



## Mulch and soil

When temperatures rise in Southern Nevada, gardening becomes even more demanding. Working exclusively with plants adapted to extreme desert conditions is less so, but many landscape and garden plants used locally are nothing like "desert-adapted". Many popular plants evolved in areas with very different climates: cooler summers, warmer winters, and no matter where these plants are from, they likely originated where they received more rainfall than they get here – the Mojave Desert, the driest region in North America.

Using water efficiently requires planning and effort, but it is not terribly difficult. Keeping plants thriving under our conditions requires creativity, and good gardeners are always creative! Simply dousing plants with more irrigation will not keep a garden healthy during a desert summer.

The first water saving practice is improving the soil. The more compost added to the soil, the more water it will hold. It is the difference dropping water on a sponge and dropping water on a concrete block. Fertile soil behaves like a sponge, holding water even during dry hot times. Improving the soil is a constant process. Liquid fertilizer is not enough. More compost needs to be added every time a non-desert garden is planted. Even desert gardens are improved with the addition of a small amount of compost.

Some plants tolerate heat and drought better than others, so grow them when conditions get difficult. Do not plant spinach or lettuce when temperatures rise; instead, try pumpkins, sweet potatoes or melons.

There are other ways to garden more water-efficiently. Shade cloth protects plants by blocking some of the most direct and burning sunlight.

Perhaps the most important way to conserve water in the garden is mulching. Mulch can be almost anything placed on the soil surface. There are different kinds of mulches, but they fall into two categories: organic, which breaks down slowly into smaller compounds; and inorganic, which does not decompose.

Organic mulches are things that had been alive – shredded bark, straw, even paper. You put a thick layer of them on the surface, perhaps 3 inches deep. The inorganics include rock and landscape fabric mulch. We once advised using black plastic, but no longer, since it cannot be reused, hardly breaks down, and takes up too much landfill space.

All mulches do at least two things in addition to unifying a landscape. Covering the soil saves labor as it decreases the number of weeds that appear in the garden, and it lowers the rate of evaporation from the soil, so you will save water. It will also help your garden to survive during the most stressful times by keeping the soil temperature more even. If you want more information, we have a number of publications about mulch at the Cooperative Extension office.

The type of plant dictates which mulch to use. Organics are fine for vegetables, as well as many flowers and shrubs, or whenever you are not using native or desert-adapted plants. A layer of mulch will also keep the soil temperature down, which benefits a lot of garden plants. Rock is best for desert landscapes, as it mimics a natural desert appearance.

All plants benefit from some kind of mulch, as do our landscapes as a whole.

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*Mulch demonstration area at the  
Outdoor Education Center*