

## Moderate Drought Conditions

By Susan Camp

Yes, the title of this column is accurate. All of coastal Virginia was designated in Moderate Drought Conditions (D1) as of October 29, 2024 on the U.S. Drought Monitor, produced at the University of Nebraska-Lincoln in partnership with the USDA and NOAA. ([drought.monitor.unl.edu](http://drought.monitor.unl.edu)). Go to [drought.gov/states/virginia](http://drought.gov/states/virginia) for more localized information on drought conditions in our region.

We didn't have enough rain on the Middle Peninsula in October to keep our plants and trees hydrated, but we enjoyed beautiful, clear, sunny days with pleasant temperatures and low humidity.

Virginia is considered "water rich" with more than 40 inches of precipitation annually, but Mother Nature hasn't favored us over the last few months with sufficient rain to keep field crops like corn from burning up. Unfortunately, it is likely that drought conditions will continue through November.

Home gardeners, too, have faced the loss of some food crops, perennials, and young shrubs and trees. We are seeing early leaf color change and leaf drop unrelated to normal seasonal temperature change. The fallen leaves are dry and crunchy underfoot. Tree nuts are dropping early this year. Stock ponds and other water supplies are drying up. To make a bad situation worse, wildfires can become a byproduct of prolonged drought.

From the perspective of climate change, we can expect increased temperature rise over the coming years, leading to the probability of more frequent and prolonged periods of drought. As gardeners, we need to evaluate the way we currently provide water for our trees and plants and make changes that will provide necessary irrigation, utilizing methods that reduce waste of valuable water.

Plants are composed of 75 to 90% water and need a regular supply to grow and thrive, about one inch per week during the growing season. If the water supply is interrupted for more than a week or two, plants will begin to show the effects of dehydration.

Water is utilized in photosynthesis to convert it, the sun's energy, and carbon dioxide into carbohydrates for nutrition. Adequate water also is necessary to transport nutrients to tissues and provide turgor or rigidity to maintain plant shape.

Although water is deficient during a drought, the soil nutrients remain. They are neither lost nor changed in a dry spell, but in the event of a sudden, heavy rainstorm after several weeks of drought, nutrients can wash away with clay and topsoil. The addition of organic material to clay and sandy soils each growing season improves soil structure. The addition of a layer of natural mulch material around the bases of plants and trees helps to conserve moisture.

It is now November, and many gardeners are asking, “Should I continue to water my garden in the fall? Won’t I cause my perennials and shrubs to awaken from dormancy and produce buds that will freeze if the temperature drops suddenly?”

The answer is to keep watering perennials, shrubs, and trees until the ground freezes. Irrigation is especially important during a period of drought for newly planted perennials and immature shrubs and trees, including evergreens, to help new roots grow.

Water deeply every 1 to 3 weeks until the soil is saturated to about 6 inches. Irrigate container plants and annuals lightly just once a week to prevent root rot. Trickle or drip irrigation and soaker hoses are the most effective watering methods, allowing water to soak slowly into the soil. These methods help to reduce water waste and prevent damage to leaves and stems.

When the temperatures grow cooler or we begin to have sufficient rain to take us out of drought conditions, taper your watering time and amount to prevent root rot. When frost is finally predicted, usually between November 6<sup>th</sup> and 20<sup>th</sup> in our region, water one last time before winter sets in; otherwise, continue watering whenever the ground feels dry to the touch, but do so with a light hand to prevent root damage.

Finally, avoid open outdoor bonfires and firepits until drought conditions have eased.