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FORAGE NEWS

 Research & Education Center
 Princeton, KY 42445

 For more forage information, visit our UK Forage Extension Website at: <http://www.uky.edu/Ag/Forage>

June 2010

Garry D. Lacefield and S. Ray Smith, Extension Forage Specialists • Christi Forsythe, Secretary

KFGC UPDATE

Mark your calendar for this year's KFGC Field Day which is scheduled for September 14 at the farm of Jim Landis in Barren County. Tentative plans are to have a twilight (4-8 p.m.) tour with an evening meal. Jim has made some significant changes with his grazing program in recent years. This field day will showcase those changes in the areas of fencing, watering, grass-legume, stockpiling, 800 foot rule and grazing management. A number of exhibits are being planned along with several hands-on demonstrations such as drill calibration, weed ID, hay testing and moisture monitoring, and fencing and watering supplies for intensive grazing. There will be more information on this field day in later issues of Forage News.

It is not too late to register for the American Forage and Grassland Conference, June 21-23 in Springfield, Missouri. Go to www.afgc.org for more information and to register. Best of luck to Caldwell Willig of Oldham County who will represent KFGC in the forage spokesperson contest.

For information on forages and upcoming forage programs go to www.kfgc.org or UK's forage website at www.uky.edu/Ag/Forage. (Don Sorrell, KFGC President)

U.S. SUPREME COURT REVIEWS BAN ON ROUNDUP READY® ALFALFA

On January 15, 2010, the U.S. Supreme Court granted a petition for review of a March 2007 federal district court order that halted planting of Roundup Ready alfalfa (RRA), pending completion of an Environmental Impact Statement (EIS) by the USDA. The petition for review was filed with the U.S. Supreme Court by Monsanto Company in October 2009. The company argued that the 2007 ban on planting RRA should not have been ordered without first holding an evidentiary hearing. Monsanto further argued that the ban imposed unnecessary costs and restrictions on both alfalfa hay and alfalfa seed growers, and that alfalfa growers deserve choice in the products that are available to them. The Supreme Court heard arguments in the case on April 27, 2010 with a possible decision by early Summer. Stay tuned to www.roundupreadyalfalfa.com for more information. (SOURCE: *The Haymaker*, Spring 2010)

INCREASE PASTURE PROFITS USING CROSS FENCES

Even though your cows no longer are grazing corn stalks, don't put away your electric fence for the summer just yet. I'll explain why in a moment.

Electric fence is the easiest and cheapest way to increase production from summer pastures. Dividing pastures with electric cross fences gives you more control of when and where your cattle graze. It helps you encourage cattle to graze pastures more uniformly and completely, including areas they normally avoid. And, it can help you improve the health and vigor of your grass by giving it time to recover and regrow after each grazing. As a result, your grass production and pasture carrying capacity will increase.

I'm sure you've seen many ads promoting high-powered, high-tensile, imported electric fencing systems. In fact, I encourage using these systems in many situations – I use them myself sometimes. But, cross fences do not need to be permanent, nor do they need to be expensive. This is especially true if you already have electric fencing your animals respect. And using fencing you already have gives you an inexpensive opportunity to experiment with where you might eventually place a more permanent cross fence.

The electric fence that keeps your cows on stalks during winter can give you this inexpensive opportunity to try some cross fencing where you have been reluctant to try it before.

So, as the rapid spring growth of your pastures begin to slow down, use your winter electric fence to try some extra summer cross fencing of your pastures.

More grass, better gains, and better profits might be the result. (SOURCE: Bruce Anderson, *Extension Forage Specialist*, University of Nebraska)

PLANT GROWTH REGULATOR TO INCREASE PASTURE GROWTH

Some of you may have recently heard about a new plant growth regulator called RyzUp SmartGrass. It is being marketed to increase grass pasture production during late fall and early spring. The product is a formulation of gibberellic acid (often called GA). GA is a naturally occurring plant growth regulator that causes cell elongation in all plants and therefore is essential for plant growth. Applications of GA have been used for years in the horticulture industry to increase fruit size. For example, GA is very important in the production of seedless grapes and seedless watermelons. Without seeds these crops do not produce enough natural GA and fruit size is very small. Simply by spraying a small concentration on the plants the cells elongate in the fruit producing the large size that consumers desire.

This article is not about fruit production. The question is whether the new GA formulation called RyzUp SmartGrass is effective in increasing pasture growth as advertised. The product has been sold for some time in New Zealand and Australia to increase pasture growth in the cooler months of the year (temperatures between 40 and 60 degrees). The University of Kentucky has been working with Valent BioSciences since 2008 to test this product in KY. Our initial trials on tall fescue growth in the fall gave mixed results with Ryzup sometimes increasing growth and other times there was no difference in growth. Results in 2009 in other states were more promising. This spring we are testing the product on orchardgrass at the UK Lexington Research Farm and a number of county agents are conducting on farm demonstration tests. In coming issues of Forage News we will update you with results from these trials and on trials planned for this fall.

ALFALFA CUTTING HEIGHT TO MAXIMIZE FORAGE YIELD AND QUALITY

Current recommendations regarding cutting height of alfalfa are designed to maximize yield while maintaining high quality forages and stand longevity. Forage growers frequently cut forages at a height of 3-inches or more. However, recent reports indicate that there may be an advantage to cutting alfalfa closer, leaving an inch or less of stubble height. Research indicates that dry matter yields and nutrient yields are higher for shorter cutting heights as compared to leaving taller stubble. Obtaining higher yields requires that the plants are healthy and that carbohydrate root reserves are adequate for plant regrowth following harvest. Wisconsin studies conducted in the 1960s using Vernal alfalfa showed that forages harvested three or four times per season produced more total forage when cut at a 1-inch height versus cutting at 3 inches or more. Recent North Dakota research evaluating the effects of cutting height shows similar results where shorter cutting height results in higher yields.

One of the reasons for leaving taller stubble is to improve the quality of harvested forage. The lowest sections of the alfalfa plant are

typically higher in fiber and have fewer high quality leaves present. If growers raise their cutting height to leave these high-fiber basal stem sections in the field, they may increase forage quality.

Research was initiated at the Marshfield Agricultural Research Station during 1999 to explore the relationships among cutting height, forage yield and forage quality.

Results indicate that alfalfa yield and milk yield is highest when cutting at the lowest possible height. While forage quality declines with lower cutting heights, forage yield increases significantly. These studies were done on healthy, weed-free stands of alfalfa and soil moisture conditions were adequate during most of the growing season.

Current recommendations for alfalfa cutting height in Wisconsin include the following:

- 1) Cut healthy, non-stressed alfalfa fields at 2-inch heights to achieve maximum dry matter and nutrient yields (Figures 1 and 2).
- 2) In fields where plants are experiencing moisture or flooding stress, or where the crop has been cut early and frequently, root carbohydrate reserves may be low and cutting height should be adjusted upward to avoid additional stress or plant death.
- 3) Adjust cutting height to avoid injuring plants, contaminating the forage with soil, or picking up rocks.

(SOURCE: Daniel W. Wiersma - Marshfield Agricultural Research Station, Ron Wiederholt - UWEX - Clark County Extension, University of Wisconsin
http://www.uwex.edu/ces/forage/wfc/proceedings2001/alfalfa_cutting_height.htm)

Figure 1

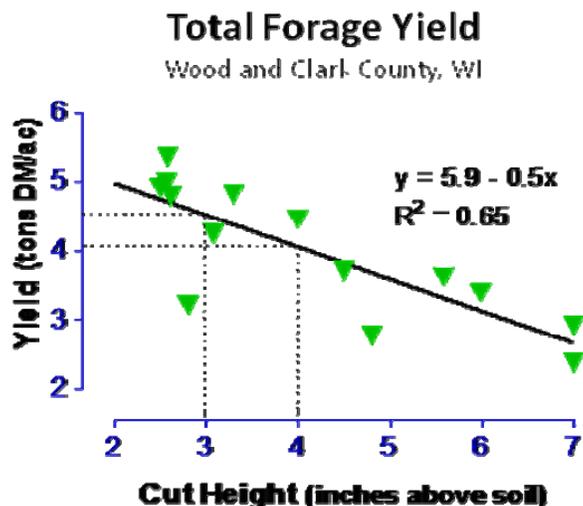
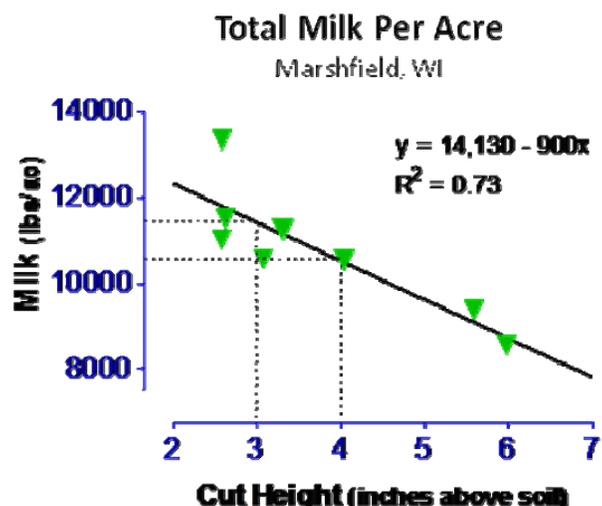


Figure 2



TRADITIONAL ECOSYSTEM SERVICES OF FORAGE AND GRAZING LANDS

The traditional ecosystem services derived from forage and grazing lands—food, feed, fiber, forest products, milk, and meat—generate a large portion of agricultural income in the U.S. Forage and grasslands account for about \$45 billion of forage-livestock receipts, with about \$11 billion from the 25.2 million ha of hayland. Forage and grazing lands supply feedstuffs for approximately 100 million ruminant animals on U.S. farms. Forage and grazing lands also provide critical conservation ecosystem services. Managed grasslands are critical to multiple soil and water conservation practices such as windbreaks for reducing wind erosion, vegetative barriers for trapping sediment and reducing water erosion, filter strips for slowing surface runoff and reducing herbicide movement, and buffer strips for protecting riparian zones. Many federal and state conservation programs in the U.S. recommend the use of multiple grass and legume species for conservation practices, such as the Conservation Reserve Program (CRP), the Environmental Quality Incentives Program (EQIP), and the Conservation Stewardship Program (CStP).

Agricultural systems based on diverse grasslands have a number of environmental benefits, including soil conservation, improved nutrient cycling, and provision of wildlife habitat. Diverse grasslands can support and even improve livestock production and health. Biologically diverse systems could provide a range of newly-emerging services, including C sequestration and biofuels production. But it must be remembered that as with most agricultural production systems there are tradeoffs between achieving production levels necessary to meet the farmer's economic sustainability, while at the same time satisfying the demands of an expanding population that wants to eat meat and drink milk, and maintaining the integrity of the agroecosystem.

(SOURCE: Matt Sanderson - Presented at the 64th Southern Pasture & Forage Crop Improvement Conference, Oklahoma City, OK, May 2010)

PERFORMANCE AND PROFITABILITY OF STOCKER CATTLE GRAZING KY 31, JESUP MAXQ & WINTER ANNUAL PASTURES. BATESVILLE, AR.

Forage	* ADG	* Gain/A	Profit/A
MaxQ	1.87	662	\$91.69
KY 31	1.03	270	(-\$68.88)
W. Annuals	1.97	470	(-\$27.47)

* Lbs - 3 yr. avg.

SOURCE: University of Arkansas

FORAGE QUALITY ANALYSIS OF JESUP MAXQ TALL FESCUE

Harvest Date	Crude Protein %	TDN %
October 2001	16.88	65.33
January 2001	20.67	75.78
March 2002	26.37	80.16
April 2002	16.75	64.55
AVG	20.17	71.46

SOURCE: Mississippi State University

UPCOMING EVENTS

AUG 9-10 Kentucky Grazing School, UK Animal Res. Ctr., Versailles
 SEP 1-4 National Hay Association Annual Conference, Lexington
 SEP 14 KFGC Field Day, Barren Co., KY
 SEP 23 UK Beef Bash, UK Res. & Education Center, Princeton
 2011
 JAN 25-26 Heart of America Grazing Conference, Louisville
 FEB 24 31st Kentucky Alfalfa Conference, Lexington

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 June 2010