

# MANAGEMENT

## Pasture Management for Horses on Small Acreage

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by P. Aravis<sup>1</sup>

### Quick Facts...

Pasture management for grazing is part art and part science. Regardless of all the tools available to you, your visual observation of the condition of your pasture before, during, and after grazing, will lead to proper utilization of this valuable resource.

A mature horse should consume about 1.5 percent of his weight in daily forage dry matter each day.

Cool-season grass species grow best during early spring and early fall.

Warm-season grasses begin to grow in late spring.

As a horse owner, you need to decide how to best use your pasture. Answering the following questions can help you make that decision.

- How many horses do you have?
- What size is your pasture?
- Is the pasture irrigated?
- How many months do you need the pasture?
- What months do you want to use this pasture?

Your answers to the above questions will dictate whether your pasture can be used for recreation or nutrition.

### Horse Pasture Needs

If the stocking rate averages one 1,000-pound horse per acre on irrigated pasture, the use of the pasture should be for recreation (*K.D. Johnson, Agronomy Department, M.A. Russell, Animal Sciences, Cooperative Extension Service, Purdue University, ID-167*). Select the grass species for a recreational pasture based on its ability to withstand wear and tear and not on forage quality. Consider species such as Kentucky bluegrass, Crested wheatgrass, tall fescue (endophyte free), and Intermediate wheatgrass.

A mature horse should consume about 1.5 percent of his weight in daily forage dry matter each day. If the major nutrient source is pasture, a 1,000-pound horse collectively consumes and wastes approximately 3,000 pounds of forage dry matter during a typical six-month grazing season. Thus, with average management, it would take about 2 to 3 acres of good irrigated pasture to meet the nutrient needs of a mature horse. If your pasture is not irrigated, the acreage size will vary based on the condition of the pasture and the natural moisture conditions in a particular year.

### Grass Species for Pastures

Many irrigated pastures along the Front Range of Colorado contain cool-season grasses such as tall fescue, Orchardgrass and Smooth brome grass. These grasses are highly palatable to horses. Cool-season grass species have their maximum production during early spring and early fall. During the hot summer months, cool-season grass production is reduced. Under irrigated conditions, a horse pasture can be productive for about six months of the year. The key is to be able to determine how much forage your pasture will produce during that six-month grazing season.

Horse owners often keep animals on pastures that are not irrigated. Under these conditions, the forage production is greatly reduced. Cool-season grass species found on dry pastures include tall wheatgrass, Western wheatgrass, Intermediate wheatgrass, pubescent wheatgrass, and Smooth brome grass. These



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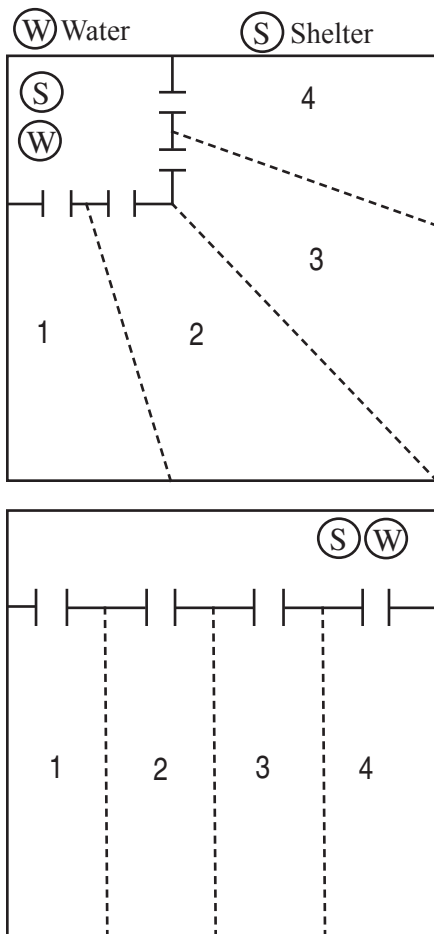


Figure 1: Divide pasture into grazing cells.

species are most productive in the early spring when we get most of our moisture, and later in the fall when temperatures begin to cool. The wheatgrass species become less palatable as the plants mature. This may result in selective grazing by horses to more desirable species or the younger leaves of plants, resulting in overgrazing of the more palatable species.

Some dry pastures are composed of warm-season grass species. Warm-season grasses begin to grow in late spring as compared to cool-season species. Grass species such as big bluestem, little bluestem, Side-oats grama, Switch grass and Buffalo grass are examples of warm-season grass species. Maximum production usually occurs during the summer months. Overgrazing easily damages warm-season grass species.

## Grazing Management

The timing of grazing has a long-term impact on your pasture. Grazing too early in the spring can reduce the yield potential of your pasture and is the most common pasture management mistake. Allow grass to grow before grazing a horse. This grass growth varies depending on the grass species. For example, allow brome and orchardgrass to grow to a height of 6 to 8 inches before grazing is initiated. Grasses have different height requirements prior to the initiation of grazing.

The phrase “**Grazing Management**” is very important. A horse that is grazing should not remove more than 50 percent of the available forage. Simply put, if your horse eats 50 percent of the grass that was there prior to grazing, remove him and allow the pasture to rest approximately 30 days or until the grass regrows to the original height. This approach is called “take half and leave half.”

Divide your pasture into grazing cells to allow for rotational grazing. After a cell is grazed, move the animals to a fresh cell while the grazed cell rests and regrows. The improved management afforded by rotational grazing can greatly increase forage productivity and pasture health (Figure 1.).

## Additional Information

- *ABC's of Small Acreage Ownership video*, XCM-214, Colorado State University Cooperative Extension
- *Pasture: Your Most Valuable Resource video*, XCM-215, Colorado State University Cooperative Extension
- *Caring for Horses in the Western U.S. video*, XCM-216, Colorado State University Cooperative Extension
- *Weeds of Colorado*, Bulletin 521A, Colorado State University Cooperative Extension
- *Weed Management for Small Rural Acreages*, Colorado State University Cooperative Extension fact sheet 3.106
- *Production Agriculture: Putting Knowledge to Work CD-ROM*, XCD-12, Colorado State University Cooperative Extension
- For more information, contact your county Colorado State University Cooperative Extension office