



Keeping Plants Alive under Drought or Water Restrictions

by Michelle Le Strange, UC Master Gardener

The recent declaration that California is in a state of drought should have all residents on heightened alert about doing their share in conserving water in the home, the garden, and the community. We can survive the shortfall of water with minimum damage and discomfort, if we all pull together.

In the garden, plants that do not receive enough water will eventually show signs of water stress. Although plants vary in the amount of water they require for optimal growth and development, most exhibit characteristic symptoms when they are in need of water. If water-stressed plants are not watered at an early stage of water deficit, then irreversible damage will occur. To avoid loss of landscape plants it is crucial to check plants regularly for symptoms of water stress, preferably during the afternoon when symptoms are most evident. Common symptoms include:

- wilting or drooping leaves that do not return to normal by evening,
- curled or chlorotic (yellow) leaves that may fold or drop, or foliage that becomes grayish and loses its green luster,
- new leaves that are smaller than normal,
- lawns that retain a footprint for several minutes.

Below are suggested methods to sustain various landscape plants during water restrictions and severe drought from UCCE Farm Advisors, Janet Hartin (San Bernardino County) and Ben Faber (Ventura County).

Ornamental Trees. Most homeowners wisely choose to use whatever water is available to save their mature landscape trees. One or two deep irrigations several weeks apart in spring and summer will often keep these valued plants alive through summer, especially if roots are relatively deep. Although mature trees can often survive one season with only one or two deep waterings during the spring and summer, two seasons without enough water can result in severe drought stress and even death. Drought-stressed trees can be more prone to damage from diseases and insects.



Fruit and Nut Trees. Keeping fruit and nut trees alive during severe water shortages is also possible, although crop production will probably be greatly reduced or stop. To produce a good crop, deciduous fruit and nut trees need adequate water in their root zones continuously from bloom until harvest. Citrus trees need adequate soil moisture during spring to set fruit and steady water in summer and fall to produce acceptable size, numbers, and quality of fruit. However, fruit and nut trees can be kept alive with a few early-season water applications, but they may not set much fruit.

Shrubs. Most established shrubs can survive long periods of dry soil. Thorough spring watering and one or two thorough waterings in the summer keeps most well-established shrubs alive for at least one season.

Ground covers. Ground covers often survive on about half the amount of water they would receive under optimal conditions, although some dieback may occur. To avoid serious drought stress, they should be watered at least every 3 to 6 weeks from April through September, depending on location and soil conditions.

Lawns. Warm-season lawns of bermudagrass, St. Augustine, zoysia, and buffalograss are more drought-efficient than cool season lawns of tall fescue and ryegrass. Warm season lawns may come back after several months of dryness. Cool season grasses may die within a month or two of receiving no water. Watering only once or twice a week and cutting the length of irrigation down to ½ of that recommended in the UC Lawn Watering Guide for the San Joaquin Valley and foothills

http://ucanr.edu/sites/UC_Master_Gardeners/files/138934.pdf will help get your lawn through the drought.

Once any lawn stops receiving adequate moisture, it will gradually turn brown and go dormant over time. A lawn that recently turned brown from drought can often be revived with regular, thorough watering.

Future articles will provide more tips and details on managing gardens and landscapes during drought and water restrictions.

January 23, 2014