



# GROWING GREENER:

by Jennie Kramer

## A BEGINNER'S GUIDE TO ROTATIONAL GRAZING

**S**pring is here and grazing season has returned! You celebrate by escorting your horses into lush, green pastures and watch them graze, gratified. Fast forward several weeks. Your fields now resemble a cross between the Mojave Desert and *A Field Guide to Weeds*. Bare patches abound. Mud, manure, and weeds have taken over. You provide additional hay, desperately attempting to divert your horse's seemingly insatiable appetite. Fall arrives once again, and your compromised pastures go dormant, only to begin the cycle again in the spring.

Fortunately, many options exist for those wishing to improve the productivity of their pastures. Pasture rotation is one of the simplest and most cost-effective methods. Read on to discover how a rotational grazing system can benefit you, your horses, and the environment.

### What is Rotational Grazing?

Rotational grazing is a management tool designed to maximize a pasture's production. In a properly implemented system, horses are periodically moved through a series of paddocks, or sub-divisions within a pasture, thereby allowing vegetation and vital soil organisms adequate time for growth and recovery following a period of grazing. The result is a sustainable, budget-friendly source of quality forage.

### Who can use a Rotational Grazing System?

Rotational grazing can be practiced on virtually any property that is capable of growing grass, regardless of size, and without the use of



specialized equipment. The potential rewards of a well-implemented grazing plan are many, but diligent management and routine maintenance are both necessary to achieve them.

## Benefits of Rotational Grazing

A properly designed grazing system will benefit horses, humans, and the environment.

### Horses

- Horses have evolved to graze high-quality forage, and will often thrive on a forage-only diet. For this reason, roughage should be considered the major component of a cost-effective feeding program for any horse, regardless of age. Unfortunately, a lack of quality grazing forces many horse keepers to substitute processed feeds in an attempt to satisfy the majority of their horse's nutritional requirements.
- A properly managed grazing system will effectively interrupt the lifecycle of many parasites, making it less likely that your horse will play host to them.
- Grazing, especially rotational grazing, closely mimics a horse's natural, nomadic lifestyle. Freedom of movement, combined with an almost continual flow of forage, encourages motility within the gut, thereby reducing the likelihood of colic.
- The option to graze freely reduces the occurrence of boredom-induced behaviors such as weaving and cribbing.

### Humans

- The more nutrition and roughage your pastures can provide, the less you need to pay out for hay and concentrated feeds.
- In addition to providing quality grazing, a properly maintained pasture will improve the overall aesthetics of the property.
- Healthy forage will provide a longer grazing season, thereby lessening dependence on 'outside' sources of feed.

### environment

- Vegetation captures and retains precipitation, allowing it to infiltrate into the soil and recharge groundwater.
- Infiltration means less erosion, sedimentation, and nutrient runoff into nearby surface water.
- A vegetative cover contributes valuable organic matter to the soil, increasing its overall productivity.
- Less opportunity for soil compaction translates into a healthier root system.
- Rotation results in a more even distribution of manure and nutrients.
- Pastures provide habitat for local wildlife.

## Developing a Rotational Grazing System

There are many things to consider when designing a rotational grazing system to fit your needs. And, while the process may seem tedious, careful planning will save you time and money in the future, allowing you to maximize your returns. Consider the following before you begin drawing up your plan:

### Know your forage

A basic understanding of forage – and the impact horses have on forage – is crucial to effective pasture management.

- Young plants are most palatable to a horse; it is necessary to protect new growth from grazing if a sustainable source of forage is our objective. It is upon this basic idea that a rotational grazing system is built. Horses should be rotated out of any pasture where the vegetation

is less than 4 inches tall. The pasture should be rested until it has regained a height of at least 6 inches.



Having a basic understanding of your forage will allow for educated decision making.

- Horses are spot grazers – they will selectively graze certain parts of a pasture while bypassing others. They will also avoid grazing in areas on which they defecate. These tendencies often result in irregular, weedy growth.
- Heavy hoof traffic will compact soil making the development of a healthy root system difficult; hooves are especially damaging to wet vegetation. If at all possible, horses should be removed to a dry lot or "sacrifice area" any time pastures are wet.
- Consider your stocking rate, or the number of horses per available acre of grazing. A higher stocking rate may necessitate more frequent rotation, longer recovery times for grazed areas, and a more frequent need to "dry lot" your herd while grazed vegetation recovers.

## Pasture Maintenance

Pasture maintenance is an important component of a successful rotational grazing program. If sustained production of quality forage is our goal, we must actively discourage overgrazing, weeds, and mud.



If temporary fencing is necessary, ensure that it is both safe for horses and installed correctly.

- **Rest:** The time necessary for vegetative regrowth will vary depending on grazing pressure, location, and seasonal changes. It is especially important to rest pastures that are experiencing environmental stresses such as drought.





There may be times when it is necessary to remove your herd to a dry lot or "sacrifice area" to allow pastures time for recovery and regrowth.

- **Re-Seedin G:** Despite diligent management, bare spots may still occur within a grazing area. These should be promptly seeded and mulched to encourage regrowth and reduce the occurrence of mud.
- **Fencin G:** Fencing, whether temporary or permanent, will need to be checked regularly and repaired as necessary. *Note: Metal "T-posts" are a popular option for those needing portable fencing. Although convenient and affordable, be aware that posts lacking safety caps pose a serious hazard to horses.*
- **Mo Win G:** Mowing serves the dual purpose of encouraging growth of vegetation and ensuring that opportunistic weeds do not shade out grass.
- **Manu Re ManaGement:** Removal or dispersion of manure will be necessary to avoid spot grazing. Remove horses from fields with recently scattered manure and allow several days for manure to dry before returning livestock to the field. Appropriate manure management will ensure more uniform grazing, discourage muddy conditions, and help to interrupt the lifecycles of equine parasites in warmer climates.



In addition to food, horses will require access to water and shelter in each section of a rotational grazing system.

## Your Horse's needs

Even the most ambitious plan will fall short if it doesn't meet your horse's basic needs. Answer the following questions to catch potential flaws or inconsistencies in your plan.

- Are you willing and able to continue supplementing your horse's diet if the pasture is unable to provide complete nutrition?
- Will horses have access to water and shelter for each subdivision within the system?
- Does your rotation schedule accommodate horses who cannot be turned out together? (This may be especially important if you are operating a boarding facility.)
- Are all exterior and interior fences horse-safe? In addition to ensuring and maintaining the integrity of the fence, remember that horses may need to be "shown" new fence lines. Ribbons tied to temporary fences will also help to improve visibility.

## When Designing your System...

It is important to do a "reality check" before finalizing plans for your rotational grazing system.

- Do you have the time, resources, and discipline to maintain the system? A successful grazing program is a year-round commitment and should be treated as such in order to bring out your pasture's full potential.
- Are you willing to designate and utilize a dry lot or "sacrifice area" in which to confine your herd when pastures are wet, overgrazed, or otherwise compromised?

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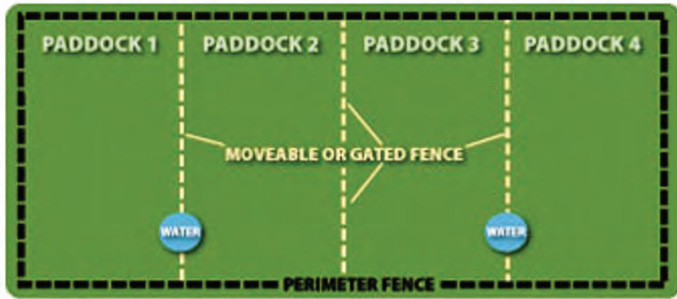
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Rotational-grazing paddock layout example



Example of small-acreage grazing system with lot and stalls.

The possibilities are endless! Take time to do some creative “brainstorming” when designing your rotational grazing system!

Photos courtesy of USDA Natural Resources Conservation Service.  
[http://www.nrcs.usda.gov/news/pubs\\_download/pasture\\_mgmt/pastureman\\_horse\\_rotational.html](http://www.nrcs.usda.gov/news/pubs_download/pasture_mgmt/pastureman_horse_rotational.html)

Plans for your new grazing program can be simple or elaborate, homespun or professional. Remember, one size does not fit all – procedures for a private property with a small herd will differ greatly from those for a large-scale boarding facility. Two examples are shown adjacent; a laminated copy of your program, conveniently located as a “quick reference,” can help avoid confusion, particularly in facilities employing multiple caregivers.

## e losing t houghts...

It is always advisable to seek the expertise of someone experienced in pasture management when creating a rotational grazing plan. Your local resource conservation office will be able to provide assistance through the National Resource Conservation Service (NRCS). In addition to providing information, trained technicians can evaluate your pastures, identify areas of concern, and recommend appropriate solutions, all at little or no cost.

The term “natural horse keeping” is something of an oxymoron. Few possess the acreage necessary to provide the lifestyle our horses’ ancestors enjoyed. As a result, most domestic horses will never experience a truly “natural” existence. It is possible, however, to recreate the nomadic experience on a smaller scale.

For thousands of years, the horse has relinquished basic freedoms as part of his servitude to man. Consider giving a little something back by implementing a rotational grazing program on your property – your horse, your wallet, and the environment will thank you. ☺☺

### About the author:

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