



## Lawns for All Locations

A child said *What is the grass?* fetching it to me with full hands;  
How could I answer the child? I do not know what it is any more than he.

- Walt Whitman, *Song of Myself*

### From Grass to Lawn to Lovely

*What is the grass?* Whether you are planning to revamp your lawn or make a new one, it may be helpful to think a bit about grass and how it is different from other plants in your garden. Because it is such a ubiquitous commodity, we tend to take grass for granted; actually, it is an amazing plant. It has minimal needs combined with great stress protection: it goes dormant if it is too hot, too cold, or too dry – and comes back with vigor when favorable conditions return. It sprouts easily from seed, grows back lushly when trimmed, will readily repair itself if damaged and, under the right conditions, will vigorously defend itself against invasive plants. Some grasses are clump-forming while others spread with underground rhizomes and/or above-ground stolons, and it is this ability to cover the ground densely that turns grass into a lawn.

### Start Right to End Right

All too often lawns have become a repository of excess chemical fertilization and haphazard applications of herbicides and pesticides. “Eight billion pounds of fertilizer are applied annually to lawns and gardens in the United States [and] 100 million pounds of synthetic pesticides just in lawn care each year – up to ten times as much pesticide per acre as farmers apply to their crops.” (Tukey, 2007) Too much synthetic fertilizer can cause foliar injury and can have negative environmental effects, while too little may result in deficient plants prone to pest problems. Using too much organic amendment may not be as detrimental, although it would still be wasteful. In other words, the single most important piece of advice for starting off right with your lawn is to get your soil tested and amend it as recommended for turf grass areas.

### Rethink Your Mowing and Watering Practices

However tough it is, grass can still be stressed – becoming more susceptible to weeds, diseases, and insects. Proper mowing and watering practices can make a big difference – taller grasses will compete better with weeds as well as conserve moisture and reduce the need for water:

- The optimal cutting height for cool-season turfgrass should range from 3” to 4”. Warm-season (*Zoysia*) cutting height is usually 1½” to 2½”. (See below for more on grass types and their qualities).
- Regularly using the mulching attachment on your mower is preferable to bagging your grass clippings. Grass clippings add organic matter to your soil which improves its water and nutrient holding capacity. In addition, they can potentially return 35% nitrogen and 50% potassium to the soil itself.
- IMPORTANT: Bag your clippings from the first 3-4 mowings of newly-seeded lawns as well as when grass has become too long. This will prevent the grass clippings from becoming matted on top of your lawn.
- Mow later in the day especially during hot summer months and change the direction of mowing each time you mow. Mow only when the grass is dry and with a properly sharpened mower to distribute the mulched clippings uniformly. Leaf cuts made by a sharp mower blade are cleaner and heal faster.

- Don't just mow because it's Saturday! Growth rates vary and are affected by seasonal changes. Follow the one-third rule: make sure that no more than one-third of the leaf growth is removed during a single mowing.
- Lawns need 1"-1½" of water a week either from rain or irrigation. There is some variation among grass types (see below) and newly seeded lawns will need more attention to keep track of varying water needs.
- Temperatures are lower in the morning and winds calmer so evaporation is reduced if you water your lawn then. Avoid late evening watering to prevent disease problems.

## Grass Primer

The easiest way to identify your existing lawn type is its color during the winter months. Cool-season turfgrasses stay green in the winter and dominate the northern section of the United States. Warm-season turfgrass loves it when it's hot and turns tan when it gets too cold. St. Louis is right in the middle swathe of the country so we have both types of turf grasses. We qualify as a "transition-area" and, as such, could go with a combination of fescues; choose our only applicable warm-season turfgrass, *Zoysia*; or try some native grasses that can stand up to our extremes of high and low temperatures. Here are some guidelines for choosing grasses and matching their qualities with your lawn spaces and personal preferences:

### Cool-Season Grasses

<b>Kentucky Bluegrass</b> / <i>Poa pratensis</i>	Rhizomatous; does best in cool temperatures; high water needs; usually mixed with perennial rye and fescues
<b>Perennial Ryegrass</b> / <i>Lelium perenne</i>	Clump-forming; germinates and establishes quickly; wear-tolerant but doesn't self-repair; low shade tolerance; not to be confused with annual ryegrass which will last only one season
<b>Fescues</b> / <i>Festuca</i> spp.  <i>Why not try a mix custom tailored for St. Louis area lawns?</i> <i>'George's Magic Sun Mix' is a collection of different Tall Fescues;</i> <i>'George's Magic Shade Mix' combines Perennial Rye Grass, Rough Bluegrass, Chewings and Creeping Red Fescues;</i> <i>'George's Magic Traffic Mix' combines Tall Fescues with Kentucky Bluegrass and Perennial Rye Grass.</i>	Most versatile; ideal for a transitional zone such as St. Louis. Seed mixes usually combine the following subcategories in order to give lawns more resilience to varying conditions: Tall: Clump-forming; tends to thin out during hot, dry summers; great year-round color 'RTF' Tall: Rhizomatous Tall Fescue sends off rhizomes that can even out the texture of a fescue lawn Chewings: Clump-forming; the only grass that truly tolerates shade Creeping Red: A fescue with short rhizomes included in mixes to fill in; lower growth habit; slightly shade-tolerant Hard: Clump-forming; slow-growing but toughest in terms of cold and heat tolerance; good for a low-maintenance lawn

### Warm-Season/Transitional Grasses

<b>Zoysia</b> / <i>Zoysia</i> spp. (plug Zoysia)  <b>Zoysia</b> 'Companion' (seed Zoysia)	Rhizomatous/stoloniferous; low water needs; good heat/cold tolerance; growth habit helps it outcompete many weeds; somewhat shade-tolerant  This cultivar germinates readily and makes it possible to have a zoysia lawn from seed rather than the more expensive plugs Grow Zoysia in a mixed lawn with Tall Fescue to have a green lawn all year!
<b>Buffalo Grass</b> / <i>Buchloe dactyloides</i>	Stoloniferous; full-sun only; slow to germinate and establish but tolerates silt/clay soils; once established needs little water and virtually no extra nitrogen; since it grows only to 6" it doesn't require mowing!
<b>Little Bluestem</b> / <i>Schizachyrium scoparium</i>	Clump-forming; very drought-tolerant; prairie grass used in seed mixes with hard fescues for year-round color

Much of the information for this tip sheet comes from *The Organic Lawn Care Manual* by Paul Tukey. Storey, 2007.