

LAWN CARE BASICS

PRIMARY CULTURAL CONTROLS

The three primary cultural practices of lawn care are mowing, fertilization, and irrigation. Correctly done, these practices will provide a healthy green lawn with a minimum of negative effects on the environment.

MOWING

Sharp blades are necessary! Sharpen every 6 weeks or have an extra blade on hand and rotate blades every 6 weeks.

- Grasses should be cut at a height of 2.5 to 3 inches. Turf grasses mowed at taller heights help shade and cool the soil, which results in less water use and healthier lawns. It also prevents germination of weed seeds.
- Don't cut more than 1/3 of the grass blade off at any mowing.
- Grasscycling (mulching grass clippings) is an excellent way to return nutrients to the lawn. Grasscycling returns approximately 2 pounds of nitrogen per year to your turfgrass stand.

FERTILIZATION

To maintain a healthy-looking lawn, the goal is to deliver 3-5 pounds of nitrogen per 1000 square feet to your turf grass.

- Use a fertilizer labeled for **Turf Grass**. Turf grass fertilizers have high nitrogen (N) content, a phosphorus (P) content of zero, and a nominal potassium (K) content.
- Use a rotary spreader, not a drop spreader. A rotary spreader will arc the product out uniformly and the turn-around at the end of each pass does not have to be precise.
- With the goal of 3-5 pound of nitrogen per year, following a holiday schedule is helpful:
 1. Memorial Day – 1 to 1.5 pounds per 1,000 square feet
 2. 4th of July – 0.5 to 1 pound per 1000 square feet
 3. Labor Day - 0.5 to 1 pound per 1000 square feet
 4. Thanksgiving - 1 to 1.5 pounds per 1,000 square feet

If you are Grasscycling (Fact Sheet C059), you can skip the 4th of July and Labor Day fertilizations. Slow-release formulations for fall/winter applications are available.

Slow release fertilizers release nitrogen over a longer period and produce more uniform turfgrass growth and color.

There are also organic fertilizers on the market, which can add to soil health. **Read the labels**, choose the fertilizer that best meets your lawn's needs, and fertilize at the recommended rate.

IRRIGATION

Applying the correct amount of water will allow grass roots to grow deeply into the soil. Over-irrigation results in runoff and leaching of nutrients as well as increased chances of having moss and crane fly larvae.

Know your soil. The type of soil, sandy, loamy, clay, will determine frequency of watering. Light, sandy soils may require irrigation more frequently; clay soils may require less frequent irrigation.

The target rate of turf grass irrigation is 2/10-inch per irrigation event. This 2/10-inch rate delivers the amount of water that loamy soil, typical in our area, can hold (0.6 inch of water per inch of soil). Irrigating at a rate of 2/10-inch, will saturate a loamy soil to a 3-inch depth. This 3-inch depth contains the majority of the roots of Kentucky bluegrass and perennial ryegrass.

Know your irrigation rates. Specifically, what is the rate of water you are applying to your turf? Recent research indicates 2/10-inch irrigation per event will give the best results, so if you aren't sure how much water your sprinklers apply, you can audit your system. More information on completing an irrigation audit can be found on the fact sheet on Irrigation Auditing. It is important to do an irrigation audit at the beginning of each watering season.

Adjust irrigation rates for each season. The majority of our rainfall occurs in the fall, winter, and spring months with a very droughty summer. It is best to split the irrigation amount into 2 or 3 application times during the week to reduce the possibility of runoff from the soil.

- a. Spring/Fall target rates are 0.5 to 0.75 inches per week
- b. Summer target rate in 1 to 1.5 inches per week

Watering at these rates is needed to keep turf grass root zone area moist. Checking the root zone in the droughty summer months will let you know if additional irrigation is required.

SECONDARY CULTURAL CONTROLS

AERATION

Aerating reduces soil compaction, improves water penetration, and improves air circulation. The turf area should not be under stress at the time of aeration therefore, the average home lawn aeration should be done in either April or May or in early September. For heavily compacted turf areas, twice yearly aeration may be needed.

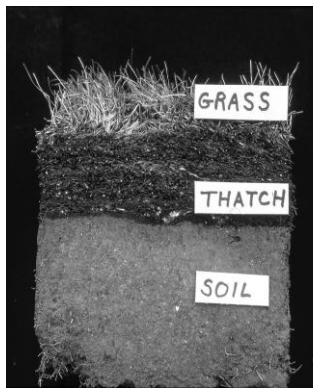
Hollow-tine core aeration is the most advantageous. Turf aerators can be rented at most rental businesses; lawn care companies may also provide this service.

Steps for turf aeration:

1. Water the lawn well the day prior to core aeration.
2. The following day, use a core aerator to remove plugs of soil.
 - Plugs can be left on the lawn, as they will break down and add additional organic matter if it is needed.
 - Plugs can be raked up and put in the compost pile. This is recommended for turf areas with heavily compacted soil.
3. Irrigate the lawn afterwards to ensure that water penetrates to the depth of the core space.
4. This is a good time to inter-seed your Kentucky bluegrass with perennial ryegrass.
 - Apply with a drop spreader at 8 to 10 pounds per 1000 square feet.
 - Ryegrass will germinate in 7-10 days.
5. This is also a good time to fertilize.
6. If soil texture needs to be improved, apply 1/2 inch of compost over the turfgrass area.

THATCH

Thatch is the spongy layer of mostly organic material that builds up in the root zone of turf. This layer should be about ½ inch thick. If the layer becomes ¾ to 1 inch-thick or more, it is time to remove some of that organic material from the lawn. Do not confuse the accumulation of dead grass blades visible on the soil surface for thatch. What we see on the surface of the soil is organic matter that will break down and return nutrients to the soil. Thatch may build up for a variety of reasons, including over-fertilization of the grass, too much water, or poor drainage. Some thatch in a lawn is normal, but it should not exceed 1/2 inch.



Thatch may be a problem in your lawn if you find the turf springy to walk across. Other signs of excessive thatch include grass that looks thin or unhealthy even after fertilizer applications. Turf that is over grown by moss, even in sunny areas, may have a thatch problem. If you suspect your lawn may have excessive thatch, pick 2-3 areas of turf and cut out a section roughly 6" by 6" and examine it closely.

Thatch problems do not occur overnight, and neither do the solutions. Regular power raking is NOT a beneficial practice of for home lawns. The best response to thatch is to begin core aerating the lawn 1-2 times a year to break up the thatch layer and improve drainage. Fertilizer applications should be reduced to no more than two pounds of nitrogen per 1000 square feet per year.

PEST (WEED & INSECT) MANAGEMENT

Unless all other cultural practices have been addressed, pesticides (herbicides or insecticides) should be considered the last line of defense in turf grass management. If proper turf grass culture has not been met, then the pest will return.

The first step of any pest management program is to IDENTIFY THE PEST. The identification will help the decisions of which control method(s) are the best to use. If the choice is the use of an herbicide or insecticide,

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since not all products are effective on all species, the importance of identifying the species to be managed comes to the forefront. Prior to purchasing and using, check the pesticide labels to determine which product(s) will be effective in the control of your particular pest(s). Master Gardeners at your local county extension office can assist you in pest identification. Two online sources for pest management information are WSU [Hortsense](#) and WSU [Pestsense](#)

A NOTE ABOUT WEEDS

Weeds are the number one pest problem in turf. They are aggressive competitors for sunlight, moisture, and nutrients as well as prolific multipliers even under adverse conditions. Weed management is much simpler if weeds do not become established in the landscape. Exclusion of weed species is by far the best preventative measure available to the home gardener. Since weeds can be introduced in topsoil, compost, with other plants, in irrigation water, and via seed-contaminated clothing, equipment, and animals; a little attention can prevent a lot of trouble.

RECOMMENDED READING

Establishing a New Lawn: Spokane County Extension publication C065. <http://extension.wsu.edu/spokane/wp-content/uploads/sites/33/2015/03/C065-Establishing-a-New-Lawn-15a.pdf>

Grasscycling: Spokane County Extension publication C059. <http://extension.wsu.edu/spokane/wp-content/uploads/sites/33/2015/03/C059-Grasscycling-15a.pdf>

Home Lawns, Washington State University Extension Publication [EB0482](#)

Integrated Pest Management for Turfgrass video, Washington State University [PRV02](#).

Kentucky Bluegrass for Home Lawns in Washington State, Washington State University Extension Publication [FS098E](#).

Fine Fescues for Home Lawns, Home Garden Series; Washington State University Extension Publication [FS200E](#).

Worksaving Tips for Lawns in Eastern Washington. Spokane County Extension publication C069. <http://extension.wsu.edu/spokane/wp-content/uploads/sites/33/2015/03/C069-Worksaving-Tips-for-Lawns-09.pdf>