

# HORSE PASTURE MANAGEMENT



## PASTURE MANAGEMENT

Forage is an ideal horse feed. A well managed pasture can provide a cheap and reliable source of feed for four to eight months of the year for most horses. Pasture management includes the following basic steps: seeding suitable species; fertilizing with manure and an application of commercial fertilizer; rotating horses out of the pasture before it becomes over grazed; mowing to prevent weeds from gaining a hold; and harrowing to break up manure and expose parasites to the sun.

## SEEDING

The ideal horse pasture combines legumes and grasses. In general, grasses offer high dry matter intake, and earlier spring and later fall grazing than legumes. They also tend to develop a thick turf which discourages weeds and reduces damage from trampling. Grasses can also reduce the risk of digestive upsets. Legumes, on the other hand, are higher in protein and mineral content, maintain or improve nitrogen fertility and generally provide higher summer production.

## FERTILIZING/SOIL TESTING

Grasses and legumes pull water, nitrogen, calcium, magnesium, phosphorus and potassium out of the soil. Manure will return some of these nutrients to the soil, but the pasture will likely require an application of commercial fertilizer. For a small investment have the soil tested and get some recommendations on nutrients required for your pasture. Soil should always be tested prior to planting. Contact the nearest Soil Test Laboratory for instructions and prices.

## ROTATION

Horses can do extensive damage to pastures as they graze close, drop manure, and trample large areas. Pasture should not be grazed until new growth is about 10 cm high and grazing should be discontinued when only 5 cm of grass remains. Rotation will allow increased production while reducing the total area needed for pasture. Follow these six guidelines for pasture management:

- Allow recovery until growth is at least 10 cm high (2030 days).
- Graze uniformly and completely but never below 5 cm.
- Mow and harrow if possible immediately after grazing.
- Harrow to spread manure, preferably in hot dry weather; do not irrigate for two to three days.
- Irrigate according to soil moisture levels and plant requirements. A 57.5 cm application of irrigation water approximately every ten to fourteen days will be adequate for many situations.
- Allow soil to dry before beginning to graze again.

## MOWING

If horses are spot grazing or weeds are growing seed heads it is time to mow. Mowing or clipping after removing horses from the pasture will help to keep weeds from gaining a hold. Persistent weeds such as Canada Thistle or buttercup may need to be treated with a timely application of a herbicide. Controlling fence line weeds by cutting or spraying will help to reduce weed establishment.

## HARROWING

Harrowing or dragging the pasture breaks up the manure for easier absorption into the soil, and exposes parasites and their eggs to the fatal heat of the sun. Rupert Herd, Ohio State University veterinarian and parasitologist states that "an integrated approach which combines the strategic and limited use of dewormers with properly timed harrowing and manure removal offers the best current program for parasite control".

## WATER CONTROL

Water laying on the pasture is a haven for mosquitoes and weeds. Drain or level the pasture to avoid this problem.

## EQUIPMENT

For many small acreage horse farms a garden tractor, mower, and small chain harrow are all that are required to maintain an ideal pasture. An electric or portable fence may be necessary to provide small areas for rotation. Horses need space to run and paddocks should be designed with this in mind. Long rectangular paddocks are preferable.

## CARRYING CAPACITY

The nutrient requirements of horses vary greatly depending on their activity; e.g. lactating mares with foals require almost twice as much dry matter intake as idle mature geldings. Horses at medium work (2 hrs. a day) are intermediate in their requirements. The carrying capacity of the pasture will depend on the pasture productivity and the requirements of the horses.

A well managed, productive pasture can support one mare and a foal for four to five months on 1.5-2 acres or three mature horses in light work on 3-4 acres.

Horses foul the same part of the pasture throughout the entire grazing season. Forage waste can be reduced by providing a small grazing area at the start of the season.

As grasses mature over the summer, growth stops and leaves drop off. The stems that remain are often low in quality. Controlling plant growth to continue to produce leafy growth over the season significantly improves pasture productivity.

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