## **Pasture Management**

I believe that the best management practices for grazing carbohydrate intolerant horses will be a scheme of rotational grazing. The best system will have to be dependant on many factors, including the climate, the species of grass and their individual morphological characteristics, the intensity and sophistication of management inputs, and the ratio of acreage to the number of animals. Many horse owners will find this far too complicated a concept. Often pastures are considered more as exercise, and the nutritional aspects of grazing are not considered. If a horse farm has enough acreage to provide a major portion of the feed as grass or hay, I strongly advise you to learn from your cattle grazer colleagues. You not only have a horse farm, you have a grass farm, and I strongly suggest you learn how to manage that grass to maximize and manipulate nutrition and production, and to learn how to maintain that grass. The best type of grass for horses is not necessarily the same as that grown to fatten cattle, but at least the cattle folks take growing grass very seriously.

This is a very comprehensive site for learning about rotational grazing and the background for understanding how we can manage sustainable, but productive pastures. Please use caution when interpreting this site's use of terms like 'best' in regards to the quality of the grass, or the 'best' times to graze. This site is targeting highest sugar grass for increased milk production in cattle. Some of the practices we will follow for obese or laminitic horses will be completely opposite. The site does have a lot of very good information regarding grass growth and management.

Managing pasture to graze during lowest sugar stage without damaging, or even killing the grass is going to be a challenge. We are essentially grazing when the grass is at it's weakest. A system that is sustainable over the long term will have to be fairly sophisticated, or you may well end up with a patch of weeds or clover. As much as I hate 'rules of thumb', here's one that is often touted by grazing specialists that should serve us well. 'Take half, and leave the rest'. When you move animals to a new section of grass, tend the previously grazed section carefully to help it gain the necessary strength (accumulation of carbs) to get it through any impending stressful climatic change, be it winter or mid-summer drought. Sections that are closely grazed early in the summer may recover sufficiently by allowing them to re-grow until freezing kills them, and use them for grazing of dead grass in winter. Avoid intensive grazing at seasons end. You may very well kill your stand of grass.

## Well nurtured grass is lower in sugar

I find too many horse people think that grass takes care of itself. A pasture is NOT a closed system, with renewable resources. The animals are constantly ingesting nutrients that become permanently part of their bodies. If you incinerate dead animals, and scattered their ashes, this would be a step in the right direction, but frankly I feel it easier to spread fertilizer. Yes, some excess nutrients are excreted as manure, but this is done haphazardly, often in specific places in the pasture, so are not evenly distributed. Nitrogen is often a limiting factor for growth. Most of the nitrogen in manure is lost to the air unless it is properly composted immediately after deposition. (And no, just piling it up is NOT composting. Composting is both art and science.) I feel that the practice of using clover and other legumes as nitrogen fixers is contradicted for pastures designed for laminitic horses due to clovers tendency to accumulate starch under cold stress. I also have a problem with clover because of the occurrence of photosensitivity of grazing horses with white patches of skin, and it's implication in the development of 'grass sickness' in equines in the UK. Clover also contains phytoestrogens. The effect of phytoestrogens has not been researched on horses, but the effects documented in sheep and cattle cause me concern. Laminitic horses often have metabolic dysfunction, and throwing in hormones of plant origin seems to be asking for trouble. Because nutrient deficiencies, especially nitrogen, are linked to increased NSC in pasture grass, it will be necessary to manage pastures for balanced nutrition of the grass as part of a management plan for keeping grass sugar levels under control. Consequently, the horses eating that grass will benefit nutritionally. Due to the very specific, and individual nature of agronomic advice, it is impractical to address them here. If you are interested in developing a holistic plan for pasture management for your horse farm, consultation services are available at grassinfo 'at' safergrass.org (take out spaces) Be advised that crop consultants charge about the same per hour as a plumber.

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