

PASTURES FOR HORSES

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For horse owners, the use of pasture in the daily management of their horses provides both exercise for the horses, but also is a valuable source of nutrients. Horse feeding programs are based on forage and pasture is an excellent means to supply nutrients. To make effective use of the forage, horse owners need to manage both the horse and the grass.

It has been suggested by some that 2-4 acres of pasture are required per horse. When looking at this it is easy to agree, but it also depends on other factors. Growing conditions, forage species, number of horses and management all have a great deal of impact on how pasture can be used and how much pasture acreage is really needed.

An ideal pasture for horses has a dense stand of forage, made up of forage species horses that will consume and adequate level of forage produced during the growing season. Horse owners need to manage the pasture to ensure this happens.

What are some of the considerations to have a good pasture? When selecting the forage species, consider what will grow in the area, what species are preferred by the horse, and what species will persist under typical grazing conditions. Researchers at the University of Kentucky have conducted preference and persistence trials to identify those forages that could be used in a horse pasture.

In grazing trials, it was noted that Kentucky bluegrass, Orchard grass and Festulolium were preferred over Tall Fescue. The preference was also noted in how much of the plant material was consumed as the Tall Fescue had the lowest forage reduction scores. When coupled with the grazing score and height reduction, it was concluded that the Kentucky bluegrass and the Festulolium were preferred slightly over the Orchard grass and were much preferred over the Tall Fescue. When evaluating the forage species it was noted that the Tall Fescue had the greatest persistence in the stand. (Hayes et al 2011) In a similar project in Minnesota using cool season grasses, the researchers noted that the species with the greater preference scores had the lowest persistence scores. (Allen et al 2011). What this means to the horse owner is those species that will be readily consumed by the horse may require more management to prevent overgrazing and loss of the species in the stand. The UK work suggested that the lower grazing pressure may have allowed the Tall Fescue to be more persistent because it was not grazed as hard and had more reserves to re-grow. For the horse owner, the other consideration is when using a mixture of species in their pasture, be aware of those areas being preferentially grazed because of a forage species being selected preferentially and manage the horses in a manner to prevent overgrazing.

To manage the pasture and the horse's desire to select preferred plant material, horse owners should consider a rotational grazing program.

The benefits of using a rotational system are: 1.) maximum yield of forage—more feed for your horses; 2.) reduction in spot grazing—preferential grazing of specific forage species; 3.) extension of days the pasture is used—resulting in reduced hay feeding. While all of these benefits are useful to the horse owner, they come at a cost. Horse owners will need a system of fences to divide their pastures to form the grazing areas, need a water supply to all grazing areas, and most importantly, the time to evaluate the pasture and move horses relative to available forage not a day on the calendar.

Limited work has been done on the benefits of rotational grazing for horse production. An early study in Oklahoma grazing yearling Quarter Horses on alfalfa pasture reported significant differences in daily gain, forage dry matter production and days on pasture, with the rotational system being better than the traditional continuous system. The significant take home message is the extended grazing days under the rotational system; the horses were on pasture for 12 more days. This may not seem to be a great increase, but even a few days of extra grazing and less days feeding hay can add to significant feed savings.

Missouri researchers have compared a cool season pasture system based on Tall Fescue by looking at the value of the rotational system. By maintaining forage production and stand vigor, horse owners have the opportunity to make greater use of the available forage as pasture and reduce their dependence on hay. This group noted horses maintained body weight on either system but the forage production was greater on the rotational system. Their research had a fixed time frame but more forage remained on the rotational system giving the option to graze longer.

At UK (unpublished data) mature horses have been maintained on a Bermuda grass pasture under a rotational system. On a five acre pasture, a range of 9-15 mature horses have maintained body weights over 90-120 day grazing periods. Of interest with the increase grazing pressure and a single forage pasture, the incidence of spot grazing was greatly reduced during the different years studied.

For the horse owner developing a horse pasture, consider the following:

- 1.) Select forage species adapted to your area as growing conditions and ease of establishment need to be considered.
- 2.) Look at grazing tolerance—as the preferred species will be selected by the horse and will require more management to prevent overgrazing and reduced forage availability.
- 3.) Plan a rotational system. Remove horses when forage has been grazed to 3-4 inches in height and return when re-growth has reached 8 -10 inches.

In most cases depending on number of horses per unit of area 7 -10 days of grazing followed by 21-28 days for re-growth should work. ***Note that areas of spot grazing could be shorter, making it important to move the horses before the entire area is 3-4 inches in height. Horses are more likely to graze the shorter areas leaving the more mature forage.***

- 4.) Mow pasture after moving the horses. This will help to maintain similar maturity across the grazing area. This practice also helps to reduce spot grazing;
- 5.) Manage the grass—it is a valuable crop that requires attention to both fertility and weed control.

Pastures are a valuable resource to horse owners, but they must be managed and used wisely.