



Summer Lawn Management: Watering the Lawn

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Why water the lawn?

Water composes from 75 to 85% of the weight of a healthy grass plant. It is essential for seed germination, tissue formation, plant cooling, food manufacture, nutrient absorption and transport. Water loss from a grass plant is greatest under conditions of high light intensity, high temperature, low relative humidity, and windy conditions. Without adequate water, the grass plant can't cool itself and becomes susceptible to wilting, desiccation and death.

Are some grasses more drought tolerant?

Yes, grasses differ in both their need for water and their drought tolerance. Seedling or recently established lawns (less than 12 months old) have little drought tolerance. Some mature grasses develop deep roots and require less water. Not all of the following grasses are suited to all areas in Virginia. Consult your local Extension Agent for specific information for your area.

Tall fescue when properly managed develops a deep root system and can be very drought tolerant. However, this advantage is lost if grown on shallow or extremely compacted soils.

Kentucky bluegrass can survive extended drought periods by gradually slowing growth, turning straw colored and entering summer dormancy. Once water becomes available again, it can initiate new growth from the crown of each plant.

Perennial ryegrasses have little tolerance to dry conditions and usually do not persist well in non-irrigated areas.

Fine fescues such as creeping red, chewings fescue, and hard fescue tolerate dry periods quite well due to their low water requirements.

Warm season grasses such as bermudagrass, zoysia-grass and St. Augustinegrass actually prefer warm conditions and can tolerate most drought conditions due to their deep and extensive root systems.

How much water does my lawn need?

This varies somewhat depending on grass type. In general, applying one inch of water per week is the recommendation when there is insufficient rainfall during summer drought. An inch of water can be measured by marking the side of a tuna or pet food can placed in the lawn. Remember that if nature provides water by rainfall, irrigation may not be needed.

What about too much or too little water?

Over watered lawns frequently lead to excess blade growth, summer fungal diseases and more frequent mowing. Excessive watering of lawns also wastes water and increases the risk of fertilizer and pesticide run-off from the lawn to paved surfaces. This could negatively impact local water quality.

Lawns that receive little to no water from irrigation or rainfall during summer months will go dormant. Grass blade coloring will lighten. Most lawns will recover when water returns. During a severe drought, the grass may die and require over seeding in the fall. This may be acceptable to those looking to conserve water during summer months.

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How can I tell if my lawn needs water?

A “thirsty” lawn turns from the normal green color to a purple-bluish color. In these areas the grass blades will not spring back if you walk across the lawn and your footprints will be visible. This is the first sign of “wilt” and indicates a need for water.

Tips for better watering

- Deep and infrequent watering maintains a healthy root system and reduces weed infestation (as opposed to light and frequent irrigation, which promotes shallow roots and germination of weed seeds).
- Applying one inch of water is often difficult to achieve in a single watering given the slow infiltration rate on most Virginia soils. Therefore, smaller amounts of water applied every 3 to 4 days may be required to allow water to enter the soil without causing runoff.
- Water is best applied early in the day (5 to 10 a.m.) when evaporation loss is lowest. Afternoon watering is acceptable but wind may affect uniformity. Night watering minimizes evaporation, but may increase fungal diseases. Consider that numerous automatic sprinklers all running during periods of high household use (early morning) may place extreme demands on a community’s water system.
- Water the lawn, not driveways, sidewalks, or roads, by adjusting sprinkler heads.
- Mow your grass at the right height during the summer. Longer grass blades increase the depth of the root system, shade the soil, and help drought tolerance (see box right).
- If your current grass is not drought tolerant, consider replacing it with one that is.

- Precondition your cool season lawn for summer by applying fertilizer in the late summer or early fall, avoiding spring applications. This favors root growth and better drought tolerance. Lush, over fertilized lawns require more water.
- Remember that newly sodded or seeded lawns require more frequent watering (for the first 3 to 4 weeks) than do well established (older than 12 months) lawns.
- Keep your mower blade sharp.
- Annual core aeration can loosen compacted soil and allow water to infiltrate deeper into the ground.

What about sprinklers?

Look for sprinklers that keep water close to the ground rather than sending a fine mist or spray high into the air. This will help reduce evaporation as well as keep the water on the lawn. Check for uniform water distribution and overlap so that “dry spots” don’t develop.

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Virginia Cooperative Extension would like to remind you that what we do to the lawn and landscape impacts local water quality and that of the Chesapeake Bay.

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