

Colorado Mountain Gardening Basics

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There is no doubt that gardening in the mountains of Colorado can be challenging. Sunlight is usually of high intensity and the humidity generally is low. Combinations of cool nights, a short growing season, drying winds, steepness of slopes, aspect, topography, and soil all influence how well plants perform in this climate.

Site Choice

First evaluate your site. The best place to grow flowers is in a site that already supports some grass, wildflowers, or even weeds. This will usually be in a fairly sunny, open area. If the area has weeds, control them before planting something new. Aspen groves are an ideal environment for many plants because of the enhanced soils, but other open areas also work well.

Soils

Soil preparation is often the key to growing healthy plants in the mountains, particularly for non-native plants. In general, it is beneficial to add organic matter to any type of mountain soil, although in poorly drained soils (clay) it is best to add some each year, rather than all at once, in order to avoid salt buildup. Incorporate 2 to 3 inches of organic matter (or 3 cubic yards per 1,000 square feet of garden), such as alfalfa pellets, compost, or aged manure, to a depth of 6 to 12 inches. Avoid using Colorado mountain peat, as it is a non-renewable resource, has too fine of a texture, and is alkaline.

Raised Beds

Raised beds can solve many problems for mountain gardeners and can be created with weed-free soil and are especially beneficial if native soils are poorly drained or very rocky and hard to dig. They also warm faster in the springtime and can help to protect the plants from burrowing rodents if a fine-wire mesh is tacked onto the bottom before the soil is added.

Microclimates

The successful mountain gardener learns to exploit or create microclimates. These warm or hot pockets are the places to experiment with plants that need more heat during the growing season to come into flower before frost. If the site is protected in the winter, this is also a place to experiment with less hardy plants. Rock formations or walls (natural or created), reflective materials, windbreaks, using south slopes or other heat sink options can raise soil temperatures.

Consider the flow of air; at night, cool air drains down to low spots. Valley floors may be over 10 degrees F cooler than surrounding gardens on hillsides above the valley floor.

Plant Choice

Catalog references to ‘woodland plants’ are seldom good choices because it usually refers to Eastern woodland conditions.

Be cautious with late-blooming plants or plants that are heat-lovers, as they probably won’t bloom before frost (late September in Woodland Park.) Plants that bloom in spring to early summer (cool season plants) are more reliable. In general, choose plants that are hardy to zones 2 to 4.

Native plants are some of the best plants for the mountains because they are already adapted to the harsh conditions. .

Local nurseries and garden centers (rather than nationwide chain stores) are also good resources, as they have more knowledge of local growing conditions.

Planting

In mountain areas, the best time to plant flowers is either immediately after the last frost (around Mid June for Woodland Park) or during the rainy season (generally mid July.) Planting in late summer or fall decreases the chance of survival, especially for borderline-hardy plants, and is less preferable. It is best to choose plants that have been grown outside at local nurseries.

Approximately two weeks before the anticipated planting time, reduce the amount of water the plants receive and expose the plants to increasingly longer periods of outdoor conditions. Start by placing the plants in a protected location, and gradually increase the exposure to sun and wind. Be prepared to provide temporary cover (frost caps, floating row covers, or even bed sheets) if the temperatures threaten to dip below freezing at night.

Watering

Determine your source of water. If it is a well with a household-only use permit (where no outside watering is permitted), which applies to most wells drilled after 1972 on less than 35 acres; you can minimize or eliminate your water inputs by “planting with the precipitation”. Plants should be watered on the day they are planted and then mulched to retain moisture. Wildflowers and native grasses sown in the fall also have little to no watering needs.

For questions regarding produce, landscape, and horticulture questions; please call 719-686-7961, visit our website at <https://teller.extension.colostate.edu/programs/gardening-horticulture/> or visit our booth at the Woodland Park farmers’ market.