

I own a farm that has two pastures, each of which is approximately four acres. How many horses can I graze in each pasture without having to worry about overgrazing? I'd like for pasture to be the primary forage source during the growing season to help ease soaring feed costs.

The number of horses allowed to graze a parcel of land is called the stocking rate. Optimal stocking rate is contingent upon numerous factors including grazing behavior, level of pasture management, forage species, seasons, and weather patterns.

Grazing behavior plays a pivotal role in deciding how many horses can graze a certain piece of land. Horses prefer young plants because they are usually more succulent and tasty. Immature vegetation also offers more nutrients than older, taller plants. As such, horses will often graze pastures spottily, causing conspicuous areas of short and long forage (called lawns and roughs, respectively). In places of congregation, such as in the vicinity of feed troughs, waterers, gates, and shelters, horses may trample and destroy all forages. These barren patches are called sacrificial areas, and every pasture seems to have some.

Pasture management includes mowing, fertilizing, reseeding, and controlling weed growth. Timely maintenance of pastures can boost stocking rate. One important aspect of pasture management is selection of hardy forages. Plants conducive to high stocking rates should be productive over a long growing season, should grow aggressively, and should not be hindered by high traffic. Because no single species of forage meets all of these criteria, a combination of grasses and legumes will provide the highest yields and the greatest variety in diet. If you are unsure which plants to use, a pasture management consultant should be contacted. This individual will be able to tell you which plants will grow best in your area based on typical weather patterns such as usual high and low temperatures and rainfall.

Time of year and weather patterns can affect stocking rate. More horses can benefit from a forage stand in times of high production such as during a flush of growth in the spring. As spring and summer progress, forage production may decrease and reduce the stocking rate of a pasture. Slow or arrested plant growth, such as that caused by drought, could limit stocking rate significantly. Regular evaluation of fields is necessary to determine if a pasture can accommodate a certain level of grazing.

Considering these factors, the stocking rate for properly tended pastures in temperate climates is one to

three acres per horse. A four-acre pasture could easily withstand the grazing of one or two horses. If the pasture is managed intensely or if grazing time is limited, it may be able to offer sufficient forage to sustain three horses.

Maximizing the use of pasture is a great way to reduce feed costs, potentially eliminating the need to feed certain horses concentrates. However, proper pasture management does require an investment of time and money.

If you would like to submit a nutrition question, please contact Eileen Phethean at ephethean@ker.com or mail to: EQUESTRIAN Nutrition Questions, c/o Kentucky Equine Research, 3910 Delaney Ferry Road, Versailles, KY 40383.