

FIVE BEST PRACTICES FOR GARDENING IN A DROUGHT

By Maritta Perry Grau, Frederick County Master Gardener, August, 2024

How many times this summer have you watched rainstorms evaporate into nothing? What have you tried to ensure that your flowers, vegetables, trees, and shrubs are getting enough water?

The University of Maryland Extension has many wonderful suggestions to help you garden even during drought. In the article, “Conserve Water in Your Landscape,” Christa Carignan, horticulturist and coordinator for the University of Maryland Extension’s Home & Garden Information Center, has compiled a number of suggestions from previous articles to help us garden successfully during this summer’s drought. Below are just five suggestions, or “best practices,” all of which revolve around ways to retain water in the soil, despite the drought.

Best Practice 1: Amend the soil in lawn and garden

Regularly adding organic matter, such as compost, manure, and even cover crops, to your garden increases the soil’s water-holding capacity, since soils with more organic matter are not as compacted, allowing rainwater and irrigation water to soak in more gradually. And the more gradual the water absorption is, the deeper the water goes and the longer it stays in the soil.

Best Practice 2: Group together plants with similar watering needs

By grouping together those plants with similar watering needs, you can more easily control where you need to direct the water to the plants. For example, along one edge of our woodland garden, we have a few Japanese painted ferns interspersed with impatiens (I know, I know; they aren’t natives). All need a fair amount of water every couple of days. On the other hand, the native ostrich ferns (*Matteuccia struthiopteris*), deeper into the wooded, shady area, have received very little extra water, and they look great!

And, of course, the weeds will compete with your beloved flowers, vegetables, and shrubs for that all-important life-giving water. Despite the lack of water in these summer months, those darn bindweeds, nightshade, and thistles grow rapidly—because, like other natives, they have deep, deep roots. Unfortunately, when we dig up the plant, it’s almost impossible to get all of the root, which just encourages regrowth from the broken roots.

Best Practice 3: Add drought-tolerant natives

Include native plants in your gardens; experts recommend that you aim for at least 50 percent native flowers, trees, and shrubs. And such plants fit right in with this article’s focus on gardening during the drought: many natives have deep root systems, which is part of what makes them drought-tolerant.

Best Practice 4: Replace lawn with groundcovers, perennial plants, shrubs, trees, etc.

In areas where you’re already having trouble growing grass, such as in heavy shade or on a slope, consider replacing the grass with groundcovers, perennials/native plants, shrubs, or trees. In those areas where you do need lawn, consider putting in a turf-type tall fescue or Kentucky

blue grass, both of which are more drought-tolerant than other grasses. After all, there's gotta be space for the kids to play and the dog to fetch!

And, as we've recommended in the past, mow to a height of about 3–4 inches, rather than leaving the lawn looking as though it has been scalped. The higher level reduces a lot of the moisture evaporation and also helps shade the soil so that weeds don't grow as easily.

Best Practice 5: Water less often but more deeply

Ever wonder if you're watering too much or not enough? Try this test: Dig down about six inches to check the soil moisture. Place a container near a sprinkler to catch the water. One inch of water in the can equals one inch of water in the soil, which then should penetrate six inches into the soil. But wait! You aren't finished yet. Wait for four hours, until the water has had time to seep through the soil, and then dig down in several locations to check the moisture level at six inches deep.

So, as you assess your current water conservation practices, give yourself a pat on the back for the practices above you are already using, and explore further: At the University of Maryland Extension's Home & Gardening web site, you can find much more detailed information than we were able to present in this article.

How to Prioritize Watering During Drought

*Compiled by Christa Carignan, Horticulturist and Coordinator,
University of Maryland Extension, Home & Garden Information Center*

High Priority	Trees and shrubs; fruit and nut trees. Focus especially on those that are young and planted on open sites exposed to wind. Large, mature shade trees and shrubs can be left alone unless the drought is severe, and the trees begin to wilt, or the root systems have been recently disturbed or compacted.
Medium Priority	Perennials, small fruits and vegetables; turf that is less than one year old.
Low Priority	Annual flowers and herb plants, established turf. These are relatively inexpensive and easily replaced, compared to trees and shrubs.

Check out the following URLs to expand your knowledge of how, when, and why to water plants—and when not to water:

- [Conserve Water In Your Landscape | University of Maryland Extension \(umd.edu\)](#)
- [Drought and Excessive Heat Stress | University of Maryland Extension \(umd.edu\)](#)
- [Watering Trees and Shrubs | University of Maryland Extension \(umd.edu\)](#)



Stewartia -- During or after a drought, young twigs and branches may die off, and the tree or shrub becomes more susceptible to diseases and pests. Here, a Stewartia has suffered branch dieback. (Photo courtesy of UME, HGIC)

Tulip Tree -- Prolonged drought or high temperatures can cause either temporary or serious damage. One sign that a plant is suffering from drought occurs with yellowing leaves, as shown on this Tulip Tree. (Photo by Brian Kunkel, University of Delaware, Bugwood.org)



Coreopsis-Coneflowers -- While many flowers, vegetables and fruits may be susceptible to drought, native plants often survive droughts because their roots grow deeper than those of non-natives. Here, coneflowers (pink) and coreopsis (yellow) thrive despite the heat, humidity, and lack of rain. (Photo courtesy of the author)

Spruce -- Most evergreens have shallow root systems and are among the first trees to exhibit signs of drought stress and wilting. Early wilt symptoms include drooping or pendant needles. Eventually, needle tips turn brown and branch tips show needle drop or dieback. (Photo courtesy of the University of Maryland Extension)



Japanese Fern -- As is evident in this picture, the Japanese fern, although frequently watered, is barely surviving the drought. Note the brown, dried and dead fronds to the left. (Photo courtesy of the author)



Ostrich Ferns -- Despite a drought, native plants usually survive since most have such deep roots. Here, native ostrich ferns are thriving, even though they've not been watered often. (Photo courtesy of the author)

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<https://extension.umd.edu/programs/environmentnatural-resources/program-areas/home-and-garden-information-center> .

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