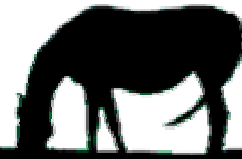


# Grazing Strategies for Horse Pastures

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Many horse pastures in Colorado suffer from overgrazing. Repeated heavy grazing that removes too much leaf material weakens plant root structure making it difficult for plants to recover. As a result, less forage is available for grazing and pastures are vulnerable to weed invasion and erosion.

Horse owners have several options for managing the grazing of horses. Some grazing strategies are better at maintaining pasture ground cover and reducing the risk of overgrazing than others. Grazing strategies include:

- Continuous (season-long) grazing
- Partial-season grazing
- Limited turnout time
- Rotational grazing

## Continuous (or season-long) grazing

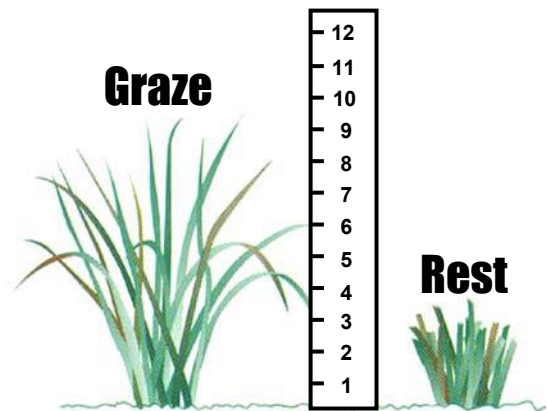
When horses have access to pasture 24 hours a day, 7 days a week, for the whole grazing season (or even 365 days a year), they are being managed under a *continuous (or season-long) grazing system*. Unfortunately, this grazing strategy often results in overgrazing, particularly on smaller acreages.

Continuous access to pasture allows horses to be very selective. Horses repeatedly graze the best-tasting plants, stressing them beyond their ability to survive. Plants are never given a rest or allowed to recover from grazing. Not surprisingly, under this type of grazing management, once-lush pastures are soon turned into dry lots where only weeds survive.

Unless large amounts of acreage are available, continuous grazing is not recommended for dryland horse pastures in Colorado.

## Two Essential Rules of Grazing Management

- 1) Avoid grazing until plants have reached an average height of 6 to 8 inches.
- 2) Remove horses and rest pastures when plants have been grazed down to 3 to 4 inches.



## Partial-season grazing

Restricting grazing to only part of the year, and then removing horses from pasture for the rest of the year, is referred to as *partial-season grazing*.

For example, some horse owners take advantage of rapid plant growth in the spring and early summer, when forage quality is also at its highest, to graze their horses. When sufficient forage has been grazed, horses are moved off the pasture and hand-fed to avoid overgrazing. Horses are not returned to the pasture until next spring.



By comparison, horse owners that spend their summer traveling to shows, rodeos and other events may choose to defer grazing over the spring and summer while they are gone. When their activities slow down in late summer and fall, they can turn their horses out to pasture to graze forage that has been stockpiled (saved back) over the summer.

Allowing access to pasture for only a portion of the grazing season reduces the risk of overgrazing as long as horses are denied access until the grass is ready (6 to 8 inches high) and removed from the pasture when sufficient grazing has taken place (3 to 4 inches high).

## Limited Turnout Time

Allowing horses daily access to pasture for shorter periods (1-hour to 12-hours per day) is referred to as *Limited Turnout Time*. This grazing strategy is ideal for horses managed on small properties, particularly operations that house more horses than their pastures can support with longer periods of grazing.

Turnout to pasture provides not only exercise, but may also provide significant savings in feed costs in the long-term, even if horses are only turned out for 1-2 hours per day. Table 1 shows how much hay can be replaced by each hour of grazing.

As with all grazing strategies, turnout can commence when grass has achieved a height of 6 to 8 inches, and should cease when grass has been grazed down to 3 to 4 inches.

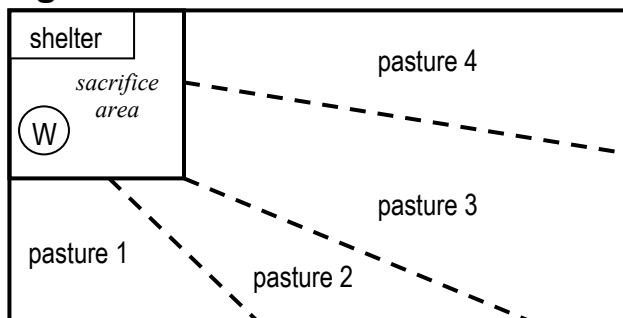
**Table 1: Amount of hay that can be replaced per hour of grazing in spring or summer.**

Season	Grass hay	Alfalfa hay
Spring	2.75 lbs	2.25 lbs
Summer	1.75 lbs	1.25 lbs

## Create and Use a Sacrifice Area

A sacrifice area is a dry lot, pen, corral, or stall run where horses can be housed and hand-fed whenever pastures need a rest from grazing. In essence, this area is sacrificed to spare your pasture from overgrazing and hoof damage at critical times.

**Figure 1**



## Rotational Grazing

Dividing a pasture into smaller cells and rotating the use of each cell is referred to as *Rotational Grazing* (Figure 1). Even small (1-2 acre) pastures can be effectively set up as a rotational system.

Using this grazing strategy, horses are allowed access to one cell at a time. When forage has been grazed down to 3-4 inches, horses can be rotated into the next cell. The previously grazed cell is then allowed to rest and recover. If sufficient regrowth occurs (6-8 inches), horses can be returned to a cell for more grazing. On irrigated pastures, regrowth may take 30 to 60 days. In contrast, each cell will likely only be grazed once on dryland pastures.

The size and number of cells can vary based on available acreage, the number of horses, the productivity of the pasture, and how long the horses will have residence in the cell. Ideally, each cell should contain enough forage to sustain the grazing horses for 4 to 7 days. Grazing for longer than 7 days may increase damage due to hoof tread, particularly near water and salt sources. Horse owners using rotational grazing for the first time will have to experiment with the size and number of their cells. Be flexible! Following a strict calendar of entrance and exit dates should be avoided. Instead, monitor the grazing progress and remove horses to another cell (or sacrifice area) when it's appropriate.

Confining horses to a smaller area of the pasture eliminates selective grazing, resulting in more complete utilization of the available forage. In addition, providing rest periods from grazing allows the grass to recover, which maintains desirable species and makes plants more competitive with weeds. Over time, the amount and quality of the forage growing in the pasture increases, which can potentially allow a greater number of horses to be supported by the same acreage. Rotational grazing can also improve the effectiveness of partial-season and Limited Turnout grazing systems.