

A beautiful lawn doesn't just happen

May 4 2007

A tree can be a lawn's best friend, or not. Most people with home lawns also have trees and shrubs in the landscape. Sometimes trees and lawns get along well together and sometimes they don't. The shade produced by trees can present some problems for grass growth, as can shallow roots and the dry conditions beneath the trees. Conifers present the biggest problems.

Normal light intensity favors photosynthesis and adequate carbohydrate reserves. As light intensity decreases, photosynthesis decreases as well, and the plant uses carbohydrate reserves from the roots. The grass becomes more succulent and vegetative and its food reserves are drained so much that they can no longer fend off disease and insect attack.

What about shady/moist???

Different grass species have different shade tolerances. Red fescues tolerate shade fairly well, but Kentucky bluegrass does not. These species make up the bulk of lawns in our area. Competition for water and nutrients from the tree roots will also make the area beneath them inhospitable for grass growth. Again, red fescue will tolerate this condition better than Kentucky bluegrass. If you plant a blend of red fescue and Kentucky bluegrass for your lawn, the species will segregate themselves over the years according to their own habitat preferences until you'll find only the red fescues beneath the trees. And that's not all the trees. Conifers like spruce and hemlock produce such dense shade, dry conditions, and a thick bed of needles that not even the fescues will tolerate them. You may actually be thankful that there is no lawn grass

that will grow under these conditions. If there were, you'd . . . have to mow it!

And speaking of mowing, should you remove your grass clippings or leave them where they fall? The experts can actually make a case for either removing or not removing the clippings from your lawn. Those homeowners that let their grass get very tall before they mow will have to remove the clippings. Heaps of clippings piled in windrows by the mowers look unsightly and block sunlight, turning the lawn yellow beneath. In effect, the clippings act like mulch. Remove those clippings and relegate them to the compost pile, or, let them dry for a day or two and use them to mulch your garden, if you haven't applied a broad-leaf herbicide to your lawn. Trying to save work by mowing less actually makes more work. Removing so much of the leaf surface at one time also causes stress to the grass plant, weakens it, and makes it more prone to disease and insects. Never remove more than one-third of the grass blade at one cutting.

On the other hand, a good case can be made for leaving clippings where they are. Being once part of the grass plant, clippings contain nutrients the plant's roots extracted from the soil. In fact, clippings from one thousand square feet of lawn contain, on average, almost three pounds of nitrogen, one pound of phosphorus, and two and a half pounds of potassium. If left to rot, the clippings return this substantial quantity of nutrients to the soil to promote further growth. That means you can use less fertilizer on the lawn and save money.

Many gardeners think that collecting grass clippings will eliminate thatch, but grass clippings do not substantially contribute to the thatch layer. Thatch is a layer of partially decomposed grass stems and rhizomes that forms on the surface of the soil just below the grass blades. Material accumulates as the lawn continues to grow year in and year out. In our cool, dry climate the rate of accumulation often exceeds

the rate of decomposition and a thick mat forms after a couple of years.

As thatch accumulates, it becomes difficult for water and fertilizer to penetrate to the grass root zone. The turf root system becomes more shallow and less tolerant to drought. Your lawn may feel soft and springy when you walk on it. The grass can no longer compete with weeds and your lawn begins to look unkempt. So check the thatch layer every spring. With your pocketknife, cut a small plug of sod and examine it closely. Thatch resembles a layer of peat moss on the soil's surface. If it's more than a half-inch thick, it's time to dethatch. Do this just before the flush of grass growth in the spring or fall. In much of our area, it's too late to dethatch this spring. You can use a mechanical core aerator. Your lawn will look pretty bad right after dethatching, as the core aerator brings up plugs of soil to help aerate and decompose the thatch, but the beautiful, healthy growth that will follow will make it worthwhile.

While some folks love to mow their lawn, others don't. Folks encourage lawn growth, whether or not they know it, with water and fertilizer. For a healthy, medium maintenance irrigated lawn, apply one pound of actual nitrogen per thousand square feet to your lawn three times per year, for a total of three pounds of actual nitrogen per thousand square feet per year. Apply each application in connection with three easy-to-remember holidays: The first application should be made around Memorial Day, the second around Labor Day, and the final application around Columbus Day. It's a little counterintuitive, but the Columbus Day application is actually the most important, as the nutrients go toward building the entire plant and not just tops, so if you want to cut back on your fertilizer routine, don't miss that one. Fertilizer may, of course, be applied earlier than Memorial Day, but the soil is still quite cool, and when the fertilizer is taken up, that application will go toward all top growth and little root growth, due to cool soil temperatures. Of course, when you fertilize you must irrigate! This will give a beautiful flush of growth, and make you the first on the block to pull out your lawnmower.

During the growing season, remember to mow your lawn on a regular basis, say once per week. Never let it get very tall and then whack it back into shape. In fact, removing more than a third of the grass at one time can stress the lawn and make it more prone to pests. Use a sharp mower to make the cuts clean. Ragged cuts damage the grass more and give the lawn a gray cast under certain lighting.

Cut the grass at the right height. That's about 2.5 inches for our lawns and that means that you never let it get taller than about 3 to 3.5 inches before cutting. You may choose, however, to set your mower a little higher during the heat of the summer. Longer blades of grass actually reduce water use.

Download the free MontGuide called "Successful Lawns" from the Extension Publications website for additional lawncare tips.

Source: Montana State University

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