



**Virginia Green Industry Council**

For Immediate Use

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Electronic Version:

[www.viriniagreen.org](http://www.viriniagreen.org)

## **Drought-Proof Your Lawn**

Sooner or later, a drought will hit your area. Whether this period of abnormally low moisture is long or short, you can plan and prepare for your lawn's survival, according to the Turf Resource Center.

### **Design For Drought**

The first step in the drought-proofing process is to consider modifying your basic landscape design. Start by reducing large mounds or steep slopes that encourage water to run off before it can soak into the soil. Another aid to making your lawn more drought tolerant is to increase natural air movement by reducing or spacing shrubs and trees that block the prevailing winds. While shade will reduce a lawn's need for water, it can also cause the grass to be too succulent and delicate to survive a severe drought. A tree's competition for water intended for the lawn is another consideration in your drought proofing design. Within the scientific community, it is generally agreed that a plant requires water in proportion to its leaf surface. Therefore, a large tree will consume tremendous amounts of water, whether you intend it for the grass or not. It may be best to avoid growing grass too near trees.

Next, improve the soil under your lawn to the greatest extent possible. This requires soil tests to determine what amendments are required. Soil amendments may include lime or sulfur to correct the soil's pH, organic material or even the addition of good topsoil. While it's always best to improve the soil before your lawn is planted, the soil of existing lawns can be improved by annual or biennial (every other year) core aeration and topdressing with required amendments.

If you are getting ready to put in a lawn select new and more drought tolerant species and varieties of lawn grasses that are especially suited to your area. You may also want to consider using turfgrass sod that is grown in your area for its drought tolerance because it will create a mature lawn almost instantly. If you are improving an existing lawn that can be seeded, consider using new varieties of grasses that are the same species as you now have. A top-quality garden center can help you determine which variety is best.

### **Pre-Drought Maintenance**

For existing lawns, maintenance practices 30-45 days prior to an expected drought, dry period or excessively hot time of year can have a real impact on your lawn's survivability. The idea is to make your lawn as strong and healthy as possible before the onset of a drought or excessive heat. Do the following:

- reduce thatch and compaction
- reduce or eliminate nitrogen fertilizer and increase potassium fertilizer
- water late at night or early in the morning
- water infrequently and deeply
- sharpen your mower blade two or three times during the season
- mow often enough so you never remove more than the top one-third or one-half of the grass blades
- leave clippings on the lawn as you mow, unless the clippings are clumping
- avoid using weed-killers (herbicide pesticides)

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## Dealing With Drought

At the earliest stages of a drought, or when the temperatures reach high levels for a week or more, additional steps can be taken, as long as adequate landscape water is available. While continuing the practices listed above, add these steps:

- raise the mowing height 25 percent or more
- reduce traffic on the lawn
- increase watering on areas near buildings and other heat reflecting surfaces and on high or sloped areas where the winds will dry the lawn faster and water may not penetrate as deeply. If the drought and/or hot weather continues for an extended period or watering restrictions are implemented, these steps should be employed according to the severity of conditions:
  - eliminate all traffic on the lawn
  - restrict watering to the areas you determine are most important to you
  - accept that the unwatered portion of your lawn will be dormant and brown until conditions improve

Dr. James Beard, in his textbook, "Turfgrass: Science and Culture," reports, "It is better to restrict irrigation than to intensively irrigate for a portion of a drought period and then miss several weeks. A brown dormant turf may actually be in better condition physiologically during a droughty period than an excessively or inadequately irrigated turf."

## When The Drought Breaks

At the end of a drought, when cooler weather returns, or when watering restrictions are reduced or eliminated, grass will naturally begin to recover, but a beautiful and environmentally beneficial lawn will require your assistance.

Begin with deep watering that restores the soil moisture. This will wash off the leaves, re-hydrate the grass's dormant crowns and buds, and initiate root growth. Heavy traffic should be avoided on freshly watered lawns because it contributes to compaction.

After a week or two of recuperative watering, when the grass has started to recover, apply a reduced amount of a balanced fertilizer. The fertilizer analysis should be in proportions that come as close as possible to 4-1-2 for nitrogen, phosphorus and potassium. High-nitrogen fertilizer should still be avoided, unless it is late in the growing season, because a drought or hot weather could return.

Once the grass is growing strong, consider applying a herbicide (weed killer) to individual weeds or the entire area, according to need. Removing competitive weeds will make more water and nutrients available to the grass and help the lawn thicken so it will eventually crowd out weeds on its own.

Practicing drought-preparation lawn maintenance throughout the growing season every year will not only help to ensure that your lawn will be beautiful but that it also continues to be a safe play area and effectively controls erosion and dust while it naturally converts carbon dioxide to clean oxygen and entraps particulate pollutants.

Go to our consumer website for additional gardening information at [www.VirginiaGardening.com](http://www.VirginiaGardening.com)

The Virginia Green Industry Council is the voice of the horticulture industry in the Commonwealth and is dedicated to enhancing the beauty of the state's environment, the well-being of our citizens, improving our state's economy, and improving the health and wellness for everyone in Virginia. The Council is made up of providers and consumers of horticultural products and services. The Council works to provide public and industry education, environmental guidelines and other information that will keep Virginia green and growing. For more information, visit [www.viriniagreen.org](http://www.viriniagreen.org). 540-382-0943 FAX: 540-382-2716 E-mail: [info@viriniagreen.org](mailto:info@viriniagreen.org)

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