



## Drought and Heat Waves Creating Stressed Plants

By Pamm Cooper, UConn Home & Garden Education Center

Here at the UConn Home & Garden Education Center we have been getting questions about lawn and garden issues that have been particularly widespread in the state. Because of the exceptional heat and drought conditions this year, lawns, trees, shrubs and gardens are showing signs of stress.

If you have plants in pots or window boxes, keeping them watered sufficiently is only half of the problem with certain annuals. While proper watering is key, some plants grown in containers become stressed by heat as well, especially if containers are dark in color. Soil will become hot unless these containers are put where they will receive some afternoon shade. Sometimes small or crowded containers may need to be watered more than once a day when temperatures soar to the high 80s or 90s F.



Even perennials of certain species that normally do not need supplemental water may be stressed when heat is coupled with an extended period of drought conditions. If perennial plants are wilting, it is a good idea to give them water until they recover. Watering once a week with 1 ½ inches of water is normally recommended during the summer if rainfall is lacking. As a general

rule of thumb, one should not water foliage in the late afternoon as disease problems may occur if foliage does not dry before night sets in. However, if that's the only time available to water and plants are wilting, just try to direct the water to the roots and not spray the foliage.

Trees that have been planted recently usually require supplemental watering during heat and drought conditions for as many years as is equal to the inches in diameter the trunk was the year it was planted. For example, a crabapple planted with a two-inch diameter trunk may require supplemental watering for two years after planting. After that, the root system should be able to supply water unless a summer like this one comes along. Water if leaves start to fold, as this is an indicator of water stress.

Lawns that did not receive any rainfall of supplemental watering may be brown and crunchy at this time. It may not be clear if the grass will recover when temperatures cool and rainfall occurs. The ideal time to seed or renovate a lawn is from August 15- September 15, so now is a good time to think about seeding dead or thin areas. As long as drought and high heat conditions are ending and seed can be kept moist to ensure good germination, lawns can be seeded now. Do not allow seed to completely dry out.

Choose a lawn grass species that is suited for your soil and environmental conditions. There are many cool season grass cultivars that have been developed for various lawn conditions. Turf-type tall fescues are especially good for drought conditions and soils with a lower soil pH than bluegrass or rye grass can tolerate. They do need a deep soil, as most can root two or more feet deep. For poorer soils and sun conditions, fine-leaved fescues can be used. A mix of hard, Chewings and creeping red fescues is a good blend for any lawn unless the soil tends to be moist.

Some vegetables like tomatoes, squash and peppers may have suffered from blossom end rot this summer either because of lack of calcium and/or uneven watering as fruit was developing. Plants require calcium for cell wall development. Limestone, which contains calcium, is added to soils to bring the pH into the mid-6 range, which vegetables prefer. Calcium and other nutrients are taken up by plant roots as they take up water. This condition can occur both in the ground, or in pots that had too much organic matter such as peat in the soil mix when not enough calcium is available. Because of excessive temperatures and dry conditions, watering vegetables can be hard to get right, especially if plants are grown in containers. Get a soil test to see if the pH needs to be amended for soils if blossom end rot was a problem.

Tomatoes of certain varieties also may exhibit a condition called yellow shoulders, which is an effect of long periods of temperatures over 90 degrees. Insufficient potassium and other nutrients as fruit is developing is also thought to play a role in this disorder. There is really nothing that can help with this heat-related injury as we cannot regulate that.

Be alert to what is happening in your own back yard, for the sooner you discover any problems the better. Check out the UConn Home & Garden Education Center's fact sheets for advice on lawns, landscapes, and other gardening subjects. Here's hoping for some needed rainfall and cooler temperatures to help our plants recover from this trying summer.

If you have questions on drought stressed plants or for other gardening inquiries, feel free to contact us, toll-free, at the UConn Home & Garden Education Center at (877) 486-6271, visit our website at [www.homegarden.cahnr.uconn.edu](http://www.homegarden.cahnr.uconn.edu) or contact your local Cooperative Extension center.