

Background Information

A rain garden was established in 2018 in a portion of the Boone County Community Gardens, on a plot of land offered by the Lebanon Church of Christ. The two acre site is an open field located within Lebanon city limits.

This site was chosen to redirect stormwater and filter it through the soil. As the garden matures, it is expected that this will reduce the water flow into the wet areas of the land. There is a future plan to use the past wet areas as a public vegetable garden.

Several Boone County Master Gardeners headed the planning and design portion of the project. Site preparation was done by hand through the work of volunteers.

The plants in the rain garden consist of a mix of sun-tolerant prairie grasses, forbes, and wildflowers. These plants were extras following the establishment of a Pollinator Garden, while others were purchased by the Boone County Community Garden Organization.

Following the installation of the garden, a Boone County Rainscaping Education Team, consisting of seven Master Gardener Volunteers, was formed.



















Garden Design: Plantings and Information

Plant Scientific Name	Common Name	Number Used
Penstemon hirsutus	Hairy beardtongue	7
Carex vulpinoidea	Fox sedge	3
Aquilegia canadensis	Columbine	6
Dalea purpurea	Purple prairie clover	6
Schizachyrium scoparium	Little bluestem	9
Liatris scariosa	Northern blazing star	6
Ratibida pinnata	Yellow coneflower	6
Aster oolentangiensis	Sky blue aster	6
Carex crinite	Fringed sedge	7
Coreopsis palmata	Prairie coreopsis	6
Echinacea purpurea	Purple coneflower	9
Hibiscus moschuetos	Swamp rose mallow	3
Chelone oblique	Rose turtlehead	6
Heliopsis helianthoides	Ox-eye sunflower	9
Asclepias incarnata	Swamp milkweed	9













Maintenance Plan: Establishment Period

Plant Scientific Name	Common Name	Number Used
Solidago riddellii	Riddel's goldenrod	1
Eupatorium maculatum	Joe-Pye weed	1
Sporobolus heterolepis	Prairie dropseed	5
Redbeckia hirta	Black-eyed susan	4
Pycnanthemum	Mountain mint	4
Physostegia virginiana	Obedient plant	10













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: Post Establishment Period

- 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 needed; about 30 minutes make sure everything is
 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. In case of a dry period a 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.
- 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: Establishment Period

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













Resource Contact

Boone County Purdue Extension

https://extension.purdue.edu/county/boone/

About the Rainscaping Education Program

The Rainscaping Education Program is a bi-state partnership which offers state-wide training for 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.

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