

Lawns in Shade

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Trees, shrubs and lawn greatly enhance the beauty and value of a home. However, maintaining a lawn in shade of trees and large shrubs can often be difficult. Trees compete with the grass for sunlight, water and nutrients. The grass is usually on the short end of this competition. However, grasses may co-exist with trees and shrubs, depending on the severity of the competition, if certain management practices are followed.

Establishment

The first step in maintaining any lawn area begins with proper establishment. Site preparation and correct seeding or sodding methods are necessary for a uniform and healthy lawn. Selecting shade tolerant grass varieties is particularly important for shady areas. The fine-leaved fescues, rough bluegrass (*Poa trivialis*), and a few varieties of improved Kentucky bluegrass perform acceptably in shade. Rough bluegrass should only be used in very wet shaded areas where the fine-leaved fescues or the shade-tolerant improved Kentucky bluegrasses do not do well. Other grasses are prone to disease or lack vigor in shaded areas and should not be planted.

Tree Root & Branch Pruning

Certain steps can be taken to reduce the competition of trees and shrubs. A sharp shovel or axe can be used to cut the surface roots of the

tree which extend into the lawn, or a special root pruning machine can be rented. Deeper roots will still supply nutrients and water to the tree. Root pruning should be done gradually so the tree or shrub will not be severely damaged. Some shallow-rooted trees and shrubs such as maples, beech and evergreens will not tolerate extensive root pruning, so proceed with care.

Selective pruning or thinning of trees and shrubs will increase light and improve air circulation to the lawn. Normally only inside branches or low branches of the tree are removed. Maintain the shape and beauty of trees with selective pruning. In some cases, trees or shrubs can be removed or replaced with dwarf types. This will eliminate or significantly reduce tree and shrub competition with the grass.

General Care

Shaded lawns need different care than sunny areas. Grass grown in shade is normally thinner than grass grown in full sun. Foot and vehicle traffic easily damages grass in shaded areas, and should be restricted whenever possible. Traffic also increases soil compaction, especially when the soil is wet.

The grass in shaded areas should be mowed 3-4 inches high, rather than the 1½ - 2½ inches normally recommended for sunny areas. Do not remove more than ⅓ of the green leaf tissue at each mowing. In the fall, it is critical that leaves be promptly removed. Leaves left on the ground will eventually smother the grass.

Shaded areas tend to stay moist much longer than sunny areas. Watering must be done carefully. Water shaded areas deeply but infrequently. Allow the area to dry before the next application of water; avoid light frequent applications. Apply enough water to supply the roots of shrubs and trees as well as the grass.

Shaded lawns need to be fertilized at lower rates than sunny areas because growth is less. Light applications of fertilizer for the grass but deep root feeding of trees is best. Heavy fertilization will give succulent turf growth that is prone to disease and traffic damage. A soil test will help to determine rates for phosphate and potash application.

Shade tolerant improved Kentucky bluegrass should have a full rate of fertilizer applied in late September in southern Michigan, with a follow-up application of ½ to ¾ rate in mid November. (A full rate of fertilizer is the rate specified on the bag, which is close to 1 pound actual nitrogen per 1,000 square feet). Fine fescue in shady areas will often thrive with no fertilizer, especially if it is already dense and well established. Newer stands of fine fescue or thin areas may benefit from ¾ to a full rate of fertilizer in late September. Avoid any fertilizer application to shady areas in spring or summer.

Alternatives to Grass

In some circumstances, avoiding the use of grass in shaded areas may be best. This is especially true in areas that receive a great deal of

traffic, or in especially dense shade of trees such as beech, maple and evergreens.

In areas that receive heavy traffic, wood chips, crushed rock, or other mulches are alternatives. These mulches can be separated from the grass by edging, or can be naturally contained using railroad ties, or other permanent material, if no clear edge exists. Shade tolerant flowers can add color to the area.

Shade tolerant ground covers can be used in areas that receive no traffic. They add to the diversity of materials for landscaping shaded areas. Once established, these areas require little maintenance. Table 1 lists several shade tolerant ground covers.

With proper selection and care of plant material, shaded areas can be beautiful.

TABLE 1. Shade Tolerant Ground Covers

Name	Growth Habit	Avg. Height
Baltic ivy <i>Hedera helix baltica</i>	evergreen creeping	8"
Bugleweed <i>Ajuga reptans</i>	herbaceous creeping	6"
Evergreen candytuft <i>Iberis sempervirens</i>	evergreen spreading	8"
Japanese spurge <i>Pachysandra terminalis</i>	evergreen upright spreading	6"
Many fern species (native)	herbaceous spreading	12-24"
Pachystima <i>Pachystima canbyi</i>	evergreen spreading	10"
Periwinkle <i>Vinca minor, V. major</i>	evergreen creeping	6"
Purple wintercreeper <i>Euonymus fortunei 'Coloratus'</i>	evergreen spreading	24"



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