



Rain Gardens

Gardening with water quality in mind

What is a rain garden?

Simply put, a rain garden is a shallow depression in your yard that is planted with native wetland or wet prairie wildflowers and grasses. This popular new type of perennial garden is strategically located to capture runoff from impervious surfaces such as roofs, driveways and patios. These landscaping features help create beautiful yards while absorbing water, reducing runoff, protecting water quality and preventing flooding.

A rain garden on your property helps a great deal with preventing stormwater pollution. Rain gardens can absorb hundreds of gallons of rain that would otherwise wash pollution down the street into the nearest river, stream or lake. Even small rain gardens can absorb a lot of rain water.

How do I make a rain garden?

Most home rain gardens are simply a depression in the ground, with no fancy pipes or special soil. If a depressional area is not already present, determine where the water from downspouts, driveways or other impervious surfaces flows to and plan to install your rain garden where it will capture the most rain water runoff.

The rain garden should be about 7 to 10 percent of the size of the area it receives runoff from and at least 10 feet, but preferably 30 to 40 feet, from your home. If the water flow toward the rain garden concentrates in a waterway, incorporate the waterway into your plan as a vegetative swale. You can dig a shallow bowl to a depth of 9 inches with sides gently sloping up towards the lawn.

If the soil is heavy (clay) and does not drain well it may be necessary to dig down another 2 feet and back-fill with a lighter soil mix (50 percent sand, 20 percent compost, 30 percent topsoil). Line the area to be planted with 2 to 3 inches of shredded wood mulch, which is useful in retaining moisture for the young seedlings and discouraging weed seeds from germinating.

Choose local, native species based on your site conditions for light, moisture and soils. Use your personal preference for plant structure, height, flower characteristics and attracted wildlife.

Once the garden is dug, seedlings can be planted from late May to mid-September. However, summer plantings may need frequent watering. Seedlings should be planted 12 to 18 inches apart with flood tolerant species toward the bottom and drought tolerant species towards the edge.

Make sure your plantings receive at least one inch of water a week for the first two months, until they



show that they are growing and well established. Once the plants are established, they will thrive without additional watering. Fertilizers are not necessary and only minimal weeding will be needed once the initial weeds that appear have been removed.

What are the challenges?

Urban soils are often extensively altered and heavily compacted during development. Compacted soils should be excavated and replaced with a mixture of 30 percent sand, 30 percent compost and 40 percent soil.

If a high water table and/or poor percolation rates exist, a subdrain tile should be installed. The tile will lower the water table and allow water to percolate through an amended soil profile.

However in some cases, outlets for a drain tile may not be easily accessible. If so, french drains (holes drilled through compacted layers and filled with porous material) can sometimes substitute for drain tiles.

Where can I get more information?

There are several helpful websites that contain more info:

www.mninter.net/~stack/rain/

www.raingardens.org



Native Plants for Rain Gardens

Wildflower

Anise Hyssop	Agastache foeniculum
Frost Aster	Aster pilosus
Flat-topped Aster	Aster umbellatus
Turtlehead	Chelone glabra
Showy Tick-trefoil	Desmodium canadense
Joe-Pyeseed	Eupatorium maculatum
Boneset	Eupatorium perfoliatum
Grass-leaved Goldenrod	Euthamia graminifolia
Bottle Gentian	Gentiana andrewsii
Sneezeweed	Helianum autumnale
Western Sunflower	Helianthus occidentalis
Oxeye	Heliopsis helianthoides
Blue Flag Iris	Iris versicolor
Meadow Blazing Star	Liatris ligulistylis
Prairie Blazing Star	Liatris pycnostachya
Marsh Blazing Star	Liatris spicata
Great Blue Lobelia	Lobelia siphilitica
Monkeyflower	Mimulus ringens
Wild Bergamot	Monarda fistulosa
Virginia Mountain Mint	Pycnanthemum virginianum

Orange Coneflower	Rudbeckia fulgida
Black Eyed Susan	Rudbeckia hirta
Blue Vervain	Verbena hastata
Ironweed	Vernonia fasciculata
Golden Alexanders	Zizia aurea

Grass

Sweetflag	Acorus calamus
Big Bluestem	Andropogon gerardii
Bottlebrush Sedge	Carex comosa
Lake Sedge	Carex lacustris
Tussock Sedge	Carex stricta
Fox Sedge	Carex vulpinoidea
Sweet Grass	heirochloa odorata
Soft Rush	Juncus effusus
Path Rush	Juncus tenuis
Little Bluestem	Schizachyrium scoparium
Green Bulrush	Scirpus atrovirens
Wool Grass	Scirpus cyperinus
Indian Grass	Sorghastrum nutans
Prairie Cord Grass	Spartina pectinata

Shrub

Specked Alder	Alnus rugosa
Pagoda Dogwood	Cornus alternifolia
Silky Dogwood	Cornus amomum
Gray Dogwood	Cornus foemina
Red-osier Dogwood	Cornus stolonifera
Winterberry	Ilex verticillata
Common Elderberry	Sambucus canadensis
Arrowwood	Viburnum dentatum
Highbush Cranberry	Viburnum trilobum

Tree

Red Maple	Acer rubrum
Yellow Birch	Betula lutea
River Birch	Betula nigra