



Volume 3, Issue 3, March 2013

Horse Pasture Management for the Spring: Part 2

Properly managed pastures provide inexpensive and optimal nutrition for horses. Poorly managed pastures have negative impacts on the environment and the overall health and nutrition of horses. February's issue of the Tennessee eQuine Report addressed soil health and early spring frost seeding. This month's issue provides tips on springtime pasture management including seeding pastures, weed control and grazing management.

Selecting and Seeding Forages for Pastures

Several types of forages can be used for horse pastures in Tennessee. Cool season grasses including tall fescue, orchardgrass, timothy and Kentucky bluegrass, grow best during the cooler months (March to June and again from September to November). Warm season grasses such as bermudagrass, grow best during the summer months (June to October). Kentucky 31 tall fescue is the predominant cool season grass used in Tennessee's horse pastures because it is persistent and provides excellent quality forage for all classes of horses except for pregnant mares. KY-31 tall fescue contains a fungal endophyte called *Neotyphodium coenophialum* that causes prolonged gestation, difficult birth and lack of milk production in pregnant mares that graze infected pastures the last three months of gestation. Warm-season grasses related to sorghum (johnsongrass, sorghum x sudangrass hybrid) should not be used for horses because they can be toxic. The majority of acres should be seeded with a cool-season perennial grass such as tall fescue with a few acres of a warm-season grass to provide grazing during the dormant summer season. Legumes (white and red clover) should be added at about thirty percent to the cool season pastures to improve the quality of the forage, while adding nitrogen to the soil and decreasing the need for fertilizer. Proper seeding date, depth and rate are critical for establishment of forages (Table 1). It is also important to plant when there is adequate soil moisture for seed germination and survival of the seedlings. Cool season forages can be established in the spring by overseeding, drilling, or conventional tillage, but establishment rates are best in the fall. When seeding cool season forages in the spring its important to plant early while growing conditions (cool temperatures and soil moisture) favor seedling establishment.

Weed Control

Weeds are usually the result of poor pasture management and either overgrazing or under-grazing. Proper grazing, maintaining soil health (fertility and pH), and mowing are the best and most environmentally friendly defense against weeds. Regardless of management practices, broadleaf

herbicides may be a necessary component of pasture management. There are several herbicides that can be used on grass pastures to control weeds broadleaf including: 2,4-D (sold under many different names by various manufacturers), dicamba (ex. Banvel), Cimarron, Clarity, Grazon P+D. The type and amount of herbicide, as well as the timing of application, will depend on the type of weed. Weeds are classified as winter or summer annuals, biennials or perennials. Herbicides are only effective when weeds have emerged, but before they flower. For example, buttercups, a common winter annual, can be controlled with herbicides in the fall or early spring, before they flower and when temperatures are mild (late March through early April). Herbicides should be applied after at least three days of air temperatures above 60°F, when winds are calm and there is no chance of precipitation within 24 hours. Removal of horses from pasture is usually not required for most broadleaf herbicides, but its important to always follow label instructions and recommendations. Contact your local Extension office to determine the best herbicide recommendations for your pastures.

Grazing Management

Proper grazing management is the best weed control and provides optimal nutrition for horses. Approximately 2 acres of pasture is needed to provide adequate forage for each mature horse. Higher stocking rates will lead to trampling, soil compaction and overgrazing, which will result in the loss of stand. When plants are constantly overgrazed without rest they die because they do not have the opportunity to replace energy reserves in their roots for regrowth. The best way to minimize overgrazing is through rotational grazing. Pastures can be divided into 4 to 16 paddocks with permanent or temporary electric fencing. Pastures should be grazed when forages reach at least 6 inches tall and horses should be removed when the forage is grazed down to 3 to 4 inches. Bermudagrass can be grazed down to 1 to 2 inches, because it has more leaves lower on the plant, and does not require as much energy from root reserves for regrowth. Grazing intervals vary depending on growing conditions, but 2 to three weeks per paddock is typical during the growing season.