

## Protecting plants from cold

On the weather forecast the other day, the meteorologist was waxing eloquent about the upcoming fall season. For gardeners, autumn is a welcome change – we can stay outdoors with our plants for considerably longer when we are not becoming dry-roasted in the summer sun.

Cool temperatures mean it is time to consider planning the fall garden – anything we grow for its roots (radishes, for instance) or leaves (any of the greens) – will do better in times of less heat and shorter days.

Even these cool season crops are not able to tolerate much freezing, however brief the period below 32°F may be. Most years, we experience a few nights when frost damage is a problem. Sensitive landscape plants can be damaged, but if they have established root systems, they may survive through the tough times. The above ground growth of aloe vera, for example, can become damaged severely in the cold, but if that frozen part is removed, a healthy root system will produce new shoots in the spring. Bougainvillea is another plant we try to grow despite its being only marginal in much of Southern Nevada. Here again, if the plant has a well-established root system, it will probably survive.

In of these cases, as with many other landscape plants, protection can be essential.

We discuss mulch for summer water conservation and weed control, but it has an important role during the winter. Whether one uses organic mulch, like straw or wood chips, or rock mulch in a desert landscape, it will affect the soil temperature. Under mulch, the amount of heat or cold around the root system is modulated. It does not get so warm during the day, but does not lose so much warmth during chilly nights. Mulch can make a world of difference.

Other forms of protection are available and particularly appropriate for vegetable gardens. Using them can make a year-round edible garden possible.

Most of the plants we grow for food had their origins in climates considerably different from Southern Nevada. Certainly those areas had higher rainfall and lower light intensity. We have made adaptations such as irrigation and planting so as to protect from the most intense afternoon sun. Many of those plants would not survive during the winter where they first evolved, but things are different here where snow is rare and temperatures are unlikely to drop much below 20°F. Still, protecting them from cold weather is important.

If nighttime temperatures will be lower than 35°F, cover the plants in the garden bed with a layer of row cover. This is a very lightweight spun bond fabric, similar to interfacing used in sewing. It



*Residents loading FREE mulch at the Research Center and Demonstration Orchard.*

can be purchased at gardening supply centers or online. Another weather-defying technique is using plastic sheeting over the raised bed, creating an environment like a greenhouse. This can remain on the bed curing cold snaps, then rolled up when it becomes warmer.

A fresh salad or stir-fry in January is a reward for this extra bit of work!

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