

Gravel Gardening: Gardens that Rock!

Olbrich Botanical Gardens
Jeff Epping

- Benefits – sustainable, environmentally sound, cost effective and beautiful
- The Idea...Beth Chatto, Cassian Schmidt, Roy Diblik
- Plant Selection Criteria – drought-tolerant species to create lasting plant communities
- Design & Layout
 - 6"+ tall border/edge
 - 4-5" gravel depth – 3/16" washed quartzite chip or standard pea gravel
 - pot grown plants in 2 ½", 3 ½" or 4" (quart) pots (gallons when smaller sizes not available)
 - layout - random/naturalistic, stylized naturalistic, English border, etc.
 - tight spacing – 12" on average
- Planting
 - remove excess soil from root ball and tear apart roots if root-bound
 - peel off 1-2" of top of root ball to get rid of weed seeds
 - hand dig hole to depth of root ball of plant – do not mix any soil into the gravel (important!)
 - not necessary for root ball to be in contact with soil beneath gravel- roots grow downward
- Maintenance – watering
 - hand water after planting to settle in gravel, root balls and soil
 - water often until plants root into the soil below – 4-5 times per week
 - water 1-2 times per week after about four weeks
 - year 2 & 3 – water during drought
 - year 4 & beyond – maybe if severe drought, otherwise should be fine on own
- Maintenance - weeding
 - crowns of plants – from existing seeds or blown in seeds, soil inadvertently mixed into gravel
 - careful not to mix soil in with gravel when pulling weeds
 - edges – debris from adjacent walkways - organic matter can accumulate over time
- Maintenance - spring clean-up
 - cut back perennials to ground in early spring – shears, rake, blower
 - NO debris – organic matter build-up becomes a seed bed for invading weeds and increased maintenance so remove as much as possible with clean-up

- Olbrich's First Gravel Garden – planted in September 2009, plant design by Roy Diblik
 - 730 sq ft -- planted 12" on center -- needed 1025 plants
 - \$3.00 per plant (2 ½", 3 ½" & 4" pots) - total \$3075
 - edging stones – salvaged – no cost
 - quartzite (7/16" screened chips) – 4-5" deep – 18 tons @ \$16/ton=\$288 (Michels Materials, Waterloo, WI)
 - shipping at \$95/hour (semi) – 25 tons/load = \$380
 - Total Material Cost (minus edging) = \$3743 (based on 2021 prices)
- Olbrich's Visitor Center Gravel Garden – planted in August 2014
 - 4354 sq ft -- planted 12" on center -- needed 4380 plants
 - \$3.00 per plant (2 ½", 3 ½", 4" and 1 gal. pots) - total \$13,140
 - edging stones – none needed
 - quartzite (7/16" screened chips) – 4-5" deep – 100 tons @ \$16/ton=\$1600 (Michels Materials, Waterloo, WI)
 - shipping at \$95/hour (semi) – 25 tons/load = \$1520
 - Total Material Cost (minus edging) = \$16,260 (based on 2021 prices)

Gravel Garden Plant List Sampler

Grasses

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| ✦ Andropogon gerardii 'Blackhawks', 'Dancing Wind' | ✦ Echinacea pallida, E. paradoxa, E. purpurea |
| ✦ Bouteloua cutripendula, B. gracilis 'Honey Blonde' | ✦ Echinacea simulata, E. tennesseensis |
| ✦ Eragrostis spectabilis | ✦ Eryngium yuccifolium |
| ✦ Panicum virgatum 'Shenandoah', 'Northwind' | ✦ Euphorbia corollata, E. polychroma 'Bonfire' |
| ✦ Schizachyrium scoparium 'Jazz', 'Standing Ovation' | ✦ Heuchera richardsonii |
| ✦ Sesleria autumnalis | ✦ Kuhnia eupatorioides |
| ✦ Sporobolus heterolepis, cvs 'Tara' | ✦ Liatris aspera, L. cylindracea, L. ligulistylis |

Forbs

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|--|---|
| ✦ Achillea x 'Feuerland', Walther Funcke' | ✦ Limonium latifolium |
| ✦ Allium x 'August Asteroids', 'Summer Beauty' | ✦ Monarda bradburiana |
| ✦ Amorpha canescens | ✦ Origanum laevigatum 'Herrenhausen' |
| ✦ Asclepias tuberosa | ✦ Parthenium integrifolium |
| ✦ Baptisia australis, B. leucantha | ✦ Penstemon 'Pocohontas' |
| ✦ Baptisia x 'Purple Smoke' | ✦ Perovskia atriplicifolia |
| ✦ Calamintha nepeta ssp. nepeta | ✦ Ruellia humilis |
| ✦ Coreopsis lanceolata, C. palmata, C. tripteris | ✦ Silphium integrifolium, S. laciniatum |
| ✦ Coreopsis verticillata 'Golden Showers' | ✦ Silphium terebinthinaceum |
| ✦ Dalea candida, D. purpurea | ✦ Symphyotrichum leave, S. oblongifolium,
S. oolentangiense, S. sericeum |
| ✦ Desmodium canadense, D. illinoense | ✦ Vernonia lettermannii 'Iron Butterfly' |
| ✦ Dianthus carthusianorum | |

- Closing - more gravel garden projects – small and large