

The Perfect Lawn

By Tom Rieman MG 2011

The definition of the “Perfect Lawn” is as individual as you. For some, the perfect lawn resembles an area rug in the yard, or no lawn at all, having been replaced by a ground cover planting, mulch, or a paved sitting area. For others, the lawn must be as pristine as a putting green, while some find a lawn peppered with the flowers of henbit, clover and dandelions to be beautiful. Each version of a lawn reflects the personality of its caretaker and all are the “Perfect Lawn” that fits the owners’ needs.

The most popular lawns in Shelby County, TN tend to be a broad expanse of a monoculture grass covering the majority of the property. Such lawns are relatively high maintenance during the summer months requiring weekly mowing, edging and watering to maintain their appearance.

The decision as to which grass variety to plant is determined in part by the primary purpose of the lawn, beautification of the landscape, control of erosion or a play area for sports. Additionally the amount of sunlight available also plays a key role in choosing the grass variety. The varieties noted below perform well in Memphis.

Grasses Most Suitable For Memphis				
	<i>Bermuda</i>	<i>Zoysia</i>	<i>Centipede</i>	<i>Tall Fescue</i>
Grass Season	Warm	Warm	Warm	Cool
Shade Tolerance	Poor	Fair	Fair	Good
Maintenance Level	Moderate to High	Low to Moderate	Low	Moderate to high
Leaf Texture	Medium	Medium to Fine	Course	Medium to Fine
Mowing height	1 ½” to 2 ½”	2” to 3”	1 ½” to 2”	2” to 3”
Wear Tolerance	Excellent	Excellent	Poor	Good
Drought Tolerance	Excellent	Good	Fair	Fair
Soil pH	5.5 – 6.5	5.5 – 6.5	5.0 – 6.0	5.5 – 6.5
Color	Medium to dark	Pale to Medium	Pale	Medium to dark
Growth Rate	Fast	Slow	Moderate	Moderate
Establishment Method	Seed, Sod, Plugs, Sprigs	Seed, Sod, Plugs, Sprigs	Seed, Sod	Seed, Sod

Cool season grasses are best adapted to air temperatures from 60 to 75 degrees F. and can be established in March or August - October

Warm-season turf grasses, grow best at air temperatures from 80 to 95 degrees F. Warm-season turf grasses lose their color and are dormant during cold winter months and periods of drought. Warm-season grasses are best established in the months of May through August.

Fertilization

When applying fertilizers and pesticides to your lawn be sure to follow the label directions for best results. Do not over apply as higher use levels will not provide added benefits and could result in damage to your lawn. Be aware that materials that land on pavement will wash into our stream and lakes which is harmful to their health. The higher levels of chemical fertilizers use in maintaining a pristine lawn can result in a shift in soil pH from optimal levels. Therefore, it is recommended that you test your soil if you have not done so recently. A soil test kit can be obtained from the Shelby County Extension office. The report will tell your fertility levels and how to correct for pH if necessary.

Fertilizer Application Date (Warm Season Grasses)	Nitrogen rate per 1,000 sq. ft.	Phosphorus and Potassium per 1,000 sq. ft.
April 15 (Tax Day)	1 lb.	2 oz.
June 1 (Memorial Day)	1 lb.	2 oz.
July 15 (4th of July)	1 lb.	2 oz.
September 1 (Labor Day)	1 lb.	2 oz.
Total annual application	4 lb.	1/2 lb.

Mowing Tips

- Mowing frequency is determined by the plants growth, not the calendar. Do not remove more than one third of the grass blade in any mowing. Heavily fertilized lawns therefore will require significantly more mowing.
- Frequent proper mowing with a mulching mower will allow you to leave the clippings on your lawn. The bits of grass will act to inhibit weed germination and as they decompose they feed the lawn without resulting in a build-up of thatch and allowing for less chemical fertilizer use.
- Cut on the high end of the recommended height range during the hottest months. Taller grass helps shade out weeds, keeps the soil cooler and allows for more photosynthesis, which in turn, feeds the plant.
- Maintain a sharp blade on your mower. Brown tips on the mown lawn is the result of a dull mower blade which rips the grass rather than cutting it cleanly.

Watering

- Water only when needed. Your lawn will tell you when it needs water through several indicators;
 - Footprintng- footprints remain in the lawn or disappear slowly
 - Turf has rolled leaves
 - Turf color is bluish-green
- Water slowly and deeply early in the morning (5 A.M. – 11:00 A.M.) to minimize evaporation and allow the grass to dry before evening as wet turf promotes a number of diseases.

- Water deeply to encourage good root development. Generally one inch of water per week applied in a single watering session will be sufficient.

Trees vs. Grass

We love trees for their many benefits – they provide a food source and habitat for wildlife, envelope us in cooling summer shade, and add both winter interest and the structure to our landscapes. However, because trees and grass compete for sunlight, water and nutrients it is a challenge to grow grass beneath our trees.

Trees and grass have different cultural needs. A feeding and watering regime that is optimal for grass is not in the best interest of our trees. To resolve this conflict there are two primary compromises.

- Recommended – Avoid competition, consider a large mulched bed under your trees that extends to the drip line of the tree canopy. Fill in this bed with appropriate shade loving plants.
- Acceptable – Have a professional certified arborist trim and thin the tree canopy to allow more light to reach the ground beneath the tree. Plant more shade tolerant varieties of grass under the tree. While tall fescue is our most shade tolerant grass it is a cool season grass which can not take full sun in our area and can only be grown with shade. It will look its best and be green all winter when the warm season grasses are dormant giving a patchwork appearance to the lawn.

Varieties of Zoysia with improved shade tolerance include Palisades, Cavalier and Royal. Tall fescue is the recommended cool season grass for shaded areas.

Weed Control

Many of our weeds are annuals that germinate from seed each year. These seeds may have laid dormant in the soil for years or may have been recently deposited by wind or wildlife. There are two primary ways to control weeds. Preemergents control weeds by preventing the seed from germinating but will have no effect on plants that are growing. To control weeds that have begun active growth a postemergent herbicide is required. Selective post emergent herbicides are specific to broadleaf weeds leaving the grass unaffected. Selective herbicides are typically a combination of several materials to cover a broad spectrum of weeds. A nonselective herbicide such as glyphosate (Roundup™) is kills all vegetation and can only be used on lawns when grass is dormant.

- Preemergence control of annual weeds and grasses.
 - Spring application Feb 15 – April 15 (when forsythia is in bloom)
 - Fall application Sep 1 – Oct 15.
- Postemergence control of perennial and annual weeds
 - Warm season grasses May 1 – July 15
 - Cool season grasses Oct 15 –March 1

Disease

Most turf diseases are caused by fungi and nematodes. Some problems however caused by environmental or management factors (soil compaction, cold damage, chemical damage etc.) resemble diseases. Understanding the cause of the problem is important when choosing control methods.

<i>Disease</i>	<i>Appearance</i>	<i>Factors Favoring Disease</i>	<i>Control</i>	<i>Time of Occurrence</i>
<i>Brown Patch</i>	Brown patches up to 3 ft. in diameter	Warm wet weather High nitrogen rates Excess irrigation	Good drainage Proper irrigation Proper soil pH Fungicide	Apr - Sep
<i>Dollar Spot</i>	Small circular spots 1-3" in diameter	Wet weather Low nitrogen rates	Good drainage Adequate Nitrogen, Fungicide	May - Sep
<i>Fairy Rings</i>	Small to large rings of very green grass, dead grass, puffballs or mushrooms	Wet weather	Remove excess thatch and before planting remove large sources of organic matter such as tree stumps.	Jan - Dec
<i>Leafspot</i>	Moderate to High	Wet weather	Moderate	May - Oct
<i>Powdery Mildew</i>	White to gray powdery fungus	Cool moist weather	Proper fertilization to avoid lush growth, higher mowing height	Mar - Sep
<i>Nematodes</i>	Slow growth and thinning turf due to root damage	More damage in dry weather	Proper fertilization and irrigation	Jun - Sep
<i>Rusts</i>	Excellent	Humid weather, Shade	Poor	May - Sep
<i>Spring Dead Spot</i>	Dead spots in grass in same place for 3-4 years	Cold winter High nitrogen rates	Reduced levels of Nitrogen, remove thatch, higher mowing heights	Apr - May
<i>Slime Molds</i>	Small yellow flecks becoming larger over time	Cool wet weather	Proper fertilization and irrigation, avoid excess shade	Mar - Apr

References

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