

Demo Rain Garden

Johnson County



Background Information

The site was previously a grassy area beside a building and a parking lot. The raingarden is located at the Extension office in Franklin, Indiana. It is visible to the public, but it cannot be seen from the front of the buidling. The 300 square foot rain garden was installed over one day in September 2019. This site was chosen because it receives runoff from a nearby roof and there are many plants in other areas around the office. Obstacles of the installation included the expenses and the excavation of the site, however each were eventually handled successfully. The rain garden has an ecological impact, as it filters runoff stormwater from a downspout. The raingarden also creates a conversation piece.



This rain garden is home to 236 native plants of twelve different species. All plants were acquired from Spence Nursery, and planted with 12 inch spacing. The garden is weeded by hand every 4 weeks or as needed by EMG volunteers and extension staff. Herbicide was used around the perimeter to keep grass back. No fertilizer was added and the native plants have adapted to the soil type on the site. Sand and compost was added when the initial excavation took place.



Demo Rain Garden: Johnson County

Garden Design: Plantings and Information

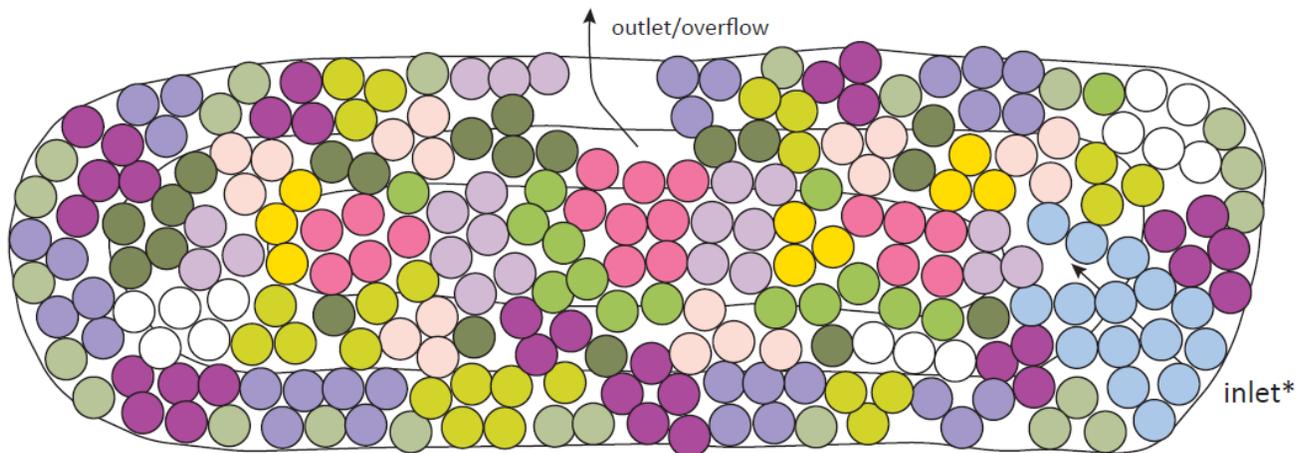
Plants

Plant Scientific Name	Common Name	Location	Color on Map	Quantity
Carex Fankii	Frank's Sedge	Bottom		15
Sporobolous heterolepsis	Prarie Dropseed	Middle		22
Asclepias incarnata	Swamp Milkweed	Bottom		15
Dalea purpurea	Purple Prarie Clover	Top		32
Echinacea purpurea	Purple Coneflower	Top		32
Eryngium yuccifolium	Rattlesnake Master	Middle		18
Iris virginica shrevei	Blue Flag Iris	Middle		15
Penstemon digitalis	Foxglove Beardtongue	Middle		19
Filipendula rubra	Queen of the Prarie	Middle		21
Oligoneuron riddelli	Riddell's Goldenrod	Bottom		10
Helenium atumnal	Sneezeweed	Middle		24
Pycnanthemum virinianum	Common Mountain Mint	Middle		13

Item(s)	Cost
Excavation	\$800
Soil amendments	\$180
Plants	\$300
Refreshments	\$50
Money From Registration Fees	+\$220
Sponsorship Money	+\$350
Total Cost	\$760

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Garden Design: Planned Plantings Arrangement



Maintenance Plan: Establishment Period

- 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.

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- 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 it's 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.

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
 - Should check to make sure garden is clean of garbage, leaves, etc. every few weeks

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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.