

DEMO RAIN GARDEN

Jackson County

PURDUE EXTENSION

RAINSCAPING EDUCATION PROGRAM

Background Information

In August of 2019, a rain garden was established at the University of Illinois Extension Office located in Murphysboro, Illinois. This was a partnership with the Jackson County Master Gardeners and Jackson County Extension.

There is a large sloped parking lot located at the Extension office in Murphysboro that leads to an area of surrounding turf and research plots. This site was chosen to collect storm water exiting the Extension



office parking lot, slow its progression to the surrounding turf and research plots, and allow for infiltration of the collected stormwater into the ground layers. It is a site that is visible to the public and will be used for educational and teaching programs. The garden should decrease the amount of water that sheets off the parking lot into the research plot area during rain events.

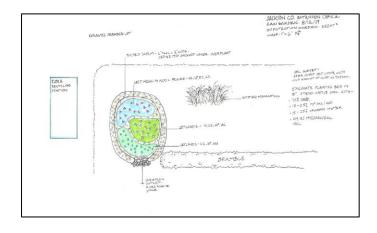
The rain garden is an unlined bio-filtration basin. The area was amended down to a depth of 18" with an engineered bio-retention media consisting of 70% landscape sand, 15% compost, and 15% native soil. The area receives full sun.

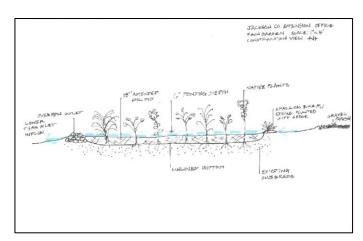
The plant species were selected for full sun tolerance. The garden was planted with a range of native forbs and sedges designed to bloom throughout the growing season and create a deeply rooted dense planting. The plants selected help to slow down and infiltrate stormwater run-off, resist water stress, and attract pollinators. Mycorrhizal inoculum was also added to increase the symbiotic fungal activity between the soil and plan root ecosystem. Approximately 300 plants were installed in this garden.

All plants are native to Illinois and were purchased from Pizzo Native Plant Nursery, located in Leland Illinois. Sand and compost were purchased from Burkdell Mulch, located in Carbondale, Illinois. Mycorrhizal inoculum was obtained from an online source, horticulturesource.com. A standard drip tape kit was purchased from dripdepot.com. A 32 excavator was rented for one day from Ace-Just Ask Rental, located in Carbondale, Illinois.

Garden Design: Plantings and Information

Plant Scientific Name	Common Name
Asclepias incarnata	Swamp Milkweed
Hibiscus moscheutos	Swamp rose mallow
Iris virginica var. shrevei	Southern Blue Flag
Liatris pycnostachya	Prairie blazing star
Rudbeckia subtomentosa	Sweet coneflower
Verbena hastata	Blue vervain
Zizia aurea	Golden alexander
Carex grayi	Gray's sedge
Carex lurida	Shallow sedge
Carex muskingumensis	Palm sedge
Carex rosea	Rosy sedge
Carex shortiana	Short's sedge





Maintenance Plan: Establishment Period

- Weeding-every 2-4 weeks for first 6 months
- Track progress of garden and water and replace plants as needed

Maintenance Plan: General Maintenance

- Fertilizing: Not necessary
- Watering: As needed, during dry spells in the summer
- · Weeding: As necessary, especially check in Spring
- Mulch: As necessary, check yearly

Maintenance Plan: Seasonal Maintenance

- · Year round: Weeding
- Spring: Weeding, prune dead vegetation and overgrown plants, add mulch and new plants (if needed)
- Summer: Watering, as needed
- Fall: Remove diseased plants; leave most leaves and plants
- Winter: Remove any debris that accumulates in garden

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.





