



NEBRASKA STATEWIDE

Arboretum

PLANTNEBRASKA.ORG



Rain Gardens 101

Why Make a Rain Garden?

A rain garden catches and holds water, giving it time to absorb into the ground, rather than run into storm drains. A rain garden also uses plants to filter out sediment, fertilizers, oil, trash and other pollutants that runoff water picks up as it travels across roofs, driveways, sidewalks and lawns.

Here are some tips to help you create a rain garden in your home landscape.

1

Decide Where to Place Your Rain Garden

Your rain garden should be placed where it can intercept water as it runs off or onto your property. Watch how water moves through your yard to determine the best spot for a rain garden.

- Don't create a rain garden in an area that's already boggy or wet. Instead, plan to intercept the water before it reaches this problem spot.
- Make sure your rain garden is at least 10 feet from your house's foundation.
- Consider where you want to direct overflow: away from buildings and already-wet areas and toward open space.
- Measure the area's infiltration rate to determine where you should put your rain garden based on how slowly or quickly standing water seeps into the soil. Measure the infiltration rate by conducting a percolation test on the area:
 - Dig a 12-inch deep, straight-sided hole.
 - Fill the hole with water and allow it to drain completely. If it takes longer than 24 hours for the hole to completely drain, choose a different location for your rain garden.
 - Fill the hole with water a second time and place a ruler or yardstick into the hole. Take note of the starting water level.
 - Check the water level in one hour to determine the inches of infiltration per hour. For example, if the water has gone down 1 inch, your infiltration rate is one inch per hour.

2

Calculate the Depth and Size of your Rain Garden

A 100-300 square-foot rain garden is typical for a yard, but your rain garden can also be smaller.

Visit plantnebraska.org/rain-gardens for detailed instructions on how to calculate the depth and size of your rain garden.



Rain Gardens 101



3

Dig Your Rain Garden

- Dig 6-10 inches deep as determined by the depth calculation, leaving a flat bottom with sloped sides.
- If the soil is heavy clay with a very slow percolation, consider digging it 2-3 inches deeper and then digging in about 3 inches of amended soil (good topsoil mixed with compost) to a depth of 6 inches in the bottom of the hole.
- To increase the filtration rate in heavy clay soils, you can also dig 2-3 “potholes” in the bottom of the rain garden that are 8-12 inches wide and 12 inches deep and filled with amended soil.

4

Plant Your Rain Garden

The plants in the bottom of the rain garden need to be able to sit in standing water for 12-24 hours. They also need to be able to handle dry conditions between rainfalls.

Include a variety of roots (fibrous, deep taproots, rhizomes, etc.) to increase water infiltration.

Try These Plants in Your Rain Garden

- Swamp milkweed (*Asclepias incarnata*)
- Joe-pye plant (*Eutrochium* maculatum*)
- Helen’s flower (*Helenium autumnale*)
- False sunflower (*Heliopsis helianthoides*)
- False blue indigo (*Baptisia minor*)
- Virginia mountain mint (*Pycnanthemum virginatum*)
- Sedges like fox sedge (*Carex volpinoidea*) or palm sedge (*Carex muskingumensis*)

*formerly *Eupatorium*

5

Care for Your Rain Garden

As with any other garden, you will need to maintain and care for your rain garden to ensure that it continues to function well.

- Annually cut back plants in the spring.
- Annually remove accumulated leaf debris.
- Monitor to know when sediment needs to be removed.
- Weed regularly throughout the year.



Swamp milkweed
(*Asclepias incarnata*)



False blue indigo
(*Baptisia minor*)



False sunflower
(*Heliopsis helianthoides*)