

## Horse Pasture Management Calendar

by Krishona Martinson, University of Minnesota

Most horse owners are aware that pastures need some level of management to produce large amounts of high quality forage throughout the growing season. However, owners may not realize there are proper times to conduct these activities (see Table, be advised the dates in the table are suggestions and should not be taken as absolute). The weather will be the biggest determination of exact dates, but generally speaking, pastures can provide feed for horses from May through September.

### Rotational Grazing

Healthy forage plants are more productive if given an opportunity to regrow between grazings. Enhance forage growth by dividing a pasture into separately fenced paddocks and rotate horses among them, aiming for about 30 days of rest for each paddock.

| Dates (Apx.) | Pasture Activity  |
|--------------|---|
| April        | Soil Test   |
| Mid-April    | Apply Fertilizer if Needed, Check Fencing   |
| May 1-15     | Begin Grazing   |
| Mid-June     | Rotate Your Horses into New Pasture/Paddock(mow, drag, and fertilize the pasture/paddock your horses were just moved from)  |
| Mid-July     | Rotate Your Horses into New Pasture/Paddock(mow, drag, and fertilize the pasture/paddock your horses were just moved from)  |
| Mid-Aug.     | Rotate Your Horses into New Pasture/Paddock(mow, drag, and fertilize the pasture/paddock your horses were just moved from)  |
| Mid-Sept.    | Rotate Your Horses into New Pasture/Paddock(mow, drag, and fertilize the pasture/paddock your horses were just moved from)<br>Control Perennial Weeds with Herbicides if Needed |
| Late-Sept.   | Remove Horses from Pasture  |

Since grass pasture plants grow most rapidly in spring and slow down in the fall, experiment to come up with an optimum rotation length. Start with 3-4 weeks of rest per paddock during summer, maybe fewer in spring and more in fall.

The general rule of thumb is to start horses grazing in a paddock when the forages are at least 6-10" tall and move horses after they have grazed the forage to an average height of 3-4". (If bluegrass is the dominant forage, horses can graze it to 2" and then get turned back into the pasture when it has reached a height of 6-8").

Continuous grazing, or allowing horses access to the entire pasture from spring through fall, will make existing weed problems even worse. If allowed to continuously graze a pasture, horses can seriously reduce the forages' productivity. Under continuous grazing, forages never get a chance to recover and outgrow the weeds. Legumes such as alfalfa and other clovers will not survive if continuously grazed. Grasses such as Kentucky bluegrass can tolerate continuous grazing but will be less productive than if managed under a rotational grazing plan. Well-timed rotations through several, smaller-sized paddocks will help desirable plants reestablish themselves.

Stocking rates depend on feed needs and pasture's yield. Horses eat about 1-2% of their body weight/day in the form of pasture forage. Assume that a 1,000 lb horse eats about 15-20 lb of pasture forage/day. Stocking rates of one horse/2-4 ac may be achieved with attention to fertility, weeds, and forage mix. Higher rates may result in horses trampling much of the pasture and damaging forage. However, well-managed pastures (adequate fertility, few weeds, appropriate plant mix) can be rotationally grazed at higher stocking rates.

### Fertility and Weed Control

Fertility refers to the level of essential nutrients present and available for pasture plants (forages). Test your pasture's soil to determine if additional nutrients must be applied to yield the volume of grasses and legumes desired. If tests reveal a deficiency, apply additional nutrients using commercial fertilizers. Get a soil test kit from any University of Minnesota Extension office or private soil testing lab.

If additional fertilizer is recommended, it is best to apply the fertilizer though the summer, instead of all at once. For example, if 100 lb of fertilizer is needed, apply 25 lb four times throughout the growing season. This will ensure plants have a steady supply of nutrients and reduce the chance of fertilizer run-off and leaching.

Positive identification of weed species is the first step in determining the appropriate control strategy. Owners should be most concerned about poisonous and noxious weeds but should strive to control other weeds in order to further improve their pasture's productivity. Control weeds by rotational grazing, mowing, hand pulling, or chemically treating weeds when the horses are elsewhere.

Perennial weeds are best controlled in the fall when the plants are storing carbohydrates in their roots for over-wintering. Herbicides applied to perennial weeds at this time will move into the roots, effectively controlling the weed. Annual weeds seldom require herbicide treatment, as timely mowing will effectively control them.

### Mowing and Dragging

Since horses selectively graze younger pasture plants, mow the mature grasses and legumes still standing after the horses have grazed the pasture to induce regrowth. Allowing the ungrazed plants to remain standing without mowing could stunt regrowth of the other forages by shading them out. Mowing the pasture too frequently will encourage short, less productive forages such as bluegrass. Mowing is also a very effective weed control tool.

To ensure pasture plants can more easily use manure's nutrients, frequently drag/rake manure deposited in the pasture. This will more evenly distribute the manure and promote its breakdown while also reducing the potential exposure of horses to internal parasites.

Information used to write this article was taken from the publication "Pasture and Manure Management for Recreational Horse Owners" by Wegner and Halback". It's available at [www.extension.umn.edu/horse](http://www.extension.umn.edu/horse). ☘