OCTOBER 2022

RESIDENTIAL RAINGARDEN PILOT PROJECT

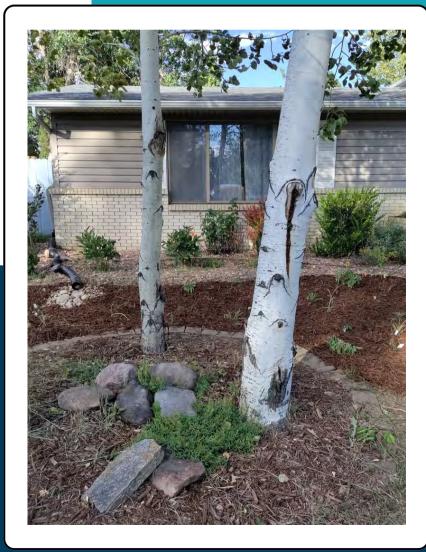
FULL SHADE PLANTING LAYOUT: 2



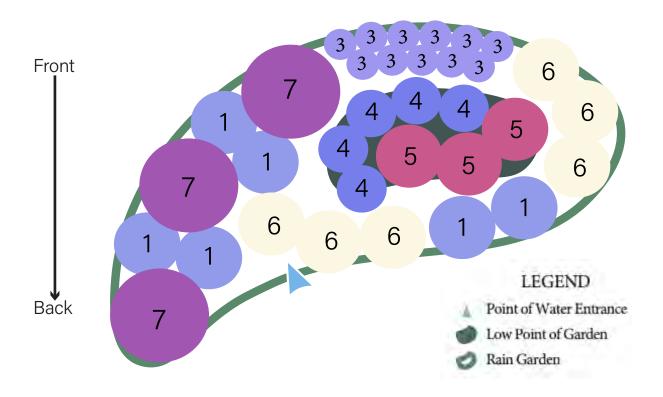
PRODUCED BY



COLORADO STATE UNIVERSITY



Rain Garden Layout - Shade Design 2 - 100ft²



- 1 Aspen Daisy Erigeron speciosus
- 2 Beebalm *Monarda fistulosa*
- 3 Harebells Campanula rotundifolia
- 4 Rocky Mountain Columbine Aquilegia caerulea
- 5 Swamp Milkweed Asclepias incarnata
- 6 White Yarrow Achillea lanulosa
- Winecups/Poppy Mallow Callirhoe involucrata

FULL SHADE 2 SUBSTITUTION LIST

All Plants on list are Native to the Rocky Mountain/Front Range Region unless marked*

Layout Number	Original Plant	Subsitution	Tier	Dimensions	Color
1	Aspen Daisy	Canada Mayflower (Maianthemum canadense)	mid	8" tall, spreading groundcover	large ovate leaves, tiny white flowers form red berries
		Rocky Mountain Columbine (Aquilegia caerulea)	mid	1.5ft tall, 1ft spread	Light blue and white flowers
2	Poobalm	Creeping Phlox* (Phlox stolonifera)	top	8" tall, 2ft spread	purple flowers, groundcover native to North America
2	Beebalm	Rocky Mountain Columbine (<i>Aquilegia</i> <i>caerulea</i>)	mid	1.5ft tall, 1ft spread	Light blue and white flowers
3	Harebells	Sierra Wild Ginger* (Asarum hartwegii)	mid	6" tall, 1ft spread	foliage appeal, heart- shaped leaves, native to North America
		White Yarrow (Achillea millefolium)	top	1-2ft tall, 1.5ft spread	white flowers, finely textured foliage
4	Rocky Mountain	Yellow Trout Lily* (Erythronium americanum)	mid	6" tall, 8" spread	yellow nodding lily, speckled foliage, native to North America
4	Columbine	Celadine Poppy* (Stylophorum diphyllum)	mid	1.5ft tall, 1ft spread	yellow mini poppy flowers, native to North America
	S	Umbrella Plant* (Darmera peltata)	low	3.5ft tall, 4ft spread	pink/white blooms, large serrated leaves, native to North America
5	Swamp Milkweed	Wherry's Foam Flower* (Tiaella wherryi)	low	1ft tall, 1.5ft spread	white/pink flowers, foliage has purple veins and turns bronze in fall, native to North America
6	White Yarrow	Prairie Trillium* (<i>Trillium</i> recurvatum)	mid	1.5ft tall, 1.5ft spread	deep red flowers blooming early, dormant in summer, native to North America
		White Wood Aster* (Eurybia divaricata)	top	2ft tall, 3ft spread	daisy-like white flowers, bushy, native to North America
7	Winecups	Jack in the Pulpit* (Arisaema triphyllum)	mid	1.5ft tall, 2ft spread	pitcher-plant like flowers, native to North America
		Crevice Alumroot* (Heuchera micrantha)	top/mid	2ft tall, 2ft spread	purple foliage, native to North America

Tiers:

Top: lowest water requirements, planted along the garden berm

Mid: average water requirement, planted on the sloping sides of the garden

Low: higher water requirements, planted in the basin, roots must withstand wet conditions up to 12 hours

Full Shade Plant Guide Layout 2



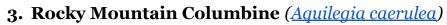
1. Aspen Daisy (<u>Erigeron speciosus</u>)

Mature Height	1-2ft tall with 1-2ft spread, clump growth habit	
Care & Water	Once established, water once per week. Deadhead to promote more blooms.	
Flowering Time	June-September	
Hardiness	Zones 4-7, plant 18" apart	
Special Features and Notes	Attracts butterflies and pollinators. Toxic to dogs, cats, and horses. Can survive in elevations up to 11,000 feet!	



2. Harebells/Bluebells (<u>Campanula rotundifolia</u>)

Mature Height	1ft tall and 1ft spread, stems are weak and the plant often bends over.
Care & Water	Once established, water once per week.
Flowering Time	June-September, periwinkle color flowers.
Hardiness	Zones 2-7, plant 10" apart
Special Features and Notes	Attracts hummingbirds. When grown from seed, the plants start blooming the second year.





Mature Height	1-2ft tall with 1ft spread
Care & Water	Once established, water once per week. Deadhead to promote blooming.
Flowering Time	May-July
Hardiness	Zones 3-8, plant 15" apart
Special Features and Notes	Attracts butterflies and hummingbirds. Deer and rabbit resistant with a pleasing scent. Will self seed to form a colony.

Full Shade Plant Guide Layout 2

4. Swamp Milkweed (<u>Asclepias incarnata</u>)

Mature Height	4-5ft tall with 2-3ft spread
Care & Water	Once established, water once per week.
Flowering Time	June-September
Hardiness	Zones 3-11, plant 30" apart
Special Features and Notes	Toxic to dogs, cats, and horses if consumed. Attracts butterflies (especially Monarchs) and hummingbirds. Deer resistant.

5. White Yarrow (Achillea lanulosa)



Mature Height	2-3ft tall with 2ft spread
Care & Water	Once established, water once per week.
Flowering Time	June-mid September
Hardiness	Zones 2-9, plant 18" apart
Special Features and Notes	Flowers and leaves (when crushed) have a pleasant aroma. White yarrow is the original native variety but other varieties bloom yellow, pink, or red.

6. Winecups/Poppy Mallow (<u>Callirhoe involucrata</u>)



Mature Height	6in-1ft tall with 3ft spread
Care & Water	Once established, water once per week.
Flowering Time	March-June
Hardiness	Zones 4-8, plant 3ft apart
Special Features and Notes	Ornate foliage that is attractive when not in bloom. Attracts butterflies and hummingbirds.