

DEMO RAIN GARDEN

Lake County - Merrillville

PURDUE EXTENSION
RAINSCAPING
EDUCATION
PROGRAM

Background Information

The Merrillville Stormwater Office was designed to showcase features that exhibit responsible practices for stormwater conservation. When it was built, a small area was set aside by the front door for a rain barrel and rain garden. A drain was installed in the area to divert the extra water from the demonstration rain barrel as it was not sufficient to house all of the water that could come off of the roof. After the building was complete, the director, Purdue Extension-Lake County, and the Soil and Water Conservation District collaborated to offer Purdue Extension's Rainscaping Education Program to



educate local residents and conservation professionals about rain gardens and also install the demonstration rain garden on site with the class participants.

The rain garden is a great asset to the area. It provides a more finished feel to the Merrillville Stormwater Office while highlighting a stormwater conservation practice. Furthermore, the garden design highlights a variety of species, which were selected to showcase color in most seasons of the year. The biggest challenge in the garden is the undersized demonstration rain barrel. Therefore, the layout of the rain garden took this into consideration. If the rain barrel were to heavily overflow, there is a straight path of rocks to the drain so that the plants do not wash out. Additionally, plants around the edges of the bed were chosen to hold water in the bed and prevent mulch from washing out.

This successful demonstration garden is visibly placed next to the stormwater building front door to highlight the mission of the office while also displaying how rain gardens can be both functional and attractive.

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Garden Design: Plantings and Information

Plant Scientific Name	Common Name	Number Used
<i>Achillea millefolium</i>	Yarrow "Strawberry Seduction"	8
<i>Achillea millefolium</i>	Yarrow "Sunny Seduction G"	12
<i>Baptisia</i>	False Indigo "Blueberry Sundae"	3
<i>Asteraceae</i>	Aster "Lilac Blue G"	6
<i>Liatris spicata</i>	Liatris Kobold "Original"	2
<i>Rudbeckia fulgida</i>	Black Eyed Susan Goldsturm	5
<i>Schizachyrium scoparium</i>	Little Bluestem "Blue Paradise"	8
<i>Chelone lyonii</i>	Turtlehead Hot Lips	7
<i>Geranium</i> × <i>cantabrigiense</i>	Geranium Biokovo	30
<i>Sisyrinchium angustifolium</i>	"Blue Eyed Grass" Lucerne	27



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Maintenance Plan: Establishment Period

- The garden should be weeded every 2-4 weeks for first six months, then tentatively once a month thereafter.
- Tracking progress of the garden:
 - If desired, a before and after photo of the garden should be taken when it is weeded to help keep track of what should be weeded and what plants should not be removed.
 - Taking a photo of your garden every few weeks will allow one to visually see the maturation of the garden over time; photos could be uploaded to a computer or printed and kept in a photo album to keep as part of the educational display.

Maintenance Plan: General Maintenance

- Fertilizer
 - Some starter fertilizer could be used on the site due to low potassium levels. Otherwise, the native plants should adapt to the soil type on site.
- Watering
 - From installation for about a month – water as weeded; about 30 minutes – make sure everything's moist.
 - Once plants are established, you should not need to water them except during prolonged dry periods (about one week).
 - If excessive rain is experienced, it is advised to temporarily reroute some incoming water away from the garden by cutting a notch in the berm. Large, mature plants handle saturation better than young, small plants.
 - Water from the rain barrels can be used to water the garden, but in case of a dry period a hose and/or sprinkler system may be used.
- Weeding
 - During the first few establishment years, weeding should take place every month as needed. Over time, the plants will fill in and weeding won't be necessary.
 - Hand pulling of weeds should be sufficient.
 - Weeding will be provided by the office or its grounds crew.
- Mulch
 - It should be coarse, double shredded hardwood or another alternative which does not easily float.
 - Approximately 3 inches should be maintained in the garden at all times.

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Maintenance Plan: Seasonal Maintenance

This is namely for after the two-three year establishment period, but should still be carried out during those first two years.

- Year-round
 - Keep drain clear and garden clean of garbage
 - Weed (except winter)
- Spring
 - Prune dead vegetation and plants that have grown too large
 - Weed the garden and add mulch if needed
 - Remove excess sediment (i.e. leaves, sticks, debris) that may have collected over winter
 - Remove dead stalks/seed heads from previous season
 - Replenish mulch layer to maintain 3 inch layer
 - Best time to plant new/different plants and replace plants that may have died over winter
 - Plugs establish more successfully than seeds
- Summer
 - Remove weeds (i.e. crabgrass, dandelions etc.)
 - Water during dry periods (based on whether National Weather service declares drought; if no rain for one week)
 - Monitor berm around edge of garden for erosion
- Fall
 - Do not remove (too many) leaves that may have fallen into the garden – leaves will provide compost material for following spring growth; layer of leaves is fine but mounds of leaves are not
 - Remove weeds and diseased plants
 - If fall is dry continue to water until grounds begin to freeze (late October)
- Winter
 - No maintenance is needed; can cut back rain garden to clean up for spring if wanted
 - You should check to make sure garden is clean of garbage, leaves, etc. every few weeks

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Resource Contact

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About the Purdue Rainscaping Education Program

The Purdue Rainscaping Education Program offers state-wide training for Purdue Master Gardeners, conservation agencies and organizations, stormwater professionals, and landscape companies and consultants.

The two day workshop sessions cover an introduction to rainscaping and rain gardens with specific modules for rain garden site selection, plant selection and garden design, installation, maintenance, and community engagement.

Workshops include hands-on activities, interactive discussions, and field trips to community rainscaping projects. Participants also gain experience through creation of a demonstration rain garden with community partners in a public space.

