

## **Establishing Horse Pastures**

By Jon P. Wiesman

Pastures provide an excellent low-cost feed source, however, they must be managed like any other commodity in order to maximize its production. The reproductive efficiency in both stallions and or broodmares begins with good nutrition, basically from the ground up! An adult horse will consume anywhere from 1.5 to 2.0% of their body weight in forages per day, which becomes approximately 2/3<sup>rd</sup>'s of their entire daily intake of food. If your pastures have been depleted of nutrients due to poor or lack of management you can only expect the same reproductive efficiency and production from them.

**Soil Test** - A soil test is the best guide for correcting soil pH and soil fertility. Your county extension offices should have soil sample kits, instructions and the tools needed to properly take your own soil samples. Soil pH should be around 6.5 for optimum forage production.

**Apply Lime and Fertilizer** - Apply according to soil test results. If large lime applications are needed, plow some down and disc some in. Disc fertilizer in after plowing. To start a vigorous crop, correct lime and fertilizer needs before seeding. Lime reacts slowly with soil and should be applied 4 to 7 months before seeding, therefore test soil early. Annual lime & fertilizer applications are required for maintenance. Annual testing of your soil pays for itself in spades!

**Preparing a Good Seedbed** - Most forage seeds and seedlings are small and require a fine firm seedbed. Finely worked soil allows close seed-to-soil and close root-to-soil contact for germination, and close root-to-soil contact for early growth. A firm seedbed allows close depth contact for shallow seed placement. Loose and cloddy seedbeds waste seed and do not sustain early growth well. Good preparation of your fields will reduce wear and tear on your tractors and mowing equipment.

**Buy High Quality Seed** - Use species and varieties, which are adapted to the area. Your County Agricultural Agent can supply appropriate information. Avoid shopping for "bargain" seed or seeds that are prepackaged by a co-op for "general" pasture use. A good pasture mix will incorporate at least 4 to 6 grass varieties and 2 to 3 legumes and guarantee a 90% or greater germination carded dated within six (6) months of purchase. Our Next Generation® Pro Seed™ Grass and Pasture Mixes, include the above protocol on the label. The cost difference between "bargain" and high-quality seed is very small when the entire expense is considered.

**Use a Good Seeding Mixture** - Usually it is best to keep a mixture simple: a few highly productive grasses, legumes, and Kentucky bluegrass. Bluegrass produces a resilient sod that "heals" well when cut by horses' hooves. The other grass provides feed when bluegrass goes dormant in the summer. Legumes supply protein and reduce the need for nitrogen fertilization. Management becomes more difficult as more species are added, although, on highly variable soils, more complex mixes can be seriously advantageous. Some species grow where others do not, ensuring excellent coverage and production of the entire pasture.

## Grasses From Which To Choose

### Cool Season Grass Varieties

**Kentucky Bluegrass** - Makes rapid growth in spring and fall, but is first to go dormant in the summer months. Excellent “cool season” grasses, extends pasture utilization.

**Smooth Bromegrass** - Forms a loose sod, but can become coarse and stemy. Clip for best utilization. Excellent “cool season” grasses

**Reed Canary Grass** - Most useful when immature, it may become very coarse. Clip before seed heads appear. Excellent for wet and marshy areas

**Perennial Ryegrass** - is palatable and nutritious and moderately hearty, excellent “cool season” grass, rejuvenates quickly with little moisture.

### Drought Type Grass Varieties

**Timothy** – Known for its “horse” hay quality although, it rejuvenates very slowly after grazing. Use only with other grasses to make up an excellent pasture blend.

**Tall Fescue** – O’l standby for years until an internal fungus was discovered namely an endophyte that inhibits reproduction & lactation efficiency. Excellent for use in yearling fields and/or heavy traffic areas such as in front of run-in sheds, very hearty droughty type grass.

**Orchardgrass** - Matures early, so clip to keep it palatable, grows very well in hot climates one of the last grasses to go dormant in summer heat – very hearty droughty type grass.

**Midland Bermudagrass** - Produces good summer growth, but starts late in the spring. It must be planted vegetatively, so is expensive to establish.

### All Around Grass Varieties

**Modified Tall Fescue** – Excellent grass that was genetically altered crossing Kentucky 31 with Perennial Ryegrass, this grass is certified fungus-free and safe for all pastures and lawns. If you compare a blade of this grass, Kentucky 31 and Perennial Ryegrass you can easily see traits of both grasses combined to make super grass!

## Legumes From Which To Choose

**Ladino Clover** - A giant form of white clover that associates well with tall grasses, but is somewhat susceptible to drought. Excellent source of free nitrogen for your grasses!

**Red Clover** - Use only newer, more disease-resistant varieties. They persist for 3 to 4 years, while older varieties last only about 2 years. Excellent source of free nitrogen for your grasses!

**Birds Foot Trefoil** – A very good pasture legume, although, it can be difficult to establish. Leave 3

to 4 inches of growth for recovery. Excellent source of free nitrogen for your grasses!

**Alfalfa** - Presents management problems in pastures, although, every pasture should have a minimum of 10 to 15% concentration in order to maintain a balance of forages in a pasture.

### **Pasture Renovations**

**Seeding** - Late summer seedings often do better than spring seedings because of cooler weather after seedling emergence. Usually there are also fewer weed problems. Seed from mid-August to early September, or as early in the spring as possible. Use a technique which covers seed only 1/4 to 1/2 inch. Leaving seed on the soil surface will result in a poor rate of germination. Band seeding, drilling, or uses of a corrugated-roller seeder are better methods than surface broadcasting.

**Control weeds** - Early weed growth will ruin a pasture. Either use herbicides or clip closely as often as needed. If using herbicides, read and follow all label instructions.

**Grazing** - Do NOT begin until there are 8 to 9 inches of growth. The root system must be well established or horses will pull the plants out while grazing.

### **SUGGESTED PASTURE MIXTURES**

<b><u>Species</u></b>	<b><u>Rate/Acre</u></b>
<b><u>Well-drained soils</u></b>	
Kentucky bluegrass	10 lb.
Orchard grass	6 lb.
Ladino clover*	1 lb.
<b><u>Moderately drained soils</u></b>	
Kentucky bluegrass	8 lb.
Timothy	5 lb.
Perennial ryegrass	8 lb.
Ladino clover*	1 lb.
<b><u>Poorly drained soils</u></b>	
Kentucky bluegrass	10 lb.
Reed canary grass	8 lb.
Alsike clover	1 lb.
Alfalfa	5 lb.

**Grasses alone require additional nitrogen fertilizer**

Kentucky bluegrass  
Timothy

10 lb.  
4 lb.

\* On light sandy soils, 2 or 3 pounds of red clover may be substituted.