Horse Pastures

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A grass-legume pasture can produce enough protein, vitamins and minerals to meet the maintenance requirements of most adult horses. Lactating mares, growing horses and hard-working horses usually need additional energy in the form of grain. Hard-working horses usually are fed hay and grain rather than pasture.

Horse pastures differ in several respects from cattle pastures, although most principles of establishing and fertilizing forages developed for cattle pastures also apply to horse pastures.

In general, horses are much more destructive to pastures than cattle. Horses tear the sod, denude paths along fences, gates, etc., and punch holes in the sod in times of excessive moisture.

Many people seeking information on horse pastures actually may be interested in seeding an exercise lot. If only one acre or less can be provided per horse, then that area can furnish exercise space but little feed. In such cases, tall fescue is the choice to use. Fescue will withstand trampling, keep down dust, reduce erosion and pollution and provide a clean and pleasant place for the horse to exercise. But the horse should be fed as if in confinement.

At least two acres per mature horse are needed to develop a pasture system that will furnish adequate feed, exercise space and conditions to control internal parasites. In addition to using drug treatments to control parasites, horses should be rotated among pastures.

Rotating horses from pasture to pasture is the simplest and cheapest method of parasite control. Change pastures every three or four weeks. If rotation is not possible, mow frequently or graze closely with cattle.

Don't overstock, graze young horses separately from other horses, and use a recommended parasite treatment program.

Horses seldom bloat, but some owners fear founder when putting them on lush spring pasture. This usually is not a serious problem, but some horses, especially fat ones, are more susceptible than others. For prevention, give horses plenty of hay before going to pasture and allow just a few hours grazing the first several days of the grazing season.

Grazing cattle with horses

If at all possible, combine cattle and horses to maintain a balance between grasses and legumes. Horses tend to graze in spots -- undergrazing and overgrazing. Cattle will graze the otherwise wasted feed. Cattle droppings are randomly distributed, but horse droppings will be concentrated in specific areas and become "hot houses" for parasites.

If cattle and horses are grazed together, pasture clipping usually is eliminated, and it is easier to control parasites and maintain a balance between grasses and legumes.

Cattle and horses may be grazed together simultaneously or rotated with one following the other. Cattle don't have the same intestinal parasites as horses, nor are horses bothered by cattle parasites. They can graze around each other's droppings without becoming infested.

Managing horse pastures

When pastures are continuously grazed by horses, many areas become severely overgrazed. In other pasture areas, the forage growth becomes tall and coarse.

The closely grazed areas first tend to increase in clover, but when this is grazed out or the short stubble killed by drought, many bare areas may result. In the ungrazed areas, the tall grass becomes too competitive and the clover often is smothered out. The best solution to this problem (other than cattle) is frequent clipping or mowing and pasture rotation.

Another frequent problem is inadequate fertilizer. Horse pastures should be topdressed annually. Grass-legume pastures should have a minimum of 30 pounds of phosphorus and 60 pounds of potash per year. Straight grass pastures should be topdressed with 90 pounds of nitrogen, 30 pounds of phosphorus and 60

pounds of potash per acre. The fertilizer usually is most effective if applied during winter or very early spring.

Types of horse pastures
Horse farms or ranches should have four or five smaller pastures rather than one or two large ones, especially if cattle are not available to help with pasture management.

Several small lots near the barn seeded to tall fescue are good to have in addition to regular pastures. When pasture soils are wet, horses tend to damage the sod more than any other class of livestock. In these times, horses are best confined to small areas to prevent damaging regular pastures. Heavy fescue turf in small lots is ideal for this type of area.

Type of forage species
Ideal pasture plants should be productive over a long growing season, highly palatable, aggressive and persistent, adaptable to climatic extremes, and resistant to insects and disease. No single forage plant meets all of this criteria, so select several species and use them in a system to supply a uniform feed supply for grazing animals.

Grasses and legumes

Kentucky bluegrass
No other grass is held in as high esteem by horse owners as Kentucky bluegrass. In areas of Missouri where it is adapted, it can become the backbone of a forage system for horses. It is palatable and nutritious, will withstand close grazing, and is responsive to management to maintain the legume component. In addition, bluegrass produces a high-quality turf that heals rapidly from the rough treatment that horse pastures receive.

Orchardgrass
Orchardgrass is very desirable for horse pastures. It can be used in combination with bluegrass or as the only grass in a mixture with a legume. It is equal to bluegrass, and outside the bluegrass area it should be first choice for horse pastures. Orchardgrass withstands closer grazing than timothy and is not as aggressive to a companion legume as fescue, bromegrass or Reed canarygrass.

Tall fescue
Fescue is widely grown in Missouri, and thousands of horses are pastured on this hardy grass. However, it is not the best forage for horses because it lacks acceptability. Horses sometimes do poorly on it unless their ration is fortified with grain. This is especially true of mares with suckling colts.

Most tall fescue is infected with an endophyte fungus. Mares grazing it during late gestation may fail to develop a normal udder and may have no colostrum at foaling time. Other problems associated with tall fescue include stillborn foals, thick, tough placentae and longer than normal gestation length. Several new varieties of tall fescue have been developed that are free of this endophyte fungus, but if the fescue pasture used for mares contains the fungus, mares should be removed from it at least 60 days prior to foaling.

A fescue-legume mixture is more desirable for horse pastures than fescue alone. Some fescue can be used for late fall and winter grazing. Late summer and early fall growth can be stockpiled and used to supplement hay and grain rations during winter.

Tall fescue should be used in small exercise lots where horses are confined in times of wet weather. It is ideally suited to barn lots, lanes, around gates and watering troughs, and in other heavy traffic areas.

Sorghum-Sudan crosses and Sudan grass
These are not recommended for horse pastures because the disease "Cystitis Syndrome" has been recognized in horses grazing them. Most of the reported cases have been in Texas. Nothing is known about the relationship of this syndrome and pearl millet.

Timothy
Timothy is well liked by horses, but it can't survive close grazing. If it is used, rotational grazing must be practiced.

Bromegrass
Bromegrass also may be used successfully as a horse pasture in areas where it is adapted. It is somewhat sensitive to close grazing and may require more management in the form of rotation grazing, clipping and fertilizing than other grasses to maintain a productive stand.

Reed canarygrass
Reed canarygrass has been used to some advantage as a horse pasture in New Jersey and is well adapted to Missouri.

Bermudagrass
In some areas of the south, bermudagrass is used with good results as a mid-summer horse pasture. Oklahoma reports that it is inferior to the cool season grasses for horses, but could be used in a system to produce some summer grazing. If used as part of the forage program, it is extremely important that a legume be maintained in combination with it.

Legumes
Any legume that is adapted to the soil and moisture conditions of an area can be used successfully as a legume in horse pastures. Horses don't bloat, so there is no fear of using alfalfa, ladino or white clover.

Sometimes an excessive amount of legumes in a mixture will cause slobbering. If the amount of legumes in the mixture can be limited to about 35 to 50 percent of the mixture, slobbering will be minimized.

Legumes that show the most promise in horse pastures are birdsfoot trefoil, white and ladino clover, alfalfa and red clover. Alsike clover and lespedeza also may be used.

Selecting a mixture

Keep seeding mixtures simple. For best results, use only one grass and one or two legumes in a mixture. Differences in palatability and maturity dates among grasses make it highly undesirable to use more than one grass species per forage mixture. For example, tall fescue and orchardgrass seeded in the same mixture results in spotty grazing and wasted forage because of differences in palatability.

The seeding rates listed should serve as guides for the proper amount of seed to plant per acre to obtain forage stands with a proper balance between grasses and legumes. Soil and climate conditions may dictate some adjustments in seeding rates from one area to another.

Seeding mixtures for horse pastures (per acre)

- Alfalfa (10 pounds) and bromegrass (10 pounds), or orchardgrass (6 pounds), or tall fescue (10 pounds)
- Medium red clover (8 pounds) and orchardgrass (6 pounds), or timothy (2 pounds fall or 4 pounds spring)
- Tall fescue (15 pounds), red clover (8 pounds) and ladino clover (3/4 pound)
- Birdsfoot trefoil (3 pounds), timothy (2 pounds), or orchardgrass (3 pounds) and Kentucky bluegrass (1 pound) (unless bluegrass was present in the old sod)
- Tall fescue (15 pounds), or orchardgrass (6 pounds) and lespedeza (15 pounds) and ladino clover (1/2 pound)
- Reed canarygrass (6 pounds), ladino clover (1 pound), and alsike clover (2 pounds)
- Reed canarygrass (6 pounds) and alfalfa (10 pounds), or red clover (10 pounds)

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