JULY 2008 – RENAISSANCE NUTRITION

THE FORAGER

Agronomics with livestock in mind!

Management of Grasses & Mixed Forage Stands

Feeding lots of highly digestible forages in a balanced ration is an essential part of dairy profitability. Improved varieties of perennial and annual species can be an excellent part of a crop rotation that will benefit not only a good cropping program, but also nutrient management and soil health, along with livestock productivity, health and overall farm profitability.

However, to make grasses and mixed forage stands productive, they must be managed properly. Grass is a crop and must be managed for yield.

Key Management Factors

Cutting Management: The Number 1 mistake by most producers is in their cutting management.

Harvest Dates: First cutting must be made aggressively! Harvest grass crops prior to boot stage; the earlier a grass crop is harvested the better the quality and the faster the re-growth. Later cuttings are typically over 30 days. For grasses such as annuals and Italian ryegrass, a second cutting may be within 20 days or so.

Cutterbar Height: With the advent of disk mowers came serious problems with grass production. Disk mowers have the ability to cut low, tempting the producer to take it all, thinking yields are higher. This approach is a disaster for most grass species. Grass needs 3 to 4 inches of stubble-height in the field. The energy storage in most grass is located in the lower couple of inches. By harvesting this lower tissue, the plants' health is compromised and may cause serious yield reductions because the grass does not 'bounce back.' Try an experiment: Leave a 1 to 2 inch stubble height in a circular area in a field, then raise the cutterbar height. You will be amazed at how fast the grasses bounce back for the next cutting. For legume/grass stands that may be getting too thick with grass, simply decrease the cutterbar height. Match species and varieties to the soil, climate and production goals on each farm. Refer to such publications as King's AgriSeed Product Info Guide for more information on this topic.

Apply proper amount and type of fertilizer. There are many nutrients that are critical for plant development and growth; however, soil nutrients like nitrogen (N), potassium (P), phosphorus (K), calcium (Ca) and sulfur (S) are of extreme importance. Here is some information regarding N, as one example.

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Nitrogen (N): One ton of dry matter with a protein content of 16% contains approximately 50 lbs of N. Grasses with their fibrous root systems are excellent for scavenging surplus nitrogen from manure, fertilizer and legume crops (i.e. alfalfa, etc.). Because of high N costs, seeding grasses with legumes offers an excellent approach that makes both financial and agronomic sense. Nutrients such as N should be "spoon-fed" to grasses. Too little N and crop yields suffer, along with protein content. Too much N can result in excessive non-protein nitrogen (NPN) and possible crop lodging. Keep in mind that when soil temperatures are low, the natural release of soil N is also low. Commercial fertilizers and manures with available N are critical for crop response especially during early spring and fall growing periods. And for a commercial N-source, this author prefers a blend of ammonium sulfate and protected urea.

Be sure to contact the Renaissance agronomy office for more details regarding soil nutrients and their value to grass and mixed forage crops.

There may be some real opportunities to further explore the use of grasses and mixed forages in high producing rations this year and in the coming years. This may be due in part to the reduction in available corn silages, which have been diverted to ethanol manufacturing, as well as various climatic extremes that have reduced the viability of a good corn crop in certain areas of the country. Grasses can offer a unique alternative that may provide numerous benefits to dairy and livestock other than the traditional idea of grazing.

The scope of available grass species and related varieties is extensive, since US suppliers have worked extensively in recent years with production and breeding facilities world-wide, gaining greater insights into the agronomic and nutritional possibilities that exist within this rather large forage group. Check out the possibilities and get all the facts. This might be an avenue of direction to consider today and in the future.

(Edited from an article by Tim Fritz, Agronomist, King's AgriSeed, Inc., Lancaster, PA)