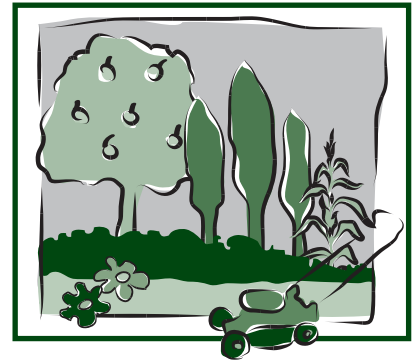


Rock Garden Plants

Fact Sheet No. 7.401

Gardening Series | Flowers



by J.E. Klett and R.A. Cox*

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.



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.

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Table 1: Recommended rock garden plants.

Plant Name	Height	Exposure	Soil Preference	Flower Color	Bloom Period	Remarks
<i>Ajuga reptans</i> Carpet bugle 'Atropurpurea' 'Burgundy Glow' 'Chocolate Chip'	4-10 in. 4-6 in. 4-6 in. 2-4 in.	Shade to part shade Shade to part shade Shade to part shade Shade to part shade	Well drained Well drained Well drained Well drained	Blue, purple Violet-blue Blue Blue	May-June May-June May-June May-June	Spreading ground cover. Bronze-purple foliage. Pink, white and green foliage. Wavy, chocolate-brown foliage.
<i>Alyssum montanum</i> Mountain alyssum	4-10 in.	Sun	Dry, rocky	Yellow	April-May	Gray foliage.
<i>Arabis caucasica</i> 'Snowcap' Snowcap rockcress	6-9 in.	Sun	Well drained	White	April-May	Abundant white flowers over gray foliage.
<i>Arctostaphylos uva-ursi</i> 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.
<i>Armeria maritima</i> Sea Pink	4-10 in.	Sun	Dry, well drained	Pink, white, purple	May-June	Grass-like foliage; several varieties.
'Victor Reiter'	2-4 in.	Sun	Dry, well drained	Pink	April-June	Small mounded plant.
<i>Aubrieta deltoidea</i> 'Purple Gem' Purple Gem Rockcress	4-6 in.	Sun to part shade	Well drained	Purple	April-June	Mounded to spreading; shear after bloom.
<i>Aurinia saxatilis</i> Basket-of-gold	8-12 in.	Sun	Dry, rocky	Yellow	April-May	Grayish-green foliage; shear after bloom.
<i>Campanula carpatica</i> Carpathian harebell 'Blue Clips'	8 in. 6-12 in.	Sun Sun to part shade	Well drained Well drained	Blue-Lilac Blue	June-July June-July	Bright green foliage. Compact mound of bright-green foliage.
'White Clips'	6-12 in.	Sun to part shade	Well drained	White	June-July	Compact mounds of wavy, bright green foliage.
<i>Campanula poscharskyana</i> Serbian bellflower	6-8 in.	Sun to part shade	Well drained	Blue	June-Aug.	Prolific flowers.
<i>Campanula rotundifolia</i> Bluebell	8-12 in.	Part shade	Well drained	Blue	May-Sept.	Bell-like flowers on slender stems.
<i>Cerastium tomentosum</i> Snow-in-summer	4-10 in.	Sun	Dry, well drained	White	May-June	Aggressive; shear after bloom.
<i>Ceratostigma plumbaginoides</i> Plumbago	8-12 in.	Sun to part shade	Well amended	Blue	Aug.-Sept.	Foliage turns red in fall.
<i>Coreopsis auriculata</i> 'Nana' Dwarf Coreopsis	4-8 in.	Sun	Dry and well drained	Orange-Yellow	June-Sept.	Dense compact spreading mounds.
<i>Delosperma cooperi</i> Purple ice plant	2-3 in.	Sun	Well drained	Purple	June-frost	Succulent foliage; to 7000'.
<i>Delosperma dyeri</i> Red Mountain® ice plant	1-2 in.	Sun	Dry, well drained	Orange-red	June-Sept.	Succulent leaves, carpet-like Plant Select® 2007.
<i>Delosperma floribundum</i> Starburst® ice plant	4-6 in.	Sun	Dry, well drained	Pink with white centers	June-Sept.	Succulent leaves, clump form. Plant Select® 1998.
<i>Delosperma nubigenum</i> Yellow ice plant	2-3 in.	Sun	Well drained	Yellow	May-June	Succulent foliage turns reddish-purple in winter.
<i>Delosperma</i> x 'Kelaidis' Mesa Verde® ice plant	2-4 in.	Sun	Dry, well drained	Salmon pink	June-Sept.	Succulent leaves, carpet-like. Plant Select® 2002.
<i>Delosperma</i> x 'John Proffit' Table Mountain® ice plant	2-4 in.	Sun	Dry, well drained	Pink-purple	June-Sept.	Succulent leaves, carpet-like. Plant Select® 2002.

(Table 1, Continued)

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Plant Name	Height	Exposure	Soil Preference	Flower Color	Bloom Period	Remarks
<i>Delosperma</i> 'Pstave' Lavender Ice™ ice plant	2-4 in.	Sun	Dry, well drained	Pink-lavender	June-Sept.	Succulent leaves, Plant Select® 2009.
<i>Dianthus deltoides</i> 'Brilliant' Brilliant Maiden Pink	6-8 in.	Sun to part shade	Well drained	Crimson	May-July	Dark green; carpet-like habit.
<i>Dianthus gratianopolitanus</i> 'Firewitch' 'Spotty'	6-8 in. 6-8 in.	Sun Sun	Well drained Well drained	Deep pink Rose-red with white spots	May-June May-June	Gray-green grass-like foliage. Gray-green grass-like foliage.
'Tiny Rubies'	4-6 in.	Sun	Well drained	Deep pink	May-June	Pin cushion growth habit with double flowers.
<i>Dianthus plumarius</i> Cottage pink	6-12 in.	Sun	Well drained	Red, pink, white	May-June	Several varieties.
<i>Eriogonum umbellatum</i> Yellow sulfur flower Kannah Creek®	6-12 in. 6-12 in.	Sun Sun	Dry, well drained Dry, well drained	Yellow Yellow	May-July May-July	Umbrella-like flowers; evergreen mounds of foliage turn reddish in fall. Foliage turns red in fall, Plant Select® 2007.
<i>Gazania krebsiana</i> Tanager® Gazania	4-6 in.	Sun	Dry, well drained	Orange	May-Sept.	May need some winter protection. Plant Select® 2003.
<i>Geranium x cantabrigiense</i> 'Cambridge Cranesbill' 'Biokovo' Biokovo Cranesbill	6-12 in. 4-10 in.	Sun to part shade Sun to part shade	Well drained Well drained	Bright pink White-pink	May-July May-July	Spreading, mounded form; foliage turns wine red in fall. Trailing groundcover; foliage turns red in fall.
<i>Geranium cinereum</i> 'Ballerina' Ballerina Grayleaf Cranesbill	4-8 in.	Sun to part shade	Well drained	Pink-purple	May-Aug.	Deeply divided bright green foliage.
<i>Geranium dalmaticum</i> Compact Rose Cranesbill	4-6 in.	Sun to part shade	Well drained	Rose-pink	May-July	Dense spreading foliage turns red in fall.
<i>Geranium magniflorum</i> 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.
<i>Gypsophila repens</i> Creeping baby's breath	4-8 in.	Sun	Well drained	White or pink	June-July	Mat-like habit.
<i>Helianthemum nummularium</i> Sunrose 'Wisley Pink' 'Wisley Primrose'	8-12 in. 8-12 in.	Sun Sun	Dry, well drained Dry, well drained	Pink Yellow	May-June May-July	Mounded habit, silvery foliage. Mounded habit, silvery foliage.
<i>Heuchera sanguinea</i> 'Firefly' Firefly Coral Bells 'Snow Angel' Snow Angel Coral Bells	8-18 in. 8-18 in.	Sun to part shade Part shade	Dry, well drained Dry, well drained	Red Pink-red	May-July May-July	Green foliage, bell-shaped flowers. Variegated foliage. Plant Select® 2003.
<i>Iberis sempervirens</i> Candytuft	8-12 in.	Sun to part shade	Well drained	White	May-June	Evergreen foliage.
<i>Iris x pumila</i> Dwarf Iris	8-12 in.	Sun	Dry, well drained	Blue or yellow	May-June	Short, stiff clump-forming leaves, several varieties.
<i>Linum flavum</i> 'Compactum' Dwarf golden flax	10-15 in.	Sun	Well drained	Yellow	May-July	Dark green foliage.
<i>Nepeta x 'Psfike'</i> Little Trudy® catmint	8-12 in.	Sun	Well drained	Lavender	June-Sept.	Low, spreading growth habit. Plant Select® 2008.
<i>Oenothera speciosa</i> White evening primrose	8-12 in.	Sun	Well drained	Pink to white	June-Sept.	Day-flowering.

(Table 1, Continued)

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Plant Name	Height	Exposure	Soil Preference	Flower Color	Bloom Period	Remarks
<i>Osteospermum barberiae</i> 'Compactum' Purple Mountain® Sun Daisy	8-12 in.	Sun to part shade	Well drained	Purple	April-Aug.	Evergreen clumps of foliage. Plant Select® 1998.
<i>Osteospermum</i> spp. 'Avalanche' ^{PPAF} sun daisy	8-12 in.	Sun	Well drained	White	April-Aug.	Evergreen clumps of foliage. Plant Select® 2011.
<i>Osteospermum</i> spp. Lavender Mist® Sun Daisy	8-12 in.	Sun to part shade	Well drained	White to lavender	April- Aug.	Evergreen clumps of foliage. Plant Select® 1998.
<i>Penstemon caespitosus</i> Creeping penstemon	3-6 in.	Sun	Well drained	Blue	May-June	Mat-like; dark green foliage.
<i>Penstemon pinifolius</i> 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.
<i>Phlox subulata</i> Moss pink or creeping phlox	4-6 in.	Sun	Well drained	Pink, white, lavender	April-May	Several varieties based on flower color; may winterburn.
<i>Potentilla nepalensis</i> 'Miss Wilmott' Miss Wilmott cinquefoil	8-12 in.	Sun	Well drained	Pink to red	May-July	Strawberry-like leaves on clump plants.
<i>Prunella laciniata</i> Lacy Self Heal	8-12 in.	Sun to part shade	Moist	Pink	May-June	Dark green fuzzy leaves, mat-forming.
<i>Pulsatilla vulgaris</i> 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.
<i>Saponaria ocymoides</i> Rock soapwort	6-10 in.	Sun	Well drained	Pink	May-July	Shear after bloom; evergreen mat-like foliage.
<i>Saxifraga oppositifolia</i> 'Purple Robe' Purple Robe saxifrage	6-10 in.	Sun to part shade	Well drained	Purple	June-Sept.	Bright green mounds, cup-shaped flowers.
<i>Sedum</i> spp. Stonecrop	Variable 1-15 in.	Sun	Any, well drained	Varies with species	July-Oct.	Some evergreen; some more appropriate as ground covers.
<i>Sedum acre</i> Gold Moss stonecrop	2-4 in.	Sun	Dry, well drained	Yellow	May-June	Evergreen leaves, fast spreading, star-shaped flowers.
<i>Sedum spurium</i> '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.
<i>Sempervivum</i> spp. Houseleek Hen and chicks	1-6 in., flower taller	Sun	Dry, gravelly	Pink to red	July-Sept.	Succulent, evergreen foliage in rosettes.
<i>Stachys byzantina</i> 'Silver Carpet' Silver Carpet Lamb's Ear	6-12 in.	Sun	Infertile, well drained	Not important	Not important	Rarely flowers; velvety silver foliage.
<i>Teucrium chamaedrys</i> Germander	6-12 in.	Sun	Well drained	Purple-pink	July-Aug.	Evergreen; cut back after flowering.
<i>Thymus x citriodorus</i> Lemon thyme	4-12 in.	Sun	Dry, well drained	Pink	June-July	Lemon-scented foliage.
<i>Thymus praecox</i> 'Pseudolanuginosus' Woolly thyme	1-3 in.	Sun	Dry, well drained	Infrequent, pink and purple	June-July	Woolly-gray foliage turns purplish in winter.
<i>Thymus praecox articus</i>	1-4 in.	Sun	Dry, well drained	Purple	June-July	Aromatic foliage; mat-forming.
Mother-of-thyme	1-3 in.	Sun	Dry, well drained	Pink	May-June	Pink flowers over mat-like foliage.
<i>Verbena bipinnatifida</i> Valley Lavender® verbena	3-6 in.	Sun	Dry, well drained	Purple	June-Aug.	Trailing stems with deeply cut leaves. Plant Select® 2005.

(Table 1, Continued)

Table 1: Recommended rock garden plants.

Plant Name	Height	Exposure	Soil Preference	Flower Color	Bloom Period	Remarks
<i>Veronica liwanensis</i> Turkish speedwell	1-2 in.	Sun	Dry, well drained	Blue	May-June	Dense mat of small dark green foliage. Plant Select® 1997.
<i>Veronica pectinata</i> Woolly speedwell	1-2 in.	Sun	Dry, well drained	Blue to purple	May-July	Gray, mat-like foliage turns purplish in winter.
<i>Veronica prostrata</i> Prostrate speedwell	2-6 in.	Sun to part shade	Well drained	Blue	May-June	Dense mats, dark green foliage.
<i>Veronica repens</i> Creeping speedwell	1-3 in.	Part shade	Well drained	Blue	May-June	Mat-like habit.
<i>Veronica x hybrida</i> Crystal River® speedwell	1-3 in.	Sun to part shade	Well drained	Blue	May-June	Evergreen, small rounded leaves. Plant Select® 2003.
<i>Viola cornuta</i> Horned violet	4-10 in.	Sun to part shade	Moist	Purple	April-July	Tufts of dark green foliage.
<i>Viola corsica</i> Corsican violet	6-8 in.	Sun to part shade	Moist	Purple	April- Sept.	Tufts of dark green foliage. Plant Select® 2003.
<i>Zauschneria garrettii</i> 'Orange Carpet' Orange Carpet® California Fuchsia	4-10 in.	Sun	Dry, well drained	Reddish-orange	Aug.-Sept.	Mounded growth habit with trumpet-shaped flowers. Plant Select® 2001.
<i>Zinnia grandiflora</i> Rocky Mountain Zinnia	4-8 in.	Sun	Dry, well drained	Yellow	June-Sept.	Flowers turn papery and last into winter.