

Rain Gardens

DESIGNED
TO COLLECT
AND FILTER
RAINWATER

RAIN
GARDEN

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Traditionally, rainwater has been directed from our rooftops and sidewalks into storm sewers. On its way to the road, this water picks up pollutants such as oil from our cars and lawnmowers, fertilizer, and grass clippings. Storm sewers are often allowed to empty directly into our lakes and rivers, where the extra nutrients can cause algae blooms and other pollutants can harm wildlife. These are the very same lakes and streams we use for drinking water and recreation.

Rain gardens are depressional areas planted with a diverse mix of native wildflowers and grasses. rainwater, from your roof, driveway, or other impervious surfaces, collects in a shallow pool and slowly filters into the ground instead of into storm sewers. There are many benefits to rain gardens including:

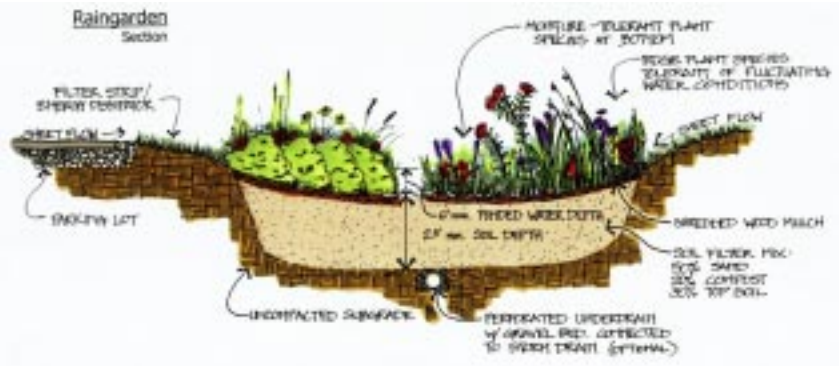
- Stormwater retention reduces runoff of pollutants and nutrients into our lakes and streams. Reduced run-off into sewers can help with flooding problems as well.
- Deep-rooted native plants stabilize soil to prevent erosion during large storm events.
- Diverse plantings with many species are more resistant to drought, flood, insects and disease than a single type or low diversity planting.
- Once established, on-going maintenance is usually very minimal.



- The deep-rooting nature of many native species encourages infiltration of stormwater runoff.
- Native plantings are adapted to local conditions and, in some cases, are more tolerant of flooding, drought and disease than non-native plantings.
- A diverse native mix with wildflowers attracts a variety of wildlife including butterflies and birds.
- In the winter, vegetation collects snow and provides interesting texture as well as habitat.

GETTING STARTED

Site Design: Map your property, including property lines, buildings, utility lines and existing vegetation. Determine areas which will catch water from downspouts, driveways, or other impervious surfaces. The rain garden should be about 7-10% of the size it receives run-off from and at least 10 feet from your home. Choose local, native species based on your site conditions and personal preference.



YOUR RAIN GARDEN IS SIMILAR TO A LAKESHORE, ABLE TO TOLERATE BOTH FLOODING AND DROUGHT CONDITIONS, AND WILL CONTAIN SIMILAR PLANT SPECIES.

Site Preparation: If a depressional area is not already present, dig a shallow bowl to a depth of 3-4" with sides gently sloping up towards the lawn. If soil is heavy and does not drain well it may be necessary to dig down further and back-fill with a lighter soil. Remove unwanted vegetation through smothering, through the use of herbicides, or a combination of these. Line the site with 2-3" of shredded mulch, which is useful in retaining moisture for the young seedlings and discouraging weed seeds from germinating.

Planting: Seedlings can be planted from late May to mid September, however, summer planting may need frequent watering. Seedlings should be planted 12-18" apart with flood tolerant species towards the bottom and drought tolerant species towards the edge.

Maintenance: Make sure your plantings receive at least one inch of water a week for the first two months. Your garden will also require light weeding the first few years.

SUITABLE PLANT LIST

UPLAND – MESIC ZONE (SOIL IS MOIST, BUT NOT WET)

<i>Achillea millefolium</i>	.Yarrow
<i>Agastache foeniculum</i>	.Anise Hyssop
<i>Allium stellatum</i>	.Prairie Onion
<i>Andropogon gerardii</i>	.Big Bluestem
<i>Anemone cylindrica</i>	.Thimbleweed
<i>Aquilegia canadensis</i>	.Columbine
<i>Amorpha canescens</i>	.Lead Plant
<i>Asclepias tuberosa</i>	.Butterfly Milkweed
<i>Aster species</i>	.Aster
<i>Dalea candida</i>	.White Prairie Clover
<i>Dalea purpurea</i>	.Purple Prairie Clover
<i>Echinacea purpurea</i>	.Purple Coneflower
<i>Geum triflorum</i>	.Prairie Smoke
<i>Heliopsis helianthoides</i>	.Common Ox-eye
<i>Heuchera richardsonii</i>	.Alum Root
<i>Liatris species</i>	.Blazing Star
<i>Lupinus perennis</i>	.Wild Lupine
<i>Monarda fistulosa</i>	.Bergamot
<i>Rudbeckia hirta</i>	.Black-eye Susan
<i>Schizachyrium scoparium</i>	.Little Bluestem
<i>Solidago species</i>	.Goldenrod
<i>Sorghastrum nutans</i>	.Indian Grass
<i>Sporobolus heterolepis</i>	.Prairie Dropseed
<i>Verbena stricta</i>	.Hoary Vervain
<i>Veronicastrum virg.</i>	.Culver's Root
<i>Zizia aptera</i>	.Heartleaf Alexanders

Wet Meadow Zone, continued next page



RAIN GARDENS ARE AN ATTRACTIVE, HEALTHY ALTERNATIVE TO TRADITIONAL GARDENS. THEY HELP REDUCE NUTRIENT AND SEDIMENT RUN-OFF INTO OUR LAKES AND STREAMS WHILE PROVIDING WILDLIFE HABITAT AND A BEAUTIFUL, LOW MAINTENANCE LANDSCAPE. PICTURED ABOVE, LEFT TO RIGHT: NEW ENGLAND ASTER, BLACK-EYE SUSAN, LITTLE BLUESTEM, BLAZING STAR.

WET MEADOW ZONE (SOIL IS WET, RARELY STANDING WATER)

<i>Acorus calamus</i>	.Sweetflag
<i>Asclepias incarnata</i>	.Swamp Milkweed
<i>Aster novae-angliae</i>	.New England Aster
<i>Carex bebbii</i>	.Bebb's Sedge
<i>Carex comosa</i>	.Bottlebrush Sedge
<i>Carex stricta</i>	.Tussock Sedge
<i>Chelone glabra</i>	.Turtlehead
<i>Eleocharis species</i>	.Spike Rush
<i>Eupatorium maculatum</i>	.Joe-pye Weed
<i>Eupatorium perfoliatum</i>	.Boneset
<i>Gentiana andrewsii</i>	.Bottle Gentian
<i>Helenium autumnale</i>	.Sneezeweed
<i>Iris versicolor</i>	.Blue Flag Iris
<i>Liatris species</i>	.Blazing Star
<i>Lilium michiganense</i>	.Turk's Cap Lily
<i>Lobelia cardinalis</i>	.Cardinal Flower
<i>Lobelia siphilitica</i>	.Great Blue Lobelia
<i>Pycnanthemum virginianum</i>	.Virginia Mountain Mint
<i>Scirpus atrovirens</i>	.Green Bulrush
<i>Scirpus cyperinus</i>	.Wool Grass
<i>Spartina pectinata</i>	.Prairie Cord Grass
<i>Verbena hastata</i>	.Blue Vervain
<i>Vernonia fasciculata</i>	.Ironweed

FOR MORE INFORMATION:

'Lakescaping for Wildlife and Water Quality' -DNR Publication

'Restore Your Shore' Interactive CD-ROM MN-DNR Publication

University of Wisconsin Extension Service – Rain Garden Publication

<http://clean-water.uwex.edu/pubs/home.htm#rain>

Wisconsin Department of Natural Resources – Resources on Rain Gardens

www.dnr.wi.gov/runoff/rg/links.htm

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