Spring Challenges of a Mountain Aerie By Francie McGowan

Spring has arrived up here in the mountains above 4,000 feet. Or has it? While rain and sun drench the lower foothills, snow, interspersed with warm, sunny days is wreaking havoc with higher mountain gardens. Gardening at higher altitudes is an ongoing challenge. Robert Frost perfectly encapsulated the effect of April in his poem, "Two Tramps in Mud Time,"

The sun was warm but the wind was chill You know how it is with an April day, When the sun is out and the wind is still, You're one month on in the middle of May. But if a cloud comes over the sunlit arch, A wind comes off a frozen peak, And you're two months back in the middle of March.

That pretty much describes what happened this last week up in the Sierra. After all the plants began leafing and basking in the sunlight, dark nimbus clouds loomed on the horizon and by daybreak, eight inches of snow covered the deck.

The effects of higher altitude on the landscape are harsh. The ground is drier up the mountain and water evaporates faster. The climate is colder, often with freezing temperatures at night, even in the late spring. The sunlight is more direct and intense, but the shadows from the pines and cedars cast cool, dark swatches of shade across the land. Mountainous terrain results in more varied microclimates.

Microclimates are a boon or a bane to the mountain gardener, depending on the gardener's prowess in plant selection. It is important to the success of any garden to know what the plants need in terms of temperature and water. Drought-resistant native plants will thrive on drier, hilly areas of the garden, while flowers and shrubs with greater water needs will be happier on flatter, more protected areas of the landscape. Creating rock gardens or raised beds are two ways to cope with dry, rocky hillsides because you can control the soil content.

Soil amendment is a must as you climb in altitude. Granite breaks down and causes flinty, sandy conditions in some areas, while other areas have hard clay soils. When planting vegetables at higher altitudes, raised beds with amended soil is the best way to provide a nutrient-rich environment. Because of the - zillions! - of pine needles and leaves shed by the conifers, the soil is very high in acidity. Either buy plants that like acidity - like roses, rhododendrons, ferns, azaleas, blueberries, columbine, lupine and most fruit crops - or amend the soil to make it more alkaline.

Another solution to the dry air and fast rate of water evaporation at higher altitudes is to use mulch. Mulching plants at 4,000 feet or above protects their root systems from frost and snow in the winter, and scorching sun in the summer. It is essential to slowing water run off and evaporation. Compost is a good organic way to amend soil by mixing it in, or to use as mulch by

spreading it over the surface of the soil. Mulch also inhibits weed growth and harmful insect infestation.

Late frosts and snow flatten early bloomers like daffodils and irises. There is nothing more jolly than a hillside of daffodils or more woebegone than those same flowers squished to the ground by snow after they have bloomed. They are hardy and deer-resistant, though, so often pop right back up after the snow has melted. They don't seem to mind the rocky, craggy outcropping of the mountainside and need the snow-soaked ground after a long, white winter. Since they are finished blooming by summer, watering is not an issue. The snow melt provides plenty of moisture for their entire blooming season.

Trees like ginkgo, crape myrtle, and magnolia, though they grow beautifully at the 2,000 foot level, do not fare well at higher altitudes. Although local nurseries often list the zones and cold-hardiness of plants, they never talk about altitude. Some research is necessary to learn what grows up the mountains in order to avoid costly and discouraging mistakes. Once you discover what does grow at your level, use those as your main landscaping plants. You can fill in areas between with annuals or semi-annuals to create a colorful and varied garden.

The challenges of mountain gardening are great but very rewarding. One of the pleasures of living up the mountain is being closer to the wilderness and enjoying the gentle breezes of summer wafting through a naturally-shaded garden. Dazzling riots of color pop out between the evergreens where the sun pierces through the pines and cedars. The incense of the cedars mixed with the gentle scent of wisteria blossoms make this mountain aerie well worth the effort it took to develop.

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