



## Managing Lawns in Shade

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Some yards have big trees, shrubs, or other structures that cast dense shade on lawns. Most lawns need about 5 hours of full sun per day or an entire day of filtered light. Without enough light the lawn can't photosynthesize enough carbohydrates to support its leaves, roots, tillers, or rhizomes and stolons. Lawns grown in the shade are often additionally stressed by lack of air movement, making the areas more humid in summer months and more prone to disease. They generally don't have the ability to tolerate or recover from stress problems as compared to lawns growing in full sun.

**How can you tell if your lawn is struggling in the shade?** Symptoms of deteriorating turfgrass includes finer leaves than normal and reduced shoot growth and density. Sometimes the leaves are longer and more succulent, but in reality they are thin and puny.

**Are all lawns the same in the shade?** Not all lawns tolerate shade equally. Of the common lawn grasses St. Augustinegrass has excellent shade tolerance as does creeping red fescue and other fine leaf (meadow) fescues. Meadow fescues are quite popular right now as an unmowed ground cover, but not your typical lawn for recreational activity. Tall fescue and zoysiagrass have good shade tolerance, while bermudagrass, buffalograss, and Kentucky bluegrass do very poorly in the shade. Shade-tolerant grasses still need an acceptable amount of light to grow.



**What remedies are available?** If you are planting a lawn, then start by choosing a shade tolerant species. The next step is to modify the shade to increase the amount of light reaching the existing lawn. Tall, dense trees can be pruned to let in more light and lower branches can be lifted up to at least 8 feet off the ground, so that early morning and late afternoon direct sunlight reaches the lawn. Dense shrubs and hedges should be thinned or removed to allow breezes to blow over the lawn surface. Reducing foot and vehicle traffic, which is sometimes impractical, also helps some. Afterwards it comes down to changing a few cultural management practices on the lawn.

**Mowing:** All lawn grasses have recommended mowing heights that are often ignored in the home lawn. In full sun the standard mowing height for most cool-season grasses (bluegrass,

ryegrass, fine fescue, and dwarf types of tall fescue) ranges 1½-2 inches. In hot climates some tall fescue varieties should be maintained at 2 to 3 inches to shade soil and reduce heating of roots. Common bermudagrass should be mowed ¾ - 1¼ inch and hybrid bermudagrass should be kept lower than ¾ inch in height. If you have a lawn growing in dense shade, then slightly raise the mowing height. This will increase the leaf area, which starts a chain reaction allowing more light interception, more photosynthesis, more shoot and root growth, and more plant density. The other perk is that you should not mow as often.

**Watering:** Where lawn roots are severely weakened and tree roots suck up the moisture more readily, then the recommendation is to water the lawn less often and more deeply every time you water. The deep water is actually going to help the tree and the lawn.

**Fertilizing:** Fall and spring are the best times to apply fertilizer to shaded lawns. The need for nitrogen (N) fertilizer is only about half as much as it is for lawns growing in full sun, but the need for potassium (K) fertilizer is greater. Potassium increases shade tolerance of grasses. So look for special fertilizers.

**Overseeding:** Overseeding with a shade-tolerant grass species is a possible compromise. For example, an established bermuda lawn could be overseeded with hard or red fescue, or if it is medium shade, then tall fescue could work.

**Lawn Alternatives:** If it is impossible to maintain a good looking lawn then switch it out to a shade tolerant ground cover or just mulch the area. Some lawns can be reshaped to areas where the sunlight is best leaving the shadiest areas to be re-configured for a different role in the landscape.

April 5, 2012