

The Grass is Always Greener... in Dutchess County

VOLUME 1, ISSUE 1

SPRING 2012

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PASTURE EYES - Tips for taking care of what you have before summer heat dries it up!

Myra Lawyer, DCSWCD

Roots are the key to a green pasture! If you manage for root mass, your grass will have more staying power in the heat of summer. Start grazing in the spring when the grass is 4" in height. Remove the animals at 2-2 1/2". This might mean that horses are only there for a day.

Division is the most important part of the equation- divide the grazing areas into 3-the best paddock management comes from long rest periods, short harvest times, and the use of a sacrifice lot when there is nothing grow-

ing above 2-2 1/2 inches. By dividing the paddock, you will better utilize the growth of the grass. Use a



square paddock design and utilize at least 2 gates / per paddock for better wear pattern reduction. Keep animals off of the growing areas and in the sacrifice area when grass

is shorter than 2-2 1/2". When you get down to the 2-2 1/2" and we haven't had an inch of rain that week, the grass can't recover and you are now terminating the existing grass. This is where the weed population can increase rapidly.

Even when you think there is nothing growing, you aren't doing your grass any favor by allowing the foot traffic to go over the area. At that point, all that is happening is the soil is being compacted, thus reducing the root mass. You should be feeding hay at that point anyway.

Grazing Strategy

Develop a grazing strategy that allows your pastures to re-grow to at least 6 inches between grazings. Walk the pasture, bend down and get the horse's view of the forages-are there rocks, moss, nasty, prickly plants in the majority of the pasture? Can you see any signs of new, green grass blades coming through the soil? Can you see bare soil?

Remember that a horse left on pasture continually will graze 20 hours a day! If it is re-grazing the same areas over and over throughout the day, that isn't giving the roots a chance to flourish and create more root mass under the soil. Those roots are concentrating so hard on re-growing the grass that they

quickly become worn out. If the horse follows the same pattern of grazing day after day, the new growth is

..."bend down and get the horse's view of the forages-"

chewed off as soon as it appears, the roots are not

getting proper food to replenish their needs and the soil around them is being compacted thus making it even harder to sustain.

Drag harrows-do they help or hurt?



By Myra Lawyer, DCSWCD

It is an age old debate-and the answer is clear -if you have good hay quality, they can help. But, if you have weedy hay, the weed seeds are passing through the horse and just begging you to harrow them into the ground. Dragging manure with a harrow increases the seed to soil contact ratio. So, if you insist that you

need to drag manure across the pasture, you had better be feeding the horse the right seeds! Remember that after dragging the pasture, you will want to provide plenty of hay or a fresh pasture while the manure breaks down into the pasture soil. While weeds are not particularly desirable as a whole pasture, they do

provide some green scenery and can be of substantial forage value. So my best tip is to learn what weeds are poisonous to your animals and let the rest of them grow.



Maximizing the Value of Pasture for Horses

By K D. Johnson, Agronomy Department
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From: <http://www.agry.purdue.edu/ext/forages/publications/ID-1&T.htm>

The first decision is whether to use the pasture for exercise purposes only or as a major part of your nutritional program. Most horses benefit from being outside regularly to exercise. This need can be met on relatively small, well-drained lots. Free exercise reduces behavior and respiratory problems, improves bone growth, and increases vitamin metabolism.

Pasture nutritional value
Most horses can be maintained nutritionally through the growing season on well-managed pasture if provided with fresh water and a supply of trace-mineralized salt. Table 1 compares the nutrient composition of three pastures with the nutritional needs of various types of horses. Productive pasture during the growing season can replace the hay and reduce the concentrate required by most horses, and can replace all feed for those that are laid up, mature, idle, or pregnant. Note in Table 1 that lactating mares and fast-growing weanlings will probably need additional energy, protein, and minerals.

forages mature. Consequently, management practices need to be utilized that keep the forage actively growing. The key to nutritional management is to continually observe the horses and supplement the pasture only if their body condition so indicates.

Pasture carrying capacity.
Horses should consume 1 percent or more of their body weight per day in forage dry-matter. If the major nutrient source is pasture, a 1000 pound horse will collectively consume and waste approximately 3 tons of forage dry matter during a typical 6-month grazing season. Thus, with average management, it would take about 2 acres of pasture to meet the nutrient needs of a mature horse.



If your desire, however, is for the pasture to serve as a feed source, other factors need to be considered including its potential nutritional value and its carrying capacity.

The values in this table also indicate a marked decrease in nutrient availability as

Of course, the carrying capacity of any particular pasture will depend on such things as type of horses, soil type, soil fertility, drainage conditions, amount of rainfall, time of year, and type of forage species present. For instance, in mid-to late-summer or in droughty periods, grass-only pastures will not carry as many horses as grass-legume pastures. Many annual forage species can be planted to provide supplemental feed in times of short permanent pasture supply.

Table I. Nutrient Composition of Pasture Dry Matter Compared with the Nutrient Needs of Horses.*

Pasture species and maturity	DryMatter	Digestible energy	Crude protein	Calcium	Phosphorous	Vitamin A
	pct.	Meal/lb.	pct.	pct.	pct.	1000 IU/lb.
Kentucky Bluegrass						
Vegetative	31	1.44	17.4	0.33	0.30	72.7
Mature	42	1.12	9.5	0.30	0.25	69.4
Orchardgrass						
Vegetative	23	1.44	18.4	0.57	0.54	34.9
Mature	35	1.06	8.4	0.45	0.35	32.1
Orchardgrass/Alfalfa						
Vegetative	22	1.35	19.2	1.27	0.42	34.3
Mature	30	1.08	11.2	1.13	0.32	30.5
Type of horse	Minimum requirements					

Mature or idle		1.00	10.0	0.30	0.20	0.5
Pregnant (last 90 days)		1.10	11.0	0.50	0.40	1.6
Lactation		1.20	14.0	0.60	0.40	1.3
Weanling		1.40	15.0	0.70	0.40	0.9
Work		1.20	11.0	0.35	0.25	0.9

“in droughty periods, grass-only pastures will not carry as many horses as grass-legume pastures”

* From "Nutrient Requirements of Horses"(1989) and "Tables of Feed composition" (1982), National Research Council, National Academy of Sciences.

Why Manage Pastures?

By Jennifer Fimbel, CCCD



*“If it’s green
does it make it
good quality
pasture?”*

You are stewards of the land. You’ll have better relationships with your neighbors and local government if you manage your grazing land using Best Management Practices (BMP).

You will improve water quality. Your horses will enjoy eating grasses rather than weeds. By better managing your pastures, you are actually practicing Agricultural Environmental Management (AEM). Water quality will be improved when you practice correct manure management and pasture management.

Grass areas act as filter strips to prevent excess nitrates, phosphorous and pathogens from entering water supplies. Managed pasture land will also reduce erosion into waterways by holding the soil in place rather than allowing it to wash away. It’s hard to think about planning your pastures during this time of year, but it’s just like planning your garden during the winter months...Now Is The Time To Plan!

Pasture is a crop. Like corn, oats, wheat and even your vegetable garden. It’s not just a place to turn your horses out into. A pasture provides nutrition and forage, as well as enough space to support the horses on it. An exercise lot provides very little nutrition or forage and only enough room for a horse to stretch it’s legs. Good quality pasture will be more nutritious and will appear more pleasing than poor quality pasture or dirt lots.

Ideally pastures should be located on relatively flat areas with no steep inclines.

Pasture size should relate to the number of horses expected to be grazing in the field. Enough room should be set aside to allow for rotation of fields. The shape of the field should be square or rectangular to avoid highly trampled areas. Generally speaking, it takes 2.5 - 5 acres of land (depending on the quality of the pasture) to support 1 horse. Most of you don’t have that amount of property - so how can you keep our horses AND pastures healthy? By limiting the amount of time each pasture has horses on it. Supplement pasture with hay year round and rotation of grazing areas.

The type of soil, how well-drained the field is and the soil type will all relate to how well your pasture mixes will grow. You should choose your seed mixtures based on the type of soil that you have, not the other way around! To find out what your soil needs to grow your pasture CROP, you should take a sampling of your soil for testing. CCEDC will send your soil to a lab to determine how much fertilizer and lime your fields need.

The addition of fertilizer and lime to your pastures will ensure quality growth when applied appropriately. Fertilize 1/2 in the spring and 1/2 in July if at all possible. Lime may be applied in the spring and/or fall. Never add more than 3 tons per acre at one time. So how long until you can graze your horse back on an area? It will depend on when grasses are planted, how well established the grasses become, how many horses are grazing and the intensity of grazing on the pasture.



What is AEM?



Agriculture Environmental Management (AEM) is a voluntary, incentive-based program that helps farmers make common-sense, cost-effective and science-based decisions to help meet business objectives while protecting and conserving the

State's natural resources.

Farmers work with local AEM resource professionals to develop comprehensive farm plans using a 5 tiered process.



Make A Plan!

A Maintenance Plan

- Soil Test every 3 years
- Follow the test result recommendations
- MOW before weeds seed out
- Inspect pastures for weeds regularly
- Check grass height
- Don't overgraze your pastures.

Grass To Their Knees?

For optimum nutrition, grasses should be grown to 6" - 8" before grazing is done. Horses should graze the grasses down to 3". Horses should then be rotated out. The grass gets mowed down to 2" and then re-growth of the grasses to 6"-8". Grasses grazed to specifications

will re-grow in about 15 days during the spring. During the summer months it may take as long as 35 days for your pasture to recover. Planning your rotational areas will make pasture rotation far more productive if you lay out your plans now.

Interesting Links...



New Lyme Disease Test for Horses and Dogs Will Help Improve Treatment - <http://www.news.cornell.edu/stories/June11/LymeVetTest.html>

Poisonous Plants to Livestock - <http://www.ansci.cornell.edu/plants/php>

[Reportable Equine Diseases](#)

Ctrl + Click to link to the websites



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845.677.5067 (Master Gardener Hotline)
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Cornell Cooperative Extension provides equal program and employment opportunities. The County of Dutchess partially funds Cooperative Extension programming in Dutchess County. Please contact the Cornell Cooperative Extension Dutchess County office if you have any special needs.



Dutchess County Soil & Water Conservation District



www.dutchessswcd.org

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Tel: (845) 677-8011 x3
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Collaborating Agriculture Agencies ...

Myra Lawyer works for the Dutchess County Soil and Water Conservation District as their Certified Nutrient Management Planner, certified AEM whole farm planner, and a licensed Certified Crop Advisor. For the past 3 years, she has been a part of the NYS grazing team training for agricultural professionals. She survived grazing training boot camp and is willing to work with any Dutchess County landowner that wants

to commit to sound grazing practices. She can be reached at 845-677-8011, ext 3.



Jennifer Fimbel works for Cornell Cooperative Extension Dutchess County as their Resource Educator specializing in

horses, livestock and Agriculture Policy. She has 25 years of experience providing pasture recommendations to horse owners and livestock farms. She can be reached at 845-677-8223, extension 118.

Myra and Jennifer frequently work together to provide you with the most up-to-date pasture recommendations for your grazing needs.