SOME NATIVE PLANTS

Remember to consider your soil and light conditions when choosing plants. Some plants prefer dry conditions, others prefer wet or shady spots, and they bloom at various times, so check these things as you select. Native plant nursery professionals or native plant enthusiasts can help you with this.

Arrowhead Bee Balm Bellwort **Bicknell Sedge Big Bluestem** Blue Cohosh Blue Joint Grass Blue Vervain Boneset **Bottlebrush Sedge** Branching Coneflower Brome Hummock Sedge Cattail **Celandine Poppy** Cardinal Flower Cinnamon Fern Columbine Culver's Root Cup Plant False Dragon's Head Fireweed Fox Sedge

Golden Alexander Great Blue Lobelia Green Bulrush Hairy Wood Mint Interrupted Fern Jack in the Pulpit Jacob's Ladder Joe-Pye Weed Lady Fern Lavender Hyssop Maidenhair Fern Marsh Marigold Marsh (Red) Milkweed Marsh Phlox Mountain Mint New England Aster **Obedient Plant** Ohio Goldenrod Palm Sedge Pennsylvania Sedge Prairie Blazing Star Prairie Dock

Purple Coneflower Purple Giant Hyssop Queen of the Prairie Riddell's Goldenrod **River Bulrush** Rough Cinquefoil (volunteer) Royal Fern Sedges Sensitive Fern Side-Flowering Aster Silky Wild Rye Smooth Blue Aster **Smooth Penstemon** (Foxglove Beardtongue) Sneezeweed Soft-stemmed Bulrush Spotted Joe-Pye Weed Stiff Goldenrod Swamp Aster Swamp Milkweed Sweet Black-eyed Susan

Sweet Flag Switch Grass Tall Brown-Eyed Susan Tall Meadow Rue Torrey's Rush Turtlehead **Tussock Sedge** Virginia Bluebells Water Plantain Wild Bergamot Wild Blue Flag Iris Wild Blue Indigo Wild Blue Phlox Wild Geranium Wild Ginger Wild Iris (Blue Flag) Wild Violet Witch Hazel Yellow Coneflower Yellow Trout Lily Zig Zag Goldenrod

VISIT OTHER GARDENS

Visiting well-designed gardens can give you ideas and talking to folks who have them can provide tips on how to do it right.

Willy Street Co-op, 1221 Williamson Street, Madison Edgewood Campus Rain Gardens, 1000 Edgewood College Drive, Madison **Residential Site**, 614 Piper Drive, Madison Residential Site, 2245 Linden Ave., Madison

Search the Internet for more information. Go to www.co.dane.wi.us/commissions/lakes/raingarden.shtml for links to informational sites. Contact UWEX if you would like someone to speak to your community group or garden club on building rain gardens. Call 608-224-3718 to schedule a time.



This brochure was prepared as a public service by the Dane County Lakes and Watershed Commission, a coordinating and advisory agency that works to protect and improve water quality as well as the scenic, economic, recreational and environmental value of Dane County's water resources.

> Sue Jones, Watershed Management Coordinator, 608/267-0118, e-mail: lakes@co.dane.wi.us Website: www.co.dane.wi.us/commissions/lakes/

A BEAUTIFUL ADDITION TO YOUR YARD THAT HELPS PROTECT OUR WATER RESOURCES!







WHAT IS A RAIN GARDEN?

A rain garden is a shallow depression in your yard that's planted with native flowering plants and grasses. The garden not only looks great, but also soaks up rainwater and melted snow from your home's downspouts, driveway or lawn. Water soaks into the soil and replenishes groundwater rather than becoming runoff.

THERE IS NINE TIMES MORE RUNOFF FROM A TYPICAL CITY BLOCK THAN FROM A WOODED AREA OF THE SAME SIZE.

WHY PLANT A RAIN GARDEN?

Rain and melted snow runs off our roofs, driveways and yards, into our streets and eventually through the storm drain system to our rivers and lakes. This runoff *is untreated*, and carries with it all sorts of pollutants such as soil, leaves, grass, oil, salt, fertilizer, pet waste, pesticides and more, and delivers it to our rivers and lakes. Rain gardens retain runoff before it can leave your yard and keep the pollutants in the garden, where they can be absorbed into the soil. Rain gardens have the potential to soak up significantly more water than a regular lawn, improving the water quality in our rivers and lakes, replenishing our groundwater and reducing the chances for local flooding. They also happen to be beautiful and provide habitat for beneficial critters (birds, bees, butterflies, dragonflies, etc.).

HOW DO I PLANT A RAIN GARDEN?

Cost

This can vary from no cost to the thousands. It's all up to you. You can do the work yourself (the design, digging, planting) and collect seeds or plants from others with established gardens, or you can hire a contractor to do the whole thing. Many professional landscapers and horticulturists are now in the business of designing and building rain gardens. But the thrifty person can create a fantastic garden as well. Most likely, if you do the work

RAIN GARDENS ARE AESTHETICALLY PLEASING TO LOOK AT: PROVIDE HABITAT FOR BIRDS, BUTTERFLIES AND BENEFICIAL INSECTS (INCLUDING DRAGONFLIES THAT EAT MOSQUITOES!); AND BENEFIT WATER QUALITY. yourself or with friends, your biggest expense will be purchasing plants. Native plugs usually run \$2–5 each. Plan on one plant per square foot of garden.

LAYOUT DESIGN

This is the fun part! When designing, you'll need to consider where you will create your garden, what soil types you are working with, how big your garden should be and what species you'll plant. You can pretty much make your rain garden any shape that pleases you as long as it lends itself to the natural flow of the runoff. Sometimes a horseshoe shape works; in other settings a long, narrow garden between properties is best. Decide whether you want taller plants in the "back" or center of your garden. Choose a variety of colors of blooms or stick with a single color scheme. Make sure that you pick varieties that bloom at different times so that you'll have beautiful flowers throughout the season and that provide substantive vegetative cover to prevent erosion. It's helpful to sketch your design on paper first.

Location, Location, Location

Rain gardens should be positioned to receive water from downspouts or at a

low-point in the lawn where drainage naturally occurs. Position your rain garden at least 10 feet from any foundation. It's a good idea to talk to your neighbor if your garden will be close to the property line. Call Digger's Hotline to make sure your rain garden will not be located over gas or water services.

Soil Type

You'll need to know what soil type you have so that you know what plants will thrive and so you can ensure your rain garden is as efficient as possible. Sandy soils, for example, will drain more quickly while heavy clay enriched soils will retain moisture longer. Runoff should infiltrate within 4–6 hours. If you have standing water for longer than this, you may want to consider adding more organic matter or increasing the size of your garden. Check with the University of Wisconsin Cooperative Extension (608/224-3700) if you're not sure what soil type you are working with.

Size

The size of your garden should depend on your goals and the area available to you. Generally, you'll want your rain garden to be a third as big as the roof area that drains to it. If your primary goal is to replenish the groundwater, then you will want to dig a deeper, smaller garden. If the soil is sandy, you can get away with a smaller area, but if you have a lot of clay enriched soils, you'll need a larger area.

Choosing Plants

Nursery professionals or garden clubs can help you choose plants best suited for your garden based on soil, hours of light and your design. Take your sketch with you RAIN GARDENS CAN HELP REPLENISH OUR DIMINISHING GROUNDWATER, AND PREVENT THOUSANDS OF GALLONS OF RUNOFF FROM REACHING OUR STREAMS, RIVERS AND LAKES.

when you go to purchase plants. Garden clubs often sell native species that are best adapted to our climate, will attract birds, native butterflies and dragonflies, and have root systems that facilitate infiltration and allow plants to survive several seasons of drought. Native plants require little maintenance once established. When choosing the kinds of natives you'll plant, take into account height, colors and when they'll bloom. A partial list of native plants is on the back of this brochure. For more information on native Wisconsin flora, go to the UW's Botany Department website www.botany.wisc.edu or the UW's Arboretum website *http://wiscinfo.doit.wisc.edu/arboretum/*.

SITE PREP AND PLANTING

Once you have sketched your garden, decided on a location, size and plants, it's time to build your garden. Cut a string as long as the circumference of your garden. Lay it out in the shape of your garden to act as a guide when you dig. Don't forget that your downspout or sump pump outlet needs to be directed to this location. Dig down 4-18 inches, depending on your site needs. Depths of 4-8 inches should suffice if you don't want standing water. You can use the turf and soil that you've dug out to build up the berm on the downhill side of your garden. If you have heavy clay enriched soils, you will need to add some organic matter before planting. Make your job easier by drilling the planting holes using a bulb auger (available in garden stores), rather than just a hand trowel. Mulching right after planting helps to discourage weed growth and keeps moisture in the soil. Free wood chips are available for use as mulch from the City of Madison Streets Division. Chips can be picked up from mid-April through September. For more information, go to www.ci.madison.wi.us/streets/brush.html or check with your local municipality to see if they have a mulch or wood chip program.

MAINTENANCE

After planting, remember to mulch and then water every other day for the first two weeks or so until your plants get established. Weed as necessary. Leave the vegetation for the winter as it provides cover and food for birds. Cut off all the dead vegetation in the spring.





- 1. Soil is prepared for planting, note the berm (raised area of soil)
- **2.** *Plant plugs laid out where they will be planted*
- **3.** *Plants in rain garden before mulching*
- **4.** Later in the season with larger plants and mulch