

Rain Gardens

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What is a Rain Garden?

Landscaped areas planted to wild flowers and other native plants that soak up rain water. It is designed to absorb rainwater runoff from urban areas like roofs, driveways, walkways, and compacted lawn areas.



The garden reduces rain runoff by allowing storm water to soak into the ground (as opposed to flowing into storm drains and surface waters which causes erosion, water pollution, flooding, and diminished groundwater).



Native plants are recommended for rain gardens because they generally don't require fertilizer and are more tolerant of one's local climate, soil, and water conditions

Why are Rain Gardens important?

- Mimics natural systems
- Increasing the amount of water that filters into the ground, which recharges local and regional aquifers
- Helping protect communities from flooding and drainage problems
- Helping protect streams and lakes from pollutants carried by urban storm water – lawn fertilizers and pesticides, oil and other fluids that leak from cars, and numerous harmful substances that wash off roofs and paved areas
- Will help economically (cheaper than regular gardens because of native plants, and helps prevent expensive damage caused by flooding)
- Providing valuable habitat for birds, butterflies and many beneficial insects

Questions concerning the Rain Garden

- Does a rain garden form a pond?

No. The rainwater will soak in so the rain garden is dry between rainfalls.

- Is a breeding ground for mosquitoes?

No. Mosquitoes need 7 to 12 days to lay and hatch eggs; the standing water in the rain garden will last for a few hours after most storms

- Does it require a lot of maintenance?

Can be maintained with little effort after the plants are established. Some weeding and watering will be needed in the first two years, and perhaps some thinning in later years as the plants mature.

- Is it expensive?

The only expense is purchasing the plants unless there are native plants elsewhere that can be re-planted.



The garden may look flooded and muddy

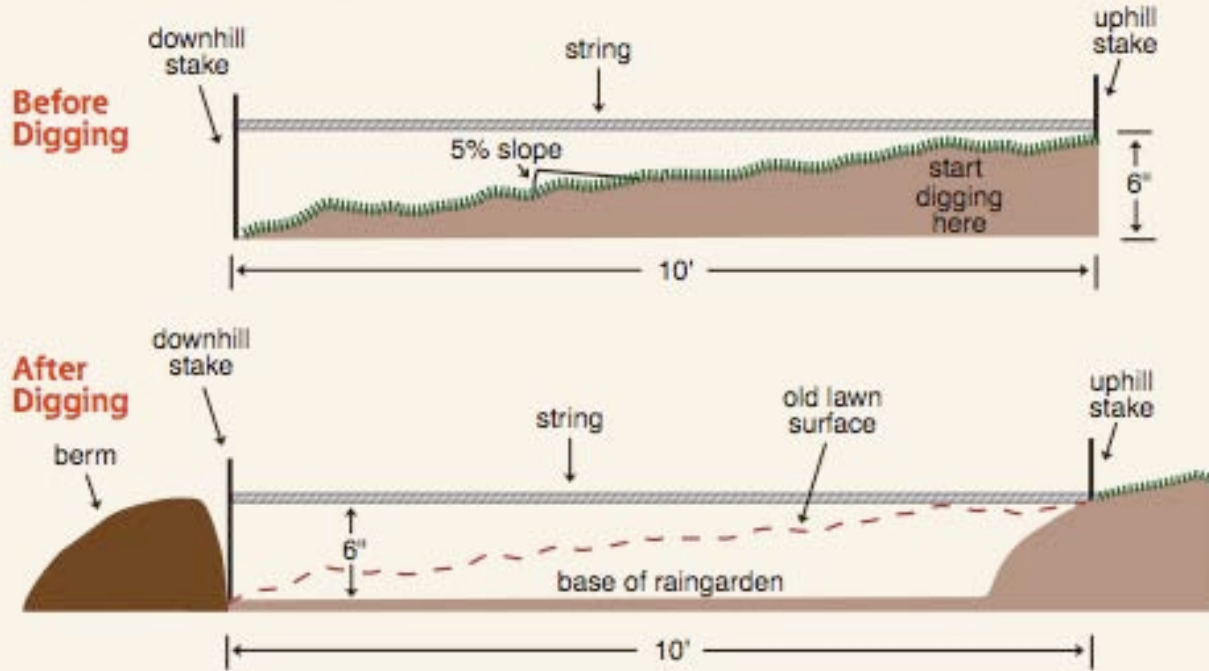
But after rainfall the ground absorbs the water and the soil becomes firm and moist







a. Between 3% and 8% slope lawn



RAIN GARDEN FOR CLAY SOILS AND FULL SUN

AREA: 192 Square Feet

Designed to thrive through conditions of periodic water infiltrations as well as dry periods

Designed to control 45% of annual runoff from an average sized rooftop (500 to 700 square feet)

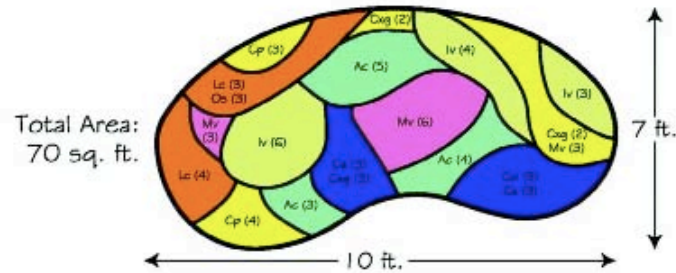
Install at least 10' from your foundation, in-line with a down-spout and/or downslope to intercept the rooftop water

Depth of the garden designed to be 3.5" to 4" deep to hold about 200 gallons of water during periods of heavy rainfall

LATIN NAME	COMMON NAME	AMT	BLOOM TIME	BLOOM COLOR	HEIGHT	SPACING
<i>Asclepias incarnata</i>	Red Milkweed	7	early summer	red	3'-5'	1'
<i>Baptisia lactea</i>	White False Indigo	1	early summer	white	3'-5'	2'
<i>Iris versicolor</i>	Blue Flag Iris	7	early summer	blue	2'-3'	1'
<i>Penstemon digitalis</i>	Smooth Penstemon	7	early summer	white	2'-3'	1'
<i>Liatris pycnostachya</i>	Prairie Blazingstar	8	summer	pink	3'-5'	1'
<i>Parthenium integrifolium</i>	Wild Quinine	8	summer	white	3'-5'	1'
<i>Ratibida pinnata</i>	Yellow Coneflower	8	summer	yellow	3'-6'	1'
<i>Boltonia asteroides</i>	False Aster	8	late summer	white/pink	2'-4'	1'
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan	2	late summer	yellow	4'-6'	2'
<i>Vernonia fasciculata</i>	Ironweed	8	late summer	magenta	4'-6'	1'
<i>Aster novae-angliae</i>	New England Aster	12	fall	pink/purple	3'-6'	1'
<i>Solidago rigida</i>	Stiff Goldenrod	12	fall	yellow	3'-5'	1'
<i>Carex vulpinoidea</i>	Fox Sedge	96			1'-3'	1'

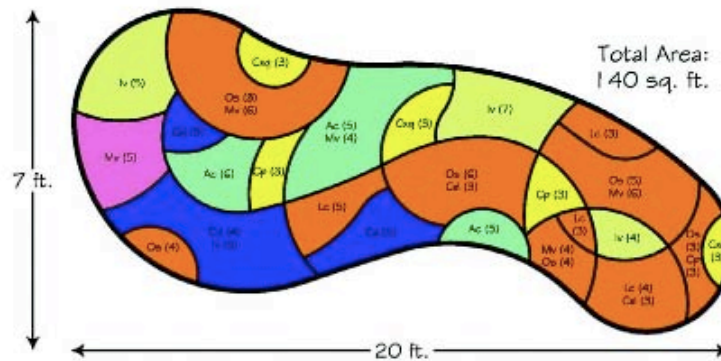
184 plants

10 feet wide;
full to partial shade
with clay soils



Symbol	Species Name	Common Name	No. of Plants
Ac	<i>Acorus calamus</i>	Sweet flag	12
Ca	<i>Campanula americana</i>	Tall bellflower	6
Cp	<i>Caltha palustris</i>	Marsh marigold	7
Cvg	<i>Carex Grayii</i>	Bur sedge	7
Cxl	<i>Carex lupulina</i>	Hop sedge	3
Iv	<i>Iris virginica-shrevei</i>	Wild blue flag iris	13
Lc	<i>Lobelia cardinalis</i>	Cardinal flower	7
Mv	<i>Mertensia virginica</i>	Virginia bluebells	12
Os	<i>Oncoclea sensibilis</i>	Sensitive fern	3
Total Plants Needed			70

20 feet wide;
full to partial shade
with clay soils



Symbol	Species Name	Common Name	No. of Plants
Ac	<i>Acorus calamus</i>	Sweet flag	16
Cp	<i>Caltha palustris</i>	Marsh marigold	9
Ca	<i>Campanula americana</i>	Tall bellflower	5
Cvg	<i>Carex Grayii</i>	Bur sedge	9
Cxl	<i>Carex lupulina</i>	Hop sedge	15
Iv	<i>Iris virginica-shrevei</i>	Wild blue flag iris	21
Lc	<i>Lobelia cardinalis</i>	Cardinal flower	15
Mv	<i>Mertensia virginica</i>	Virginia bluebells	25
Os	<i>Oncoclea sensibilis</i>	Sensitive fern	25
Total Plants Needed			140