

GRAVEL GARDENING: Gardens that Rock!



PRESENTER: Jeff Epping, Olbrich Botanical Gardens • olbrich.org

Benefits

- sustainable, environmentally sound
- cost effective
- less maintenance
- beautiful

The Idea

- Beth Chatto, Cassian Schmidt, Roy Diblik

Plant Selection Criteria

- drought-tolerant species to create lasting plant communities

Design and Layout

- 6" + tall border/edge
- 4-5" gravel depth – 3/16" washed quartzite chip, standard pea gravel or similar hard rock
- 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 – 12-15" on average

Planting

- remove loose excess soil from root ball and tear apart roots if root-bound – contain it
- peel off about 1" of top of root ball to get rid of weed seeds – contain it
- 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 – up to 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
- free of 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 with 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 (3/16" 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 (3/16" 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)

Plant List Sampler (*see next page*)

Closing

- more gravel garden projects – small and large



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GRAVEL GARDENING: Plant List Sampler

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Grasses

- Andropogon gerardii 'Blackhawks', 'Dancing Wind'
- Bouteloua cutripendula, B. gracilis 'Honeycomb'
- Eragrostis spectabilis
- Panicum virgatum 'Shenandoah', 'Northwind'
- Schizachyrium scoparium, 'Jazz', 'Standing Ovation'
- Sesleria autumnalis
- Sporobolus heterolepis, 'Tara'

Forbs

- Achillea x 'Feuerland', Walther Funcke'
- Allium x 'August Asteroids', 'Summer Beauty'
- Amorpha canescens
- Asclepias tuberosa
- Baptisia australis, B. leucantha
- Baptisia x 'Purple Smoke'
- Calamintha nepeta ssp. nepeta
- Coreopsis lanceolata, C. palmata, C. tripteris
- Coreopsis verticillata 'Golden Showers'
- Dalea candida, D. purpurea
- Desmodium canadense, D. illinoense
- Dianthus carthusianorum
- Echinacea pallida, E. paradoxa, E. purpurea
- Echinacea simulata, E. tennesseensis
- Eryngium yuccifolium
- Euphorbia corollata, E. polychroma 'Bonfire'
- Heuchera richardsonii
- Kuhnia eupatorioides
- Liatris aspera, L. cylindracea, L. ligulistylis
- Limonium latifolium
- Monarda bradburiana
- Origanum laevigatum 'Herrenhausen'
- Parthenium integrifolium
- Penstemon digitalis, 'Pocohontas'
- Perovskia atriplicifolia
- Ruellia humilis
- Silphium integrifolium, S. laciniatum
- Silphium terebinthinaceum
- Symphyotrichum laeve, S. oblongifolium, S. oolentangiense, S. sericeum
- Vernonia 'Southern Cross'



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