

DEMO RAIN GARDEN

Grant County

PURDUE EXTENSION
**RAINSCAPING
EDUCATION
PROGRAM**

Background Information

The Randall Environmental Studies Center at Taylor University in Grant County, Indiana, has been making efforts towards sustainability for many years, and recently saw an opportunity to turn a lawn in front of the building into a learning opportunity for sustainable stormwater conservation.

With the help of students, community members, Extension Master Gardeners, and more, the 2023 Rainscaping Education Program worked to design and install this rain garden.

With primary excavation and soil amendments performed by Taylor University grounds maintenance staff and environmental science faculty, the ground was formed into a rain garden. Students and participants in the program then planted 120 native plants that are tolerant of wet and temporarily flooded conditions. In addition, this garden is unique in that it also contains several large rocks to serve as teaching examples of Indiana geologic foundations.



Demo Rain Garden: Grant County

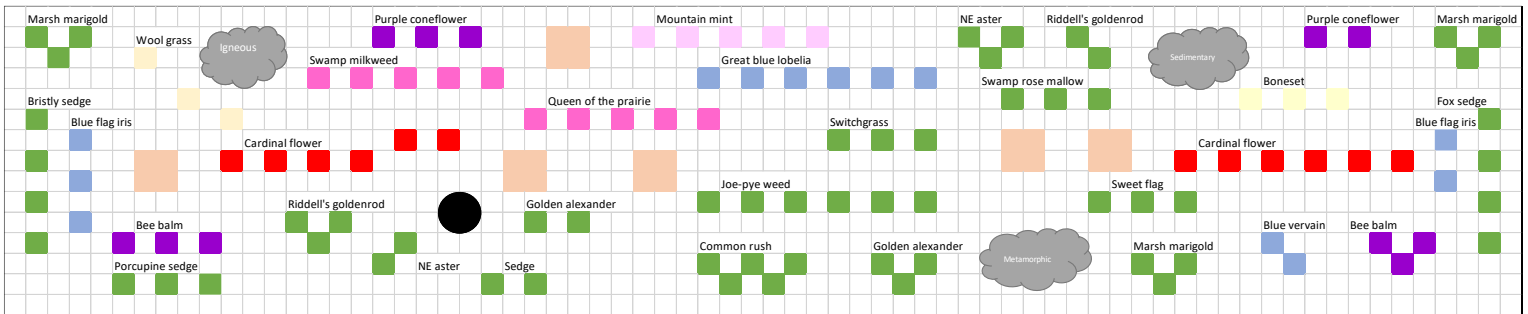
Garden Design: Plantings and Information

Scientific name	Common name	Number used	Unit price (\$)	Total price (\$)
<i>Acorus americanus</i>	Sweet flag	3	3.99	11.97
<i>Asclepias incarnata</i>	Swamp milkweed	5	1.13	5.67
<i>Caltha palustris</i>	Marsh marigold	9	5.99	53.91
<i>Carex comosa</i>	Bristly sedge	5	1.13	5.67
<i>Carex hystericina</i>	Porcupine sedge	3	3.99	11.97
<i>Carex vulpinoidea</i>	Brown fox sedge	5	1.13	5.67
<i>Echinacea purpurea</i>	Broad-leaved purple coneflower	5	1.13	5.67
<i>Eupatorium perfoliatum</i>	Boneset	3	3.99	11.97
<i>Eutrochium maculatum</i>	Spotted Joe-pye weed	3	3.99	11.97
<i>Eutrochium fistulosum</i>	Hollow Joe-pye weed	3	4.49	13.47
<i>Filipendula rubra</i>	Queen of the prairie	5	1.13	5.67
<i>Hibiscus moscheutos</i>	Swamp rose mallow	3	4.49	13.47
<i>Iris versicolor</i>	Northern blue flag iris	5	1.13	5.67
<i>Juncus effusus</i>	Common rush	5	1.13	5.67
<i>Lobelia cardinalis</i>	Cardinal flower	12	5.49	65.88
<i>Lobelia siphilitica</i>	Great blue lobelia	9	5.49	49.41
<i>Monarda fistulosa</i>	Wild bee balm	6	3.99	23.94
<i>Oligoneuron riddellii</i>	Riddell's goldenrod	5	1.13	5.67
<i>Panicum virgatum</i>	Switch grass	3	3.99	11.97
<i>Pycnanthemum virginianum</i>	Common mountain mint	5	1.13	5.67
<i>Scirpus cyperinus</i>	Wool grass	3	3.99	11.97
<i>Symphotrichum novae-angliae</i>	New England aster	3	4.99	14.97
<i>Verbena hastata</i>	Blue vervain	3	3.99	11.97
<i>Zizia aurea</i>	Golden Alexanders	5	1.13	5.67

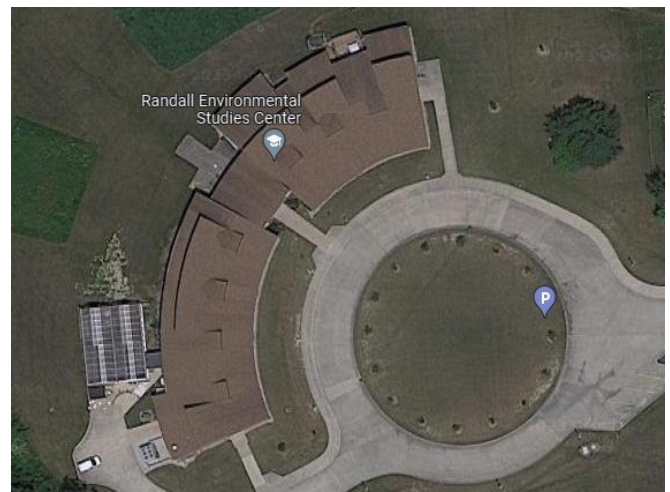
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Garden Design: Plantings and Information

Plant scientific name	Common name	Number used	Unit price (\$)	Total price (\$)
<i>Cornus sericea</i>	Red osier dogood	5	NA	NA
<i>Viburnum dentatum</i>	Arrowwood viburnum	3	NA	NA
All – sum total cost*				~\$500
(* sums may differ from calculated sum due to coupon code discounts and rounding changes)				



Spring, summer, fall bloom colors	Plant height	Plant name	Quantity
	1	Common rush	5
	2	Marsh marigold	9
	2.5	Bristly sedge	5
	2.5	Porcupine sedge	3
	2.5	Brown fox sedge	5
	3	Mountain mint	5
	3	Riddell's goldenrod	5
	3	Golden alexander	5
	3	Blue flag iris	5
	4	Purple coneflower	5
	5	Wild bee balm	6
	5	Great blue lobelia	9
	5	Swamp milkweed	5
	6	Blue vervain	3
	6	Cardinal flower	12
	6	Joe-pye weed	6
	6	New England aster	3
	6	Boneset	3
	6	Wool grass	3
	6	Sweet flag	3
	6	Swamp rose mallow	3
	8	Queen of the prairie	5
	10	Switch grass	3



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Maintenance Plan: Establishment Period

- Excavation
 - Sod removed
 - Garden area excavated to a depth of 18" and formed into rain garden shape with maximum depth of 12"

 - Inlet: stormwater downspouts
 - Outlet: stormwater drain in middle of garden

- Soil amendments
 - Compost added to top six inches of soil
 - Mulch applied on top of soil

Maintenance Plan: General Maintenance

- Weeding
 - Students and faculty in the environmental science department will weed the garden regularly

- Watering
 - If there is no rain for longer than a week, garden will be watered by students or faculty

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Maintenance Plan: Seasonal Maintenance

- Weeding
 - As needed

- Replanting
 - A packet of wildflower seeds will be provided by Purdue Extension-Grant County containing both annuals and perennials
 - Replacement perennials to be planted on an as-needed basis

- Shrub pruning
 - Thinned and pruned shrubs as needed

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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.

