



## Gardening in the Summer Heat

by Anne Skinner, UC Master Gardener

I'm getting tired of the summer heat. Imagine how it feels if you are a shrub or tree and are literally rooted in place. Our recent winter with low rainfall left our plants without reserves to cope with the heat of summer and it has been a long hot summer. Even with fall approaching, we need to continue to monitor our plants for water stress.

The symptoms of too little or too much water can look very similar. **An acute water deficit** occurs when water loss from the leaves increases, during extreme heat or windy conditions or when the water supply decreases suddenly. Many plants will wilt at the hottest part of the day, but recover overnight if the problem does not persist.

A **chronic water deficit** causes slow growth or stops growth altogether. Leaf color may change and deciduous trees may drop their leaves prematurely. Prolonged water stress causes shoot and branch dieback. Chronically water stressed plants have less resistance to pests, leading to injury from insects or diseases. Leafy plants have a permanent wilting point, beyond which, they cannot be revived.

**Container plants and plants in small areas limited by concrete have a reduced volume of soil.** This limits the water available in the root zone. Environmental factors, such as high light intensity, wind, temperature and relative humidity determine the evaporative potential of the plant's location. Plants should be checked daily for their water status. A quick and simple method is a moisture meter. The probes are pushed into the soil and register from dry to moist. The meter can be found at home improvement stores for about \$12-15. They are especially handy with plants set in a saucer to keep water off the patio. The soil on the top may feel dry to touch, but the meter will detect if the pot is not draining and the roots are actually sitting in water. If the plant is in water logged soil, the roots cannot take up oxygen, nutrients or water and the plant will die.



Using a moisture meter will help determine when it is time to water a container plant.

**Spread mulch on the ground around trees and shrubs to keep moisture in and heat away from the roots.** Mulch needs to be kept away from the crown of the plant to avoid fungal diseases. If the plant is on a drip irrigation system, the emitters need to be checked regularly for clogging, displacement by lawn equipment, damage from gophers or inadequate size for the plant. As the plant or tree grows, it will require additional water.

**Using a hose timer will save water when you use a sprinkler to water a stressed plant.** An alternative is using the kitchen timer to avoid forgetting that the hose is running and wasting water. Fall is the best time to plant many perennial plants, but they will need extra water to get established when the temperature is still high.



Using a hose timer will turn water off automatically.

**Brown spots in the lawn?** First, check the sprinkler timer and system, power outages from lightning storms can require resetting the timer. Next, run the system manually to check the sprinkler heads are not damaged or clogged, the amount of water being applied and the coverage of each sprinkler head. A can test- setting tuna cans out on the lawn, running the sprinkler for 20 minutes, then measuring the water in each can-is a quick check of sprinkler output and coverage.

Continue to mow the lawn with the mower set high. The taller grass blades shade the roots of the plant, hold in moisture and keep sun from reaching weed seeds in the soil. Irrigate the lawn deeply, not small amounts daily. Shallow irrigation encourages weeds, especially crabgrass which thrives in summer heat.

#### **Is summer the time to fertilize?**

Check the label on the fertilizer for the optimal temperature for application. Usually this is less than 85 degrees; otherwise the fertilizer can burn the plant. It will also encourage new plant growth, which is more stress for a plant coping with the heat.

Keep your fingers crossed that fall arrives soon; people and plants will feel relief from the heat.

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