap" for that water!

Rain gardens are also good for the environment. Like a native forest, rain gardens use heavy rain to recharge the aquifer, support wildlife habitat, and also filter out toxic materials before they can pollute streams. Whether you deal with drought, the rising cost of municipal water, or simply want to make the best use of our water, Mother Nature is providing this precipitation for free.

The plants for rain gardens are some of our favorites, especially the natives that attract beneficial and pollinating insects, butterflies, and birds.

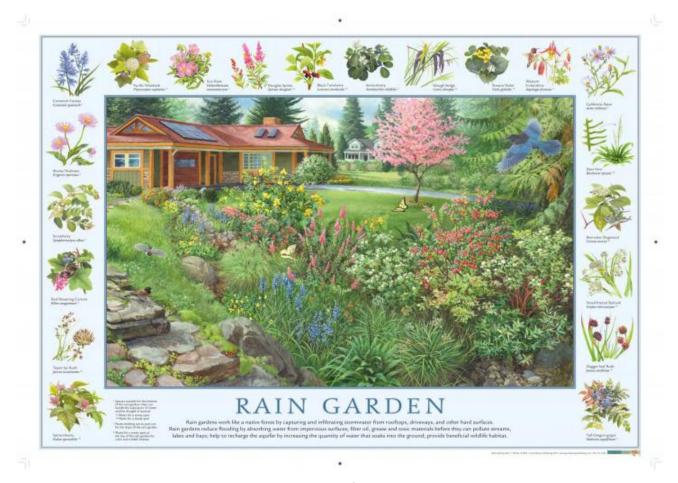


Image Credit: WSU

Choosing Plants for a Rain Garden

Plants of all types and sizes help to manage storm water, so it's a good idea to plan for a range of species!

Trees and large shrubs deflect rainfall, slowing it down before it reaches the ground, which allows it to better soak into the soil and not run off immediately.



Tall grasses act as filters, sucking up water, trapping pollutants, and preventing silt from being carried off into ponds or rivers.



Shorter, well-established, deeply-rooted plants hold soil and direct water into the ground.



See our full lists of rain garden plants for sun and shade below.

5 Benefits of a Rain Garden

What do you gain when you catch the rain? Shower power! An inch of rain on a 100-square-foot surface results in 60 gallons of water!

Here are just five of the many benefits of creating a fully-functional rain garden:

- 1. Reduced risk of water in the basement
- 2. Recharged groundwater supplies (a rain garden soaks up at least 30% more water than a lawn)
- 3. A wildlife habitat (birds, butterflies, and beneficial insects will be drawn to the garden)
- 4. Lower water bills
- 5. A cleaner environment

Consider the Pollution

Storm water runoff, from flooding or even heavy rainfall, contains 70% of the pollution that flows into our lakes, ponds, rivers, and streams. Polluting sources include ...

- roads, parking lots, paved driveways, and sealed surfaces (including roofs) that contain oil and other contaminants
- pesticides and lawn treatments that contain high concentrations of nitrogen and phosphorus
- pet and other animal poop

Creating a Rain Garden

Creating a rain garden can be as simple as directing the flow of water from your roof to a spot that you've already planted with water-loving plants—or you can start from scratch.

The size of the garden depends on the size of the impermeable area draining into it. Aim to make the bed 20% to 30% the size of the roof or driveway from which the water is being funneled. For example, a 300 sq. ft. garden to hold the runoff from a 1000 sq. ft. roof. The deeper the garden and the more freely draining the soil, the greater the volume of water a given area will be able to accommodate.

- Create a basin by digging out dirt from a dry area at least 10 feet away from the foundation of yourhouse and downhill from the water source. Avoid directing runoff to a naturally low spot that is already saturated with water or to your septic system.
- A rain garden is NOT for areas that already get standing water; it's a temporary water holding basin. Look for a low spot that is fairly flat with soil that allows any standing water to drain within a day or two after a storm is best. To check if the soil drains fast enough, dig a test hole about 10 inches deep and fill it with water. If the water drains away within 48 hours, you're good to go.
- Replace heavy soil with one-half sand, one-quarter compost, and one-quarter topsoil—a fast-draining mixture.
- Pile stones and extra soil on the downhill side of the garden to act as a berm and create a bowl where water can pool to a depth of about 6 inches.
- If water does not naturally flow to your rain garden, dig a shallow (3- to 4-inch-deep) trench from your downspout to the garden, line it with landscape fabric, and cover with stones to create a streambed effect.

Planting a Rain Garden

We've provided some sample plant lists below. Contrary to common belief, a rain garden is not meant to be a place for wetland plants.

Most of the plants in the center are woody and herbaceous plants that can tolerate temporarily saturated soil.

- Plant the center of the garden with perennials and native plants that tolerate wet feet.
- Around these, place plants that tolerate occasional standing water.
- At the outer edges, set plants that prefer drier soil.

Some of our favorite plants are natives, including **purple coneflower** (*Echinacea purpurea*), **summersweet** (*Clethra alnifolia* 'Hummingbird'), and **lady ferns** (*Athyrium felix-femina*) for the shady areas.

Mulch with compost or shredded hardwood (bark chips may float away in a heavy rain). If the water that flows into the garden washes out the mulch, break up the flow entering the basin with a well-placed rock or two.

A rain garden is a beautiful addition to your landscape, and a great way to support more biodiversity in an environmentally sustainable way.

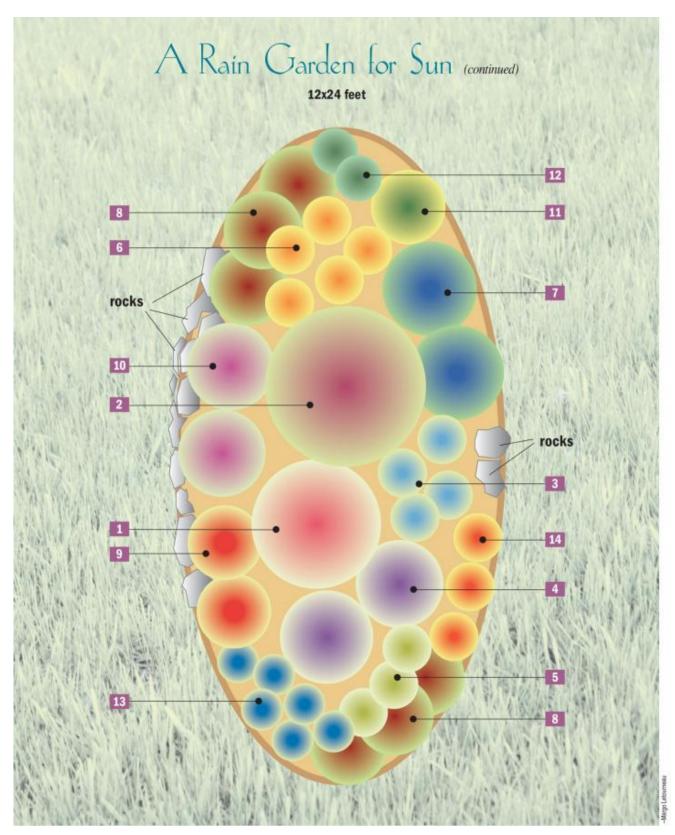
Rain Garden Plant Lists and Designs

Both of the below rain garden designs are meant for a 12 x 24-foot space, but are also adaptable to smaller areas.

Note: In the below plant lists, some plants are linked to our Growing Guides with pictures. Others can be easily found via Google.

Rain Garden for Sun

Plants set into a rain garden that gets full sun must be able to endure both occasional flooding and dry spells.



Sun Rain Garden Plant List

In the center, plant #1 to #6. For the drier, outer edge, plant #7 to #14.

- 1. **Summersweet** (*Clethra alnifolia* 'Ruby Spice'), a woody shrub that bears fragrant, pink, bottlebrush flowers in the summer. 5 to 6 feet tall; Zones 4 to 9. One plant.
- 2. **Red osier dogwood (***Cornus sericea***)**, which has white blossoms in spring and reddish-purple leaves in the fall—although its most attractive features are its red stems, which lend winter interest to the landscape. 6 to 10 feet tall; Zones 2 to 8. One plant.
- 3. <u>Blue flag iris</u> (*Iris versicolor*), which brightens the rain garden with lavender-blue flowers in the spring. It looks very natural in a wet setting. Avoid the yellow flag iris (Iris pseudacorus), which is an invasive species that will take over. 2 to 4 feet tall; Zones 3 to 9. Four plants.

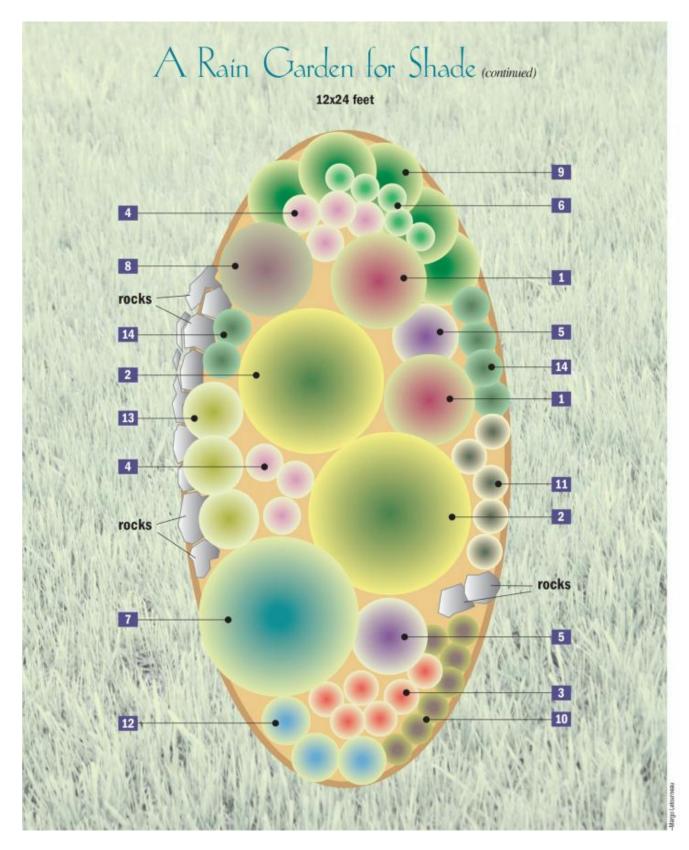


- 4. **Joe Pye weed (***Eupatorium maculatum***)**, which has purple flowers in late summer that butterflies can't resist. 3 to 5 feet tall; Zones 3 to 7. Two plants.
- 5. <u>Astilbes</u> (*Astilbe*), which are long-lived, moisture-loving perennials that will thrive in the sunny rain garden if planted where they get some afternoon shade from taller shrubs nearby. They bloom in summer and are available in pinks, reds, purple, and white. 1 to 3 feet tall; Zones 3 to 8. Three plants.
- 6. <u>Daylilies</u> (*Hemerocallis*), which may not be natives but can keep your rain garden in bloom over a long season if you plant early, midseason, and late varieties. Assorted heights and a rainbow of colors are available. Zones 4 to 11. Five plants.
- 7. **Blueberries** (*Vaccinium*), whether highbush (up to 5 feet tall) or lowbush (up to 2 feet tall) varieties, which add both a flowering shrub and an edible fruit to your landscape. Zones 3 to 8. Two plants.
- 8. <u>American cranberry</u> (*Vaccinium macrocarpon*), which is a pretty, ground-covering shrub that also bears edible fruit. About 6 inches tall; Zones 2 to 7. Six plants.
- 9. <u>Bee balm</u> (*Monarda*), which in summer features brilliant-red, pink, or white flowers that attract hummingbirds and butterflies. Look for a mildew-resistant variety. 3 feet tall and wide; Zones 3 to 9. Two plants.
- 10. <u>New England aster</u> (*Aster novae-angliae*), which will carry the show into fall with its bright, violet-purple flowers. It gets quite tall but can be cut back to half its height in June to create a shorter and bushier plant, if desired. Up to 6 feet tall; Zones 4 to 8. Two plants.
- 11. **Sneezeweed** (*Helenium autumnale*), which bears sunny yellow flowers in late summer. It is highly adaptable to wet or dry soil. 3 to 5 feet tall; Zones 4 to 8. One plant.
- 12. **Meadow anemone** (*Anemone canadensis*), which is deer-resistant and salt-tolerant. This tough little perennial bears pure-white blossoms in late spring. 2 feet tall; Zones 2 to 9. Two plants.
- 13. **Blue cardinal flower** (*Lobelia siphilitica*), which has spikes of true blue flowers in late summer. 2 to 4 feet tall; Zones 5 to 9. Six plants.

14. **Butterfly weed** (*Asclepias tuberosa*), which features orange blossoms that provide excellent nectar for butterflies. In addition, the plants are an important larval food for monarch butterflies. 2 to 3 feet tall; Zones 4 to 9. Three plants

Rain Garden for Shade

Placing a rain garden in full shade is not recommended; partial shade is best.



Shade Rain Garden Plant List



In the center, plant #1 to #6. For the drier, outer edge, plant #7 to #14.

- 1. **Rhododendrons**, especially cold-hardy native rhodora (**Rhododendron canadense**), which like damp soil and partial sun. They will bloom profusely in the spring. 2 to 4 feet tall and wide; Zones 3 to 6. **Two plants**.
- 2. **Winterberry** (*Ilex verticillata*), which needs one male plant to act as a pollinator, along with the females, if you want a crop of colorful red berries. For this garden size, choose from dwarf cultivars. 3 to 5 feet tall; Zones 3 to 9. Two plants.
- 3. **Cardinal flower** (*Lobelia cardinalis*), which grows well in sun or partial shade. It has rich red flowers in late summer. 2 to 3 feet tall; Zones 3 to 9. Six plants.
- 4. **Pink turtlehead** (*Chelone lyonii*), which is a trouble-free perennial that doesn't mind wet feet. It blooms in the late summer to early fall. 2 to 4 feet tall; Zones 3 to 8. Seven plants.
- 5. **Purple meadow rue** (*Thalictrum dasycarpum*), which loves a damp spot in partial shade. It can get quite tall and has clouds of purple-tinged white blossoms in summer. 3 to 6 feet tall; Zones 5 to 9. Two plants.
- 6. <u>Wild columbines</u> (*Aquilegia canadensis*), which are an important source of nectar for hummingbirds and butterflies and thus will draw them to your rain garden. They produce their bicolor red and yellow blossoms in late spring. 1 to 3 feet tall; Zones 3 to 8. Five plants.
- 7. **Arrowwood (Viburnum dentatum)**, which is a nicely rounded shrub with glossy leaves and dark blue berries. It has creamywhite blossoms in late spring and colorful fall foliage. 6 to 10 feet tall and wide; Zones 3 to 8. One plant.
- 8. **Dwarf fothergilla** (*Fothergilla gardenii*), which has fragrant white flowers that appear before the plant leafs out in the spring. The foliage becomes a neat, crimson mound in the fall. 3 feet tall and wide; Zones 5 to 9. One plant.

- 9. **Common bearberry** (*Arctostaphylos uva-ursi*), which is a rugged evergreen ground cover in the heath family. It has white flowers in spring and red berries in late summer. 3 to 8 inches tall, spreading to between 2 and 4 feet wide; Zones 2 to 6. Five plants.
- 10. **Coral bells (***Heuchera sanguinea***)**, which are colorful foliage plants that send up tall spikes of tiny red, pink, or white flowers in late spring. 6 to 12 inches high and wide; Zones 3 to 8. Seven plants.
- 11. **Foam flower** (*Tiarella cordifolia*), which is a deer-resistant plant with white flowers in spring. (Heuchera and Tiarella have been crossed to create a hybrid genus called Heucherella which combines the gorgeous foliage of heucheras with the showy flowers of tiarellas—look for this one!) 5 to 12 inches tall; Zones 3 to 7. Five plants.
- 12. **Jacob's ladder** (*Polemonium reptans*), which is a low-growing, spreading perennial with clusters of light-blue flowers. 8 to 12 inches tall; Zones 3 to 8. Three plants.
- 13. **Zigzag goldenrod** (**Solidago flexicaulis**), which bears golden yellow flowers in the fall. 2 feet tall and wide; Zones 3 to 8. Three plants.
- 14. **Spotted geranium** (**Geranium maculatum**), which has dainty, pinkish-purple flowers that bloom above the mound of lobed leaves in the spring and often again in the fall. 1 to 2 feet tall; Zones 4 to 8. Six plants.

Click here to download the rain garden plans (PDFs) to your computer.

Learn More

- Want to catch more rain?Learn how to incorporate a rain barrel into your gardening.
- Here are 10 great tips for an eco-friendly garden.