



## Winter mulch



*Mulch demonstration area at Cooperative Extension's  
Outdoor Education Center*

Mulch is widely recognized as an important component in any garden, or it should be. A multi-purpose element, it serves both aesthetic and practical purposes. It is one way to connect the varied plantings in a landscape, covering bare soil with a consistent layer that can create a unified theme. In any climate, and certainly

in a desert, mulch is an ecologically important way to conserve soil moisture and control weeds. Almost any mulch material – straw, wood chips, bark, gravel or even shredded newspaper – will work. Each has its most appropriate use, but they all serve similar roles.

During the summer, mulch is a very simple way to protect the lowest part of a plant – its roots and the stem base. Its shade shields the soil from the high heat of our blazing sun. Plant roots experience less stress when they are protected from temperature and moisture extremes. Because of this cooling action, even plants from more temperate areas can be grown successfully here in the Mojave.

It is more than a summer lifesaver; however, mulch can benefit plants in the wintertime as well. This might be less obvious. After all, weeds tend to be less of a problem in the dead of winter, and cooler, shorter days mean that many plants are growing more slowly, if at all, so they tend to need less water. Why would mulch be such an important consideration for perennial plants like trees and shrubs in this season?

People who live in southern Nevada know that desert winters, particularly winter nights, can be surprisingly chilly, even freezing at times. The stress is extreme, especially during freaky winters when nighttime temperatures can drop significantly below freezing. Very few plants survive thrive when it is less than about 28°. Sensitive plants can suffer from something called “chilling injury”, which is very different from frost damage! Cool-tender plants might be seriously damaged when the temperatures have fallen only into the low to mid 40’s. Many horticultural specimens that originated in hot, dry climates have not had the opportunity to

evolve the capacity to tolerate those relatively mild winter temperatures, much less when they drop down lower than the mid 20's that we often experience. Despite that, adventurous desert gardeners frequently want to try introducing them.

For any marginal landscape plants, mulch can be viewed as a kind of protective insulation, something like a thermal blanket, or insulation in the ceiling. This is certainly no less important than it would be during hot weather. When their roots are protected by an additional layer of protection, cold-intolerant plants are less vulnerable to extremely cool temperatures. Plants generally benefit when they experience a narrower range of heat and cold.

Over the course of a year, mulch moderates soil temperatures – keeping them warmer in the winter and cooler in summer, playing a similar role as the insulation in our homes. As an element of the landscape, there are choices of materials that can be an attractive addition throughout the garden.

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