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GARDENS

PHOTO COURTESY SUE ELLINGSON

Let it rain *Capturing storm water in gardens is good for the lakes*

By Mary Ellen Gabriel

“Rain garden” sounds so refreshing, doesn’t it? It’s much more appealing than “run-off infiltration system,” which is arguably more accurate. Rain gardens, for those who haven’t heard, are shallow depressions strategically placed to capture the rainwater or melted snow pouring from rooftops and driveways, and return it to the ground. How? Rain gardens are planted with native wildflowers, sedges and other plants whose root systems do a much, much better job of soaking up water than your average lawn grass.

“Lawn grass has a four-inch root system,” says Taylor Elkins, owner of Blue Iris Landscaping, which installs around a dozen residential rain gardens a year. “A typical prairie plant has roots anywhere from four feet to eight feet in length.”

As those long roots grow ever

longer, says Elkins, they create tunnels through the soil. The water enters at ground level, and, finding the tunnels, keeps on going — down, down, down. The roots’ “spongy” composition helps too, wicking and absorbing.

Why should we want to keep rainwater on our property? Why not just aim our downspouts toward the driveway, and send it all cascading into the storm drain?

Here’s the problem: in Madison, storm drains lead to lakes. And the water coming off your roof, trickling down your sidewalk or driveway, and joining up with the larger river flowing past your curb is not crystal-pure rainwater. It’s a toxic mix of sand, sediment, oil, car fluids and lawn chemicals. Homeowners who care about the health of our lakes, which are profoundly affected by stormwater input, are turning to rain gardens both for their fast-acting efficiency and low-maintenance beauty.

“I noticed a benefit very quickly,” says Sue Ellingson, a Vilas neighborhood resident who planted a small, terraced rain garden in 2003, in the shallow, natural swale that ran between her house and a neighbor’s. During last summer’s torrential rain, she says, she watched with satisfaction as “all that water went into my rain garden. It felt really good.”

Rain gardens planted in spring begin to work right away, even if the plants still look tiny. Most of the growth is happening at the roots. By the following year, the rain garden will have filled in, offering bursts of color throughout the growing season. By the third year, says Elkins, “it’s a beautiful thing.”

Homeowners accustomed to tidy gardens may need to adjust their expectations.

“I had this standard concept of a garden: mulch around every individual plant, everything nice and neat,” says Ellingson. “This is more like a

meadow. It takes awhile, but then you realize it’s just as beautiful.”

Ellingson installed her own rain garden with the help of Wild Ones, the group of native plant enthusiasts to which she belongs. If you’re an experienced gardener, you may want to try designing, digging and planting your own rain garden as she did: her Web site (www.sueellingson.com) offers photos and insights from a homeowner who learned as she went.

The DNR and the UW-Extension have teamed up to provide a nifty how-to manual for homeowners, available by calling 877-947-7827, or on the Web at cleanwater.uwex.edu/pubs/raingarden. (For more do-it-yourself resources, see sidebar.)

However, if you don’t know your soil type (or how to determine it), are unfamiliar with native plants, or don’t want to risk creating a marsh, you’re better off consulting an expert like Taylor Elkins or, if your property is extensive (an

acre or more), Applied Ecological Services in Brodhead. The latter are international experts on ecological restoration and specialize in local genotypes (their yellow cone-flowers, for example, come from Wisconsin, as opposed to Texas or Florida). The company has several hydrology specialists on staff, and the nursery offers more than 500 species of native plants.

Site, soil and size are critical factors to keep in mind. To prevent all that soaked-in water from soaking something crucial like your basement, the rain garden should be at least 10 feet from the house. The recommended size is 100 to 300 square feet, and depends on how much roof or lawn will drain to the garden. Soil type can make or break the deal.

“You’d have a hard time with heavy, clay soil,” says Elkins. But, he adds, people are frequently mistaken about their soil type. “Most people I see who think they have clay soil, in reality have silty loam



Opposite: 1922, a Sue Ellingson rain garden. This page, three Formecology projects: The stargazer rain garden (top left) is meant to be admired from above; a retaining-wall-rain-garden combo (top right) and after-and-before at the Willy Street Co-op's useful anti-runoff project.

PHOTOS COURTESY FORMECOLOGY

Call the experts

Blue Iris Landscaping
Madison

608-238-2464; blueirislandscapes.com

Formecology
Evansville

608-882-6656; formecology.com

Applied Ecological Services
Brodhead

608-897-8641; appliedeco.com



Do-it-yourself

Rain Gardens: A How-To Manual for Homeowners

is a joint publication of the DNR/UW-Extension, available by calling 877-947-7827, or on the Web at clean-water.uwex.edu/pubs/raingarden.

Friends of Lake Wingra

offers the why and the how under "Rain Gardens," at lakewingra.org/pages/rain_gardens.php

"10 Steps to Building a Rain Garden"

shares insights from the Edgewood College Rain Garden Project. natsci.edgewood.edu/wingra/management/raingardens

Sue's Rain Garden Tips

Sue Ellingson's own research and experience are extensively chronicled on sueellingson.com

that's been condensed and packed over decades of use. That's mostly what's found in this area, and that we can work with."

Elkins recommends using as little heavy machinery as possible when preparing the site. Bobcats can pack the soil and destroy its natural, delicate filtration arrangement – aggressive rototilling can have the same effect. Better, he says, to kill the lawn grass (covering it up with a sheet of black plastic for a while is a safe alternative to pesticides), and dig the old-fashioned way: with a shovel.

Most rain gardens are surrounded

by a low berm, to help contain the water. Some homeowners dig a shallow swale through the lawn to direct runoff, if there is no natural path from downspout to rain garden.

Mechanics in place, it's time to choose plants – which is where things get interesting. Even if you think you know prairie plants, talk to someone who's done this before. Sue Ellingson, for example, didn't know her Joe-Pye weed would get eight feet tall. And she wishes she'd put in more sedges, which would have

helped keep her flowering plants at bay.

Rain gardens, with their dense concentrations of native plants, also attract insects and small animals, which thrills Ellingson.

"It's like an oasis," she says, of her two terraced gardens, each 10 by 15 feet. "I've seen all kinds of special things: butterflies, birds, a hawk moth, a toad."

But the rumor that rain gardens attract mosquitoes is a myth. In a well-designed rain garden, there is no standing water between rainfalls. Mosquitoes take 7-12 days to lay and hatch eggs. Water in a rain garden is gone a few hours after a storm.

If you do plant a rain garden, be sure to let the city know. Genesis Bichanich, a water resources management engineer in the city's engineering department, is mapping rain garden sites as part of Mayor Dave Cieslewicz's "1000 Rain Gardens" initiative. If you live in Dane County, look into the Plant Dane Matching Grant Pro-

Let the Mayor know

Contact Genesis Bichanich so she can add your rain garden to the map, as part of Mayor Dave's 1000 Rain Gardens Initiative: 608-266-4751

gram (www.danewaters.com/private/rain_garden), which matches a homeowner's upfront expenditures for rain garden plants. Coordinated by the Madison Area Municipal Storm Partnership and Dane County

(and made possible through a grant from the Graham-Martin Foundation), the grant is for individual homeowners, school, and nonprofit wishing to plant a rain garden. Applications are received in December; recipients are announced in January. Each recipient is

required to attend a rain garden workshop, and awards come in the form of plants and seeds, not cash.

"It's a great way to get people interested in native plants," says Marcia Hartwig, who directs the Plant Dane program. The program's plants and seeds are provided by AgriCol, a local native plant and seed company. Experts from AgriCol help homeowners fill out their order forms at the workshop in February. Come May, all those baby rain garden plants are ready for a new home. Maybe it's yours. ♦