



FLOWERS

Rock Garden Plants

no. 7.401

by J.E. Klett and R.A. Cox¹

Quick Facts...

Rock gardens are effective if built on a natural slope or terrace.

Use rocks of one geological type.

Good drainage is necessary.

Plant a variety of species in the rockery.

The garden should not be larger than can be easily maintained.

The ideal location for a rock garden is a natural slope or terrace, such as those found at the side or rear of a house based on a split-level or garden-level design.

Use rocks of one geological type. A common rock in Colorado is native granite covered with lichens (moss rock). Rocks are available from nurseries, landscape contractors and rock dealers. An effective rock garden should have several large rocks, some weighing 200 pounds or more.

Set the rock into the ground so at least one-third is buried. Place rocks in a natural way, following the grain of the rock. Position rocks to control soil erosion between rocks and to allow soil pockets of various sizes for plants. Use smaller, similar rock as a mulch. Place lichen-covered rock to expose as much of the lichen as possible.

Provide good drainage. Most plants suitable for rock gardens require a well-drained soil. For most plants, incorporate organic matter into heavier clay soils to improve texture and provide better drainage. Refer to fact sheets 7.222, Soil – the Key to Successful Gardening and 7.235, Choosing a Soil Amendment.

A rock garden should be no larger than can be easily maintained. Rock gardens have high maintenance requirements. Weed control is the biggest problem. Most rock garden plants need low to moderate watering amounts and frequency. Refer to fact sheet 7.231, Xeriscape: Garden Flowers.

Plant a variety of species, repeating some species several times to make the garden look natural. Ideally, rock garden plants should spread slowly. Take care not to overplant.

Plant Selection

Many types of plants are suitable for rock gardens. Generally, plants that are low growing and have a clumping habit are preferred. Perennial plants are most common in rock gardens, although some annuals can be used. Table 1 lists many rock garden plants, along with their characteristics and cultural requirements. Most plants listed should be hardy to 8000 feet, some higher.

Refer to fact sheets 7.406, Flowers for Mountain Communities and 7.413, Ground Covers for Mountain Communities.

Plant Select® plants may be viewed online at www.plantselect.org.



**Colorado
State
University**

Extension

© Colorado State University Extension. 6/00.
Revised 7/05.
www.ext.colostate.edu

Table 1: Recommended rock garden plants.

Plant Name	Height	Exposure	Soil Preference	Flower Color	Bloom Period	Remarks
Ajuga reptans Carpet bugle 'Atropurpurea'	4-10 in.	Shade to part shade	Well drained	Blue, purple	May-June	Spreading ground cover.
'Burgundy Glow'	4-6 in.	Shade to part shade	Well drained	Violet-blue	May-June	Bronze-purple foliage.
'Chocolate Chip'	4-6 in.	Shade to part shade	Well drained	Blue	May-June	Pink, white and green foliage.
Alyssum montanum Mountain alyssum	2-4 in.	Shade to part shade	Well drained	Blue	May-June	Wavy, chocolate-brown foliage.
Arabis caucasica 'Snowcap'	4-10 in.	Sun	Dry, rocky	Yellow	April-May	Gray foliage.
Snowcap rockcress	6-9 in.	Sun	Well drained	White	April-May	Abundant white flowers over gray foliage.
Arctostaphylos uva-ursi Kinnikinnick	6-8 in.	Shade to part sun	Acid to neutral, high in humus, well drained	White-tinged red	May-June	Spreading evergreen foliage; red fruits.
'Massachusetts'	4-6 in.	Shade to part sun	Acid to neutral, high in humus, well drained	Pink-tinged	April-May	Spreading evergreen foliage; red fruits.
Armeria maritima Sea Pink 'Victor Reiter'	4-10 in.	Sun	Dry, well drained	Pink, white, purple	May-June	Grass-like foliage; several varieties.
Aubrieta deltoidea 'Purple Gem'	2-4 in.	Sun	Dry, well drained	Pink	April-June	Small mounded plant.
Purple Gem Rockcress	4-6 in.	Sun to part shade	Well drained	Purple	April-June	Mounded to spreading; shear after bloom.
Aurinaria saxatilis Basket-of-gold	8-12 in.	Sun	Dry, rocky	Yellow	April-May	Grayish-green foliage; shear after bloom.
Campanula carpatica Carpathian harebell 'Blue Clips'	8 in.	Sun	Well drained	Blue-Lilac	June-July	Bright green foliage.
'White Clips'	6-8 in.	Sun to part shade	Well drained	Blue	June-July	Compact mound of bright-green foliage.
Campanula poscharskyana Serbian bellflower	6-8 in.	Sun to part shade	Well drained	White	June-July	Compact mounds of wavy, bright green foliage.
Campanula rotundifolia Bluebell	6-8 in.	Sun to part shade	Well drained	Blue	June-Aug.	Prolific flowers.
Cerastium tomentosum Snow-in-summer	8-12 in.	Part shade	Well drained	Blue	May-Sept.	Bell-like flowers on slender stems.
Ceratostigma plumbaginoides Plumbago	4-10 in.	Sun	Dry, well drained	White	May-June	Aggressive; shear after bloom.
Coreopsis auriculata 'Nana'	8-12 in.	Sun to part shade	Well amended	Blue	Aug.-Sept.	Foliage turns red in fall.
Dwarf Coreopsis	4-8 in.	Sun	Dry and well drained	Orange-Yellow	June-Sept	Dense compact spreading mounds.
Delosperma cooperi Purple ice plant	2-3 in.	Sun	Well drained	Purple	June-frost	Succulent foliage; to 7000'.
Delosperma floribundum Starburst™ ice plant	2-3 in.	Sun	Dry, well drained	Pink with white centers	June-Sept	Succulent leaves, clump form. Plant Select®1998.
Delosperma nubigenum Yellow ice plant	2-3 in.	Sun	Well drained	Yellow	May-June	Succulent foliage turns reddish-purple in winter.
Delosperma x 'Kelaidis'	2-4 in.	Sun	Dry, well drained	Salmon pink	June-Sept	Succulent leaves, carpet-like. Plant Select®2002.
Mesa Verde™ ice plant	2-4 in.	Sun	Dry, well drained	Pink-purple	June-Sept	Succulent leaves, carpet-like. Plant Select®2002.
Delosperma x 'John Proffit'	2-4 in.	Sun	Dry, well drained	Pink-purple	June-Sept	Succulent leaves, carpet-like. Plant Select®2002.
Table Mountain™ ice plant	6-8 in.	Sun to part shade	Well drained	Crimson	May-July	Dark green; carpet-like habit.
Dianthus deltoideus 'Brilliant'	6-8 in.	Sun to part shade	Well drained	Crimson	May-July	Dark green; carpet-like habit.
Brilliant Maiden Pink	6-8 in.	Sun	Well drained	Deep pink	May-June	Gray-green grass-like foliage.
Dianthus gratianopolitanus 'Firewitch'	6-8 in.	Sun	Well drained	Deep pink	May-June	Gray-green grass-like foliage.
'Spotty'	6-8 in.	Sun	Well drained	Rose-red with white spots	May-June	Gray-green grass-like foliage.

Table 1 (continued): Recommended rock garden plants.

Plant Name	Height	Exposure	Soil Preference	Flower Color	Bloom Period	Remarks
'Tiny Rubies'	4-6 in.	Sun	Well drained	Deep pink	May-June	Pin cushion growth habit with double flowers.
Dianthus plumarius Cottage pink	6-12 in.	Sun	Well drained	Red, pink, white	May-June	Several varieties.
Eriogonum umbellatum Yellow sulfur flower	6-12 in.	Sun	Dry, well drained	Yellow	May-July	Umbrella-like flowers; evergreen mounds of foliage turn reddish in fall.
Gazania krebsiana Tanager™ Gazania	4-6 in.	Sun	Dry, well drained	Orange	May-Sept.	May need some winter protection. Plant Select® 2003.
Geranium x cantabrigiense Cambridge Cranesbill	6-12 in.	Sun to part shade	Well drained	Bright pink	May-July	Spreading, mounded form; foliage turns wine red in fall.
'Biokovo' Biokovo Cranesbill	4-10 in.	Sun to part shade	Well drained	White-pink	May-July	Trailing groundcover; foliage turns red in fall.
Geranium cinereum 'Ballerina' Ballerina Grayleaf Cranesbill	4-8 in.	Sun to part shade	Well drained	Pink-purple	May-Aug.	Deeply divided bright green foliage.
Geranium dalmaticum Compact Rose Cranesbill	4-6 in.	Sun to part shade	Well drained	Rose-pink	May-July	Dense spreading foliage turns red in fall.
Geranium magniflorum LaVeta Lace™ Cranesbill	6-10 in.	Sun to part shade	Well drained	Purple	May-July	Lacy, dark green foliage turns purplish-red in winter. Plant Select® 2003.
Gypsophila repens Creeping baby's breath	4-8 in.	Sun	Well drained	White or pink	June-July	Mat-like habit.
Helianthemum nummularium Sunrose	8-12 in.	Sun	Dry, well drained	Pink	May-June	Mounded habit, silvery foliage.
'Wisley Pink' 'Wisley Primrose'	8-12 in.	Sun	Dry, well drained	Yellow	May-July	Mounded habit, silvery foliage.
Heuchera sanguinea 'Firefly' Firefly Coral Bells	8-18 in.	Sun to part shade	Dry, well drained	Red	May-July	Green foliage, bell-shaped flowers.
'Snow Angel' Snow Angel Coral Bells	8-18 in.	Part shade	Dry, well drained	Pink-red	May-July	Variegated foliage. Plant Select® 2003.
Iberis sempervirens Candytuft	8-12 in.	Sun to part shade	Well drained	White	May-June	Evergreen foliage.
Iris x pumila Dwarf Iris	8-12 in.	Sun	Dry, well drained	Blue or yellow	May-June	Short, stiff clump-forming leaves, several varieties.
Linum flavum 'Compactum' Dwarf golden flax	10-15 in.	Sun	Well drained	Yellow	May-July	Dark green foliage.
Oenothera speciosa White evening primrose	8-12 in.	Sun	Well drained	Pink to white	June-Sept.	Day-flowering.
Osteospermum barberiae 'Compactum' Purple Mountain™ Sun Daisy	8-12 in.	Sun to part shade	Well drained	Purple	April-August	Evergreen clumps of foliage. Plant Select® 1998.
Osteospermum spp. Lavender Mist™ Sun Daisy	8-12 in.	Sun to part shade	Well drained	White to lavender	April to August	Evergreen clumps of foliage. Plant Select® 1998.
Penstemon caespitosus Creeping penstemon	3-6 in.	Sun	Well drained	Blue	May-June	Mat-like; dark green foliage.
Penstemon pinifolius Pineleaf penstemon	6-12 in.	Sun	Dry	Orange-red	June-Sept.	Needle-like evergreen foliage, trumpet-shaped flowers.
'Mersea Yellow'	6-12 in.	Sun	Dry, well drained	Yellow	June-Sept.	Needle-like evergreen foliage, trumpet-shaped flowers.
Phlox subulata Moss pink or creeping phlox	4-6 in.	Sun	Well drained	Pink, white, lavender	April-May	Several varieties based on flower color; may winterburn.
Potentilla nepalensis 'Miss Wilmott' Miss Wilmott cinquefoil	8-12 in.	Sun	Well drained	Pink to red	May-July	Strawberry-like leaves on clump plants.
Prunella laciniata Lacy Self Heal	8-12 in.	Sun to part shade	Moist	Pink	May-June	Dark green fuzzy leaves, mat-forming.
Pulsatilla vulgaris Pasque Flower	6-12 in.	Sun to part shade	Well drained	Blue to purple, red, white	March-April	Silky leaves appear after flowering, followed by long-lasting feathery seedheads.

Table 1 (continued): Recommended rock garden plants.

Plant Name	Height	Exposure	Soil Preference	Flower Color	Bloom Period	Remarks
Saponaria ocymoides Rock soapwort	6-10 in.	Sun	Well drained	Pink	May-July	Shear after bloom; evergreen mat-like foliage.
Saxifraga oppositifolia 'Purple Robe' Purple Robe saxifrage	6-10 in.	Sun to part shade	Well drained	Purple	June-Sept.	Bright green mounds, cup-shaped flowers.
Sedum spp. Stonecrop	Variable 1-15 in.	Sun	Any, well drained	Varies with species	July-Oct.	Some evergreen; some more appropriate as ground covers.
Sedum acre Gold Moss stonecrop	2-4 in.	Sun	Dry, well drained	Yellow	May-June	Evergreen leaves, fast spreading, star-shaped flowers.
Sedum spurium 'Dragon's Blood'	2-4 in.	Sun	Dry, well drained	Rose red	June-July	Evergreen foliage with red edge, turns red in fall.
'Red Carpet'	2-4 in.	Sun	Dry, well drained	Rose red	June-July	Red, wedge-shaped evergreen foliage.
Sempervivum spp. Houseleek	1-6 in., flower taller	Sun	Dry, gravelly	Pink to red	July-Sept.	Succulent, evergreen foliage in rosettes.
Hen and chicks						
Stachys byzantina 'Silver Carpet'	6-12 in.	Sun	Infertile, well drained	Not important	Not important	Rarely flowers; velvety silver foliage.
Silver Carpet Lamb's Ear						
Teucrium chamaedrys Germander	6-12 in.	Sun	Well drained	Purple-pink	July-Aug.	Evergreen; cut back after flowering.
Thymus x citriodorus Lemon thyme	4-12 in.	Sun	Dry, well drained	Pink	June-July	Lemon-scented foliage.
Thymus praecox 'Pseudolanuginosus'	1-3 in.	Sun	Dry, well drained	Infrequent, pink and purple	June-July	Woolly-gray foliage turns purplish in winter.
Woolly thyme						
Thymus serpyllum Mother-of-thyme	1-4 in.	Sun	Dry, well drained	Purple	June-July	Aromatic foliage; mat-forming.
'Pink Chintz'	1-3 in.	Sun	Dry, well drained	Pink	May-June	Pink flowers over mat-like foliage.
Verbena bipinnatifida Valley Lavender™	3-6 in.	Sun	Dry, well drained	Purple	June-Aug.	Trailing stems with deeply cut leaves. Plant Select® 2005.
verbena						
Veronica liwanensis Turkish veronica	1-2 in.	Sun	Dry, well drained	Blue	May-June	Dense mat of small dark green foliage. Plant Select® 1997.
Veronica pectinata Woolly veronica	1-2 in.	Sun	Dry, well drained	Blue to purple	May-July	Gray, mat-like foliage turns purplish in winter.
'Rubra'	1-2 in.	Sun	Dry, well drained	Pink	May-June	Can be evergreen.
Veronica prostrata Prostrate speedwell	2-6 in.	Sun to part shade	Well drained	Blue	May-June	Dense mats, dark green foliage.
Veronica repens Creeping speedwell	1-3 in.	Part shade	Well drained	Blue	May-June	Mat-like habit.
Veronica x hybrida Crystal River™	1-3 in.	Sun to part shade	Well drained	Blue	May-June	Evergreen, small rounded leaves. Plant Select® 2003.
speedwell						
Viola cornuta Horned violet	4-10 in.	Sun to part shade	Moist	Purple	April-July	Tufts of dark green foliage.
Viola corsica Corsican violet	6-8 in.	Sun to part shade	Moist	Purple	April- Sept.	Tufts of dark green foliage. Plant Select® 2003.
Zauschneria garrettii 'Orange Carpet'	4-10 in.	Sun	Dry, well drained	Reddish-orange	Aug.-Sept.	Mounded growth habit with trumpet-shaped flowers. Plant Select® 2001.
Orange Carpet®						
California Fuschsia						
Zinnia grandiflora Rocky Mountain Zinnia	4-8 in.	Sun	Dry, well drained	Yellow	June-Sept.	Flowers turn papery and last into winter.

¹J.E. Klett, Colorado State University Extension horticulture specialist and professor, horticulture and landscape architecture; and R.A. Cox, Extension horticulture agent, Jefferson County.

Colorado State University, U.S. Department of Agriculture, and Colorado counties cooperating. Extension programs are available to all without discrimination. No endorsement of products mentioned is intended nor is criticism implied of products not mentioned.