



Rain Gardens

August 2009 “In the Garden” from the Nebraska Statewide Arboretum
Podcast and web video at arboretum.unl.edu

Water conservation can be as simple as directing downspouts to planted areas, placing small areas of grasses or other deep-rooted plants on slopes or areas off downspouts, decreasing paved areas, using permeable pavers and installing rain barrels. A growing awareness of the pollutants in rainwater, however, has led to the use of rain gardens—depressions planted with native or adapted plants that help absorb excess water and filter out excess nutrients before entering the groundwater system. When placed to receive runoff from roofs, downspouts and paved areas, they can capture and filter as much as 90 percent of common pollutants.

Plants for these areas need to tolerate extremes since there will be periods of standing water when the soil is saturated and also very dry periods. They are meant to drain within 24-48 hours, a rate that will depend on the amount of runoff the area receives, quality of the soil, plant absorption and the depth of the depression. Recommended depth is about 8” since deeper areas are less likely to drain well, difficult to plant effectively and soil and mulch are likely to erode. Gravel or rocks can be placed where water enters and exits to help slow the water flow, spread it out and prevent erosion.

Rain gardens are primarily planted in full sun for rapid absorption. Some of the plants recommended for rain garden areas in full sun are deep-rooted native and ornamental grasses, black-eyed Susan, goldenrod, iris, butterfly milkweed and gayfeather.

They can also be planted in part shade with plants like: astilbe, lady’s mantle, iris, Korean reedgrass, sedges, aster, coneflower, turtlehead, Joe Pye-plant, germander, hibiscus and houttuynia.

In Lincoln

The video that accompanies this column shows several rain gardens installed by the city of Lincoln through a grant project of the Nebraska Environmental Trust, a beneficiary of the Nebraska Lottery. To be placed on a waiting list for these funds, contact Amanda Meder at 402/441-7075. Meder will talk about rain gardens for Southeast Community College from 8-noon October 17 at Warren United Methodist Church, 1205 N. 45th. She says the gardens are quick to catch on once one is installed—a recent installation near Woods Park resulted in three additional rain gardens on the same street.

Meder is passionate about water conservation and sees rain gardens as one way homeowners can help make a difference. “Individually it’s hard to make a big difference, but collectively we can have a real impact.” The gardens are valuable in many other ways as well, she said, “beautifying the neighborhood, bringing neighbors together, attracting birds and butterflies and sparking the interest of both adults and kids.”

Resources

Fast facts (more at arboretum.unl.edu and water.unl.edu):

- Stormwater runoff is the primary water quality problem in America
- In cities, about 50 percent of rain water goes into storm sewers
- Runoff from a 1” rain may exceed 5,000 gallons—even from a 1,500 square foot house on a small lot
- More than 50 percent of outdoor water usage goes into watering lawns and gardens
- On a dry summer day in Lincoln, lawns alone may absorb more than 50 million gallons of water per day from the Platte River

There are a wide range of regional resources on water conservation and rain gardens at lincoln.ne.gov (keyword: rain gardens) and water.unl.edu. Nebraska Statewide Arboretum has a “Water and the Landscape” publication (arboretum.unl.edu or 402/472-2971) and there is a series of stormwater management NebGuides from the University of Nebraska: *Rain Garden Design for Homeowners*, *Installing Rain Gardens in Your Yard* and *Plant Selection for Rain Gardens in Nebraska*.