

Rain Barrels

Rain barrels are an excellent way to help the environment in urban areas because they catch rainwater and reduce storm water runoff which carries pollutants and sediment directly to creeks and rivers. The barrels also save you money and precious groundwater supplies. The free stored rain water, which is naturally soft and free of chlorine, is great for use in gardens, houseplants, lawns and trees.

An average home with a roof size of 1,000 square feet will generate approximately 600 gallons of water from a 1-inch rainfall. Collecting and using this water with rain barrels helps reduce the demand on public and private water supplies, and reduces pollution, flooding, and erosion in local waterways by reducing storm water runoff.

The Winnebago County Soil and Water Conservation District has rain barrels and accessories for sale at their office located at 4833 Owen center Road, Rockford, Illinois.
(http://www.winnebagoswcd.org/RAIN_BARREL_BROCHURE2.pdf)

All barrels have a garden hose size spigot at the bottom, an overflow fitting to allow the excess water that flows from the downspout to be diverted away from the barrel, and a linking hose fitting so two or



more barrels can be joined together. The barrels come fitted with a screw-on mesh lid to keep out debris and mosquitoes. The Winnebago County SWCD is also selling additional accessories that will make for easy installation.

What About Mosquitos?

Mosquitoes won't find rain gardens to be good breeding areas because if they are properly constructed the water will drain within 24 hours (but usually within an hour or two). The Culex mosquito, the primary variety that can transmit West Nile virus to humans, prefers to breed in small, stagnant containers of water. These are usually old tires, pots, birdbaths and pans under planters.



The development of a mosquito, from egg to adult takes 10 to 14 days depending on the air temperature. The warmer the air the shorter time the eggs take to mature. It takes 24 - 48 hours for eggs to hatch. After the eggs hatch the mosquito larva must live in water for 7 -12 days.

For More Information:

- Rain Garden Network
www.raingardennetwork.com
- Wisconsin DNR
<http://dnr.wi.gov/org/water/wm/dsfm/share/documents/rgmanual.pdf>
- U.S. Environmental Protection Agency
www.epa.gov/greenacres/nativeplants/factsheet.html
- USDA-NRCS Rain Gardens
<ftp://ftp-fc.sc.egov.usda.gov/IA/news/Quinn.pdf>
- Prairie Wildflowers of Illinois
<http://www.illinoiswildflowers.info/>

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WATER FRIENDLY LANDSCAPING ALTERNATIVES



*Use Rain To Your
Advantage!*

Why Keep Storm Water In My Yard?

Simply put, to help keep clean, fresh rainwater out of the storm sewer system, to reduce pollution and preserve our water systems.

Rain and melting snow runs off roofs, driveways and even lawns and flows directly to the street, down the storm drain and right to our rivers and lakes. This runoff is untreated and carries with it pollutants like oil, salt, fertilizer, pesticides, pet waste, transportation chemicals, sediment and all sorts of other things that shouldn't be in our freshwater.

By capturing that runoff you can save thousands of gallons of rainwater that can be used in your own garden and yard and keep all of these pollutants out of our waterways. Water captured in your yard soaks or infiltrates deep into the ground so that it can be used by the nearby plants and trees. Native plants in rain gardens also help to soak up the water; the roots are deep and will break up hard soil and infiltrate water and nutrients deep into the soil.

Finally, plants, mulch and soil break up the pollutants and make them inert, not harmful. Moderate amounts of water and limited amounts of pollutants people shed from their personal property can easily be managed by rain gardens. These same pollutants will cause havoc if combined with pollution from your neighbors on your block and the next block and the neighborhood and the community. Imagine all the pollutants from a whole city moving, untreated into your rivers, lakes and streams that you might be drinking!!!!

This is why we all should plant a rain garden ... or two ... or three ...



How can I create my own rain garden?

Location - Position your garden at least 10 feet from your home to prevent flooding around the foundation. Try to choose a naturally occurring low spot in your lawn, away from your septic system and utilities. Choose a location with either full or partial sun. Direct your downspouts and sump pump to this depression, either by using a buried 4" PVC pipe or by digging out a shallow swale (linear depression).

Size - Rain gardens are typically 5 to 10 percent the size of the impervious surface which generates the runoff entering the garden. Measure the square footage of the impervious area (length x width), then multiply this by the number associated with your soil type. For sandy soil, multiply by 20%; for loam use 30-35%; for clay use 45-60%. These numbers will ensure that your garden holds as much water as possible.

Create a Design - By planning your garden on paper first, you will be able to create the best appearance possible. Lay out the shape and boundary of the garden on the ground. Call your local utility company to locate any underground utilities before you begin to dig.

Choose Plants - Native plants are suggested because they are best adapted to our climate. Choose yours based on site considerations for light, moisture, and soil. Vary plant structure, height, and flower color for seasonal appeal and butterfly habitat.

Dig Garden and Amend the Soil - Dig your garden 4-8 inches deep, and mix the soil with 2-3 inches of compost and sand to enhance infiltration.

Plant Flowers and Grasses - Young plants, or plugs, are best for rain gardens because they are easier to establish and maintain. When laying plants out, randomly clump individual species in groups of 3 to 5 plants to provide bolder color. Be sure to repeat these individual groupings to create repetition and cohesion in your planting. It is a good idea to place plant labels next to each individual grouping. This will help identify the young native plants from weeds as you maintain the garden.

Mulch and Water the Garden - Apply 2-3 inches of mulch to your garden and water it every other day for the first two weeks. Once the garden is established and growing well, it will thrive without additional water or fertilizer.

Why Use Native Plants?

- Native plants provide a beautiful, hardy, drought-resistant, low maintenance landscape while benefiting the environment.



- Native plants do not require fertilizer.
- Native plants require fewer pesticides than lawns.



- Native plants require less water than lawns.

- Native plants help reduce air pollution.

- Native plants do not require mowing. Gas-powered garden tools emit 5% of the nation's air pollution.

- Native plants sequester, or remove, carbon from the air.



- Native plants provide shelter and food for wildlife.



- Native plants create biodiversity and promote stewardship of our natural heritage.