Rain Gardens

A Best Management Practice to:
- Reduce Stormwater Runoff
- Improve Water Quality
- Enhance Lexington’s Landscape

Rain Gardens

Bring on the Butterflies!

Rain gardens not only look beautiful, but create a habitat for local wildlife, such as butterflies, insects, and birds.

Rain Garden Myths

- A rain garden is not a pond or wetland, as it only holds water for 1 – 2 days after a rainfall event
- A rain garden is not a breeding ground for mosquitoes, which need 7 – 12 days in standing water to reproduce.
- A rain garden is not expensive to construct. It only costs $8 – $12 per square foot and is an excellent method for capturing and filtering stormwater runoff from your yard.

Rain Garden Design Templates:
- www.lowimpactdevelopment.org/raingarden_design/templates.htm

Mill Creek Watershed Council:
- www.millcreekwatershed.org/howto.pdf
  Includes details on rain garden dimensional calculations

A rain garden has many benefits, including that it:
- Significantly filters and reduces runoff before it enters local waterways and groundwater
- Decreases drainage problems and localized flooding
- Conserves water and reduces pollution
- Attracts birds, bees, and butterflies
- Recharges the groundwater supply

It is a Best Management Practice (BMP) to improve Lexington’s water quality.

Additional sources of information can be found on the web ...

- Mt. Airy Rain Catchers: www.mtairyraincatchers.org
- Rain Gardens of West Michigan: www.raingardens.org
  www.raingardens.org/docs/bioretention_tools.pdf
- 10,000 Rain Gardens: www.rainkc.com
- Wisconsin Department of Natural Resources:
  www.dnr.state.wi.us/org/water/wm/npss/ing/links.htm
- Rain Garden Network: www.raingardenetwork.com
- U.S. EPA Homeowner’s GreeScapes:
  www.epa.gov/epaoswer/non-hw/green/owners.htm
- Shooting Star Nursery:
  http://shootingstaruniversity.com
- Rain Garden Design Templates:
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Rain Barrels

For more water conservation opportunities, research the use of rain barrels in your yard.

Refer to:
- http://rainbarrelguide.com
- www.kentuckypride.com

The Lexington-Fayette Urban County Government
Department of Environmental Quality

LexCall 3•1•1
(or 859-425-2255)

www.lexingtonky.gov/environmental/

Follow the links to “Stormwater”

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10,000 Rain Gardens:
www.rainkc.com
Wisconsin Department of Natural Resources:
www.dnr.state.wi.us/org/water/wm/npss/ing/links.htm
Rain Garden Network:
www.raingardenetwork.com
U.S. EPA Homeowner’s GreeScapes:
www.epa.gov/epaoswer/non-hw/green/owners.htm

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Rain Gardens: A mosquito trap!

Rain gardens only contain standing water for 1 – 2 days, whereas the mosquito reproduction cycle takes 7 – 12 days to complete. As water filters into the ground and the rain garden dries up, any mosquito eggs are destroyed before they ever have a chance to mature into larvae. Also, rain gardens attract dragonflies, which eat mosquitoes!

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What is a Rain Garden?

- A garden planted as a shallow depression that captures and treats rainwater runoff.
- A natural process that improves water quality by filtering pollutants and reducing the amount of stormwater runoff.
- A visual improvement for Lexington, creating attractive landscapes with a variety of native plants.

The journey of a ranndrop

During a rain event, water is collected by impervious surfaces such as rooftops, patios, driveways, and parking lots. This turns into stormwater runoff, which gathers pollutants and flows untreated into storm sewers and open ditches, eventually entering Lexington’s creeks, streams, and reservoirs.

A rain garden captures this runoff before it enters these systems. The water easily infiltrates into the soil because of the deep roots of the native plants, allowing for pollutant filtration and groundwater recharge.

Finding the Natural Fit

To find the most logical place for your rain garden, keep these pointers in mind:

- Note the existing drainage pattern of your yard.
- Find an area downslope from downspouts or impervious surfaces, such as driveways, where you can dig a shallow depression.
- Avoid locations directly under tree cover or those prone to standing water.
- Sunny or partly sunny areas are best for rain gardens, but shaded locations are also possible.
- Make sure your rain garden is at least 10 feet from your house to prevent water from seeping into the foundation.
- Rain gardens should not be placed over or near the drain field of a septic system.
- Consider where the water will enter the garden and where it might overflow. Prevent excess runoff from going to a neighbor’s property!

Sizing for Success

Rain gardens are designed to capture water from a 1” rainfall event and allow it to soak into the ground in 1-2 days. Not all soil types have equal drainage capabilities, but you can still make them work for rain gardens. Rainwater collected in a rain garden should drain 1-2 days after the rain stops to avoid the possibility of creating a habitat for mosquitoes.

Assuming average conditions for Lexington’s soil type and amount of impervious area, a rain garden should be dug approximately 8” deep and have dimensions of 8’ x 10’ to collect water captured from a single downspout. To capture runoff generated from an entire yard, rain gardens should be dug 8’ deep, with one or more rain gardens totaling dimensions of 12’ x 26’.

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Bluegrass pride

Native plant species are recommended for rain gardens for their extensive root systems and tolerance to local weather conditions. Their deep root structures loosen the soil and help move water infiltrate the ground. These native plants are adapted to Lexington’s local climate, which make them more suited for rain gardens than non-native species. A variety of native flowers, ferns, grasses, sedges, and shrubs can be used to customize the look of your rain garden. If possible, buy locally to support the Lexington community!