**FORAGES AT KCA: NEW YEAR – NEW CHALLENGES**

Happy New Year! I do hope each of you are planning to attend and participate in the 2009 Kentucky Cattlemen’s Association Convention and Trade Show January 8-10, 2009 at the Lexington Convention Center. Dave Maples and the entire KCA staff are working hard to make this a most informative, interesting and “FUN” time.

Our Forages at KCA Conference will be January 9, from 2:00 to 4:30. We have put together an outstanding program featuring Mr. Barry Drury the National Forage Spokesman. We are honored to have Barry with us and so proud of him for representing Kentucky at the National AFGC Forage Spokesman Contest. Barry’s topic is “How I use Forages”. He is a forage producer from Woodford county and will discuss his forage-cash hay program.

In addition to Barry, we have four additional timely topics that we know will be of value to you in your forage program. Topics and speakers for the entire program are:

**Kentucky Forages**

2:00 p.m. Welcome – Dr. Garry Lacefield
2:10 How I use Forages - Mr. Barry Drury, National Forage Spokesman
2:30 Selecting Clover Varieties Wisely - Dr. Ray Smith
3:00 Weed Control Options for Pastures - Mr. Jon Doran
3:30 Teff: What is it? Where does it fit in Kentucky - Mr. Bret Winsett
4:00 Extended Grazing & Reducing Stored Feed Need - Dr. Garry Lacefield
4:30 Adjourn

We will have a proceedings available along with other publications at the Conference. If you have questions, do not hesitate to contact me at 270-365-7541, Ext. 202, glacefie@uky.edu or Christi at 270-365-7541, Ext. 221 cforsyth@uky.edu

See you in Lexington January 8-10.

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**FORAGE NEWS**

January 2009

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

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**2008 VARIETY TEST REPORTS**

The 2008 Forage Variety Test reports are now available. Check with your county agent for a copy of these reports or go to www.uky.edu/Ag/Forage for the current report or all yearly reports from 2001-2008. We have continued to develop the summary report that contains all of the variety testing information for the last 10 years in easy to read comparative tables for each species. 2008 was a tough year with the continued dry summer conditions. Overall, forage yields were down in the testing program, but the advantages of improved varieties were all the more apparent. We want to especially thank Mr. Gene Olson for his excellent management of the largest forage variety testing program in the eastern U.S.

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**KFGC - Supporting KY’s Forage Industry**

With over seven million acres in production, forages play a major role in Kentucky’s agriculture economy. For example, forages are the backbone of our livestock industry with approximately 75% of the nutritional needs of all livestock animals coming from forages such as pasture, hay and corn silage.

In 1962 the Kentucky Forage and Grassland Council (KFGC) was organized to promote and strengthen the forage industry in Kentucky. One of the primary goals of KFGC is to increase the productivity and profitability of KY’s forage producers. Some of the ways this can be done is by increasing forage yield and quality and by improving forage utilization and marketing. To address these and other forage related issues, KFGC sponsors education programs such as the KY Grazing Conference, Alfalfa Conference, Master Grazer Program(s), forage field days and tours. KFGC members also receive the following forage publications: Forage News, The Forage Leader and Hay and Forage Grower.

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**NEW PUBLICATION ADDRESSES KEY FORAGE/LIVESTOCK ISSUE**

January 12, 2009. A new publication developed by forage and grazing specialists in five different states addresses an issue that is of major importance with regard to profitability of livestock production. The publication, titled Extending Grazing And Reducing Stored Feed Needs, was written by Dr. Don Ball at Forage News, The Forage Leader and Hay and Forage Grower.

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**USDA/NASS**

Source: USDA/NASS

Livestock

Crops

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin. UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE, AND KENTUCKY COUNTIES, COOPERATING
Auburn University, Ed Ballard who is retired from the University of Illinois, Mark Kennedy with NRCS in Missouri, Dr. Garry Lacefield at the University of Kentucky, and Dr. Dan Undersander at the University of Wisconsin. It was developed under the auspices of the Grazing Lands Conservation Initiative, a consortium of livestock and forage-oriented organizations commonly referred to as simply GLCI.

The authors, who collectively have nearly one hundred fifty years of experience in working with livestock producers, share the opinion that greatest expense associated with a livestock operation is typically the cost of feeding the animals during periods when pasture forage is not available. They agree that the percentage of expenses associated with providing hay or other stored feed is usually the single best indicator of the profitability of a livestock operation. The reason is that the cost per day or per animal of providing pasture forage is usually no more than about one third of the cost of stored feed.

There are also other reasons why it makes sense to keep animals grazing as much of the time as possible. Concentrating animals to feed them stored feed simultaneously concentrates manure and nutrients. Feeding animals on a sod also concentrates nutrients and often results in damage to the land. When grazing animals harvest the forage, less labor is required, weather is rarely a concern, and there is less likelihood of damage to the environment. Also, pasture forage is generally of higher quality than hay.

Given the recent sharp increases in livestock production inputs, this publication is extremely timely. While the best techniques to reduce stored feed needs vary with geographic region, type of farming operation, and other factors, this publication outlines strategies that can be used in some or many areas to extend grazing, thus increasing profit. The 8 ½ X 11-inch color publication is currently available only in pdf format, but within the next few months hard copies will be printed and distributed in various ways, including by Extension Forage Specialists, as well as by NRCS and various other GLCI organizations. It is currently accessible on our web sites at:

http://www.uky.edu/Ag/Forage/ForagePublications.htm

**Fertilizing Forage Crops in 2009**

Forage producers around the world have struggled over the last year with high fertilizer prices. I’ve had many tell me, “I can’t afford to fertilize my hay or pastures this year. I’ll go broke.” While there is some truth to this statement, in the long term, you will definitely “go broke” if your forage crops don’t have the necessary nutrients for sustained growth. I don’t claim to be a soil science expert, but I would like to provide some basic principles on how to manage the nutrient inputs and outputs on your farm.

First of all, everyone should take soil tests on a regular basis. In hay fields, soil tests should be taken every year, since nutrient removal in hay is high. For managed pasture, soil tests are recommended about every 3 years. I have heard some of you say, “No point in taking a soil test, since I know I can’t afford to apply expensive fertilizer.” I would counter that you can’t afford not to take a soil test, especially when fertilizer costs are high. A soil test may tell you that one field does not need any fertilizer, another field only requires P, another field only needs lime, and a fourth field has very low nutrient levels so you may consider planting a legume like annual lespedezas which will grow in low pH and low P soils. Taking a soil test will allow you to make educated decisions on your farm rather than adding fertilizer that is not needed, or reducing fertilizer applications on fields that need it the most. And some of you may be fortunate and find that the nutrient levels in your fields are in the high range and you can “mine” the nutrients for a few years and hope that fertilizer prices come down (as they have recently for certain nutrients). If you decide that you are going to cut back on fertilizer applications remember that hay crops remove more nutrients than almost any other commercial crop. In the book “Southern Forages” nutrient removal from various forage crops is shown in a table on page 85. For example, a 5 ton/acre alfalfa hay crop removes 280 lb of nitrogen/acre, 75 lb of phosphate, and 300 lb of potash. Nitrogen removal is not a problem with alfalfa because N fixation occurs in the nodules on alfalfa roots, but P and K level will drop in that field. Fortunately, it takes the removal of 5 to 7 lb/acre of potassium/acre and about 10 lb/acre of phosphate for soil test levels to drop by 1 lb/acre. In other words, there are more nutrients tied up in the soil than show up on the soil test report. Remember though that even if your soil test levels are high today, hay crops will eventually deplete the nutrients in the soil if you are not replacing them with commercial fertilizers or manure.

In pastures approximately 80% of the nutrients consumed in the forage are returned to the pasture in the manure and urine. Therefore, fertilizer requirements on pasture are lower than for hayfields, but this is only true in well managed rotationally grazed pastures where manure and urine are equally distributed throughout the pasture. If livestock continuously graze one field all season, then nutrient redistribution occurs because much of the manure and urine end up around the pond and shade trees and the rest of the field becomes nutrient deficient.

During the last couple of years the price of nitrogen increased rapidly (N fertilizer is produced using natural gas) and therefore the interest in planting legumes also increased. Nitrogen fertilizer prices have dropped, but it is still makes more sense to add legumes than to rely only on N fertilizer. Not only do the legumes provide N “for free” from the air, but legumes are usually higher protein forages resulting in higher rates of gain and higher milk production. Legumes have tremendous advantages, but they also require higher pH levels and higher P and K levels for growth and stand survival than grasses (with the exception of the lespedezas). Just like the rest of life, “you don’t get something for nothing.” (SOURCE: Ray Smith)

**KFGC Sponsored Project First In the State**

In mid-December switchgrass was used for the first time in Kentucky as fuel for a power plant. East Kentucky Power Cooperative (EKPC) burned about 70 tons of switchgrass mixed with coal at the cooperative’s Spurlock Station Plant in Maysville. A major media event was staged December 17 to announce the success of the trial burn. The power plant demonstration was part of an innovative four-year pilot project conducted by University of Kentucky Plant and Soil Sciences Department to determine if switchgrass can be grown sustainably and economically in Kentucky. The project is being funded through a grant to the Kentucky Forage and Grassland Council from the Kentucky Agricultural Development Board. UK forage extension specialists (Tom Keene and Ray Smith) are working with 20 farmers and county agents in northeastern Kentucky to evaluate options for planting, growing, harvesting, transporting and processing switchgrass. Switchgrass was chosen because it is well adapted to Kentucky and will grow on marginal, low fertility soils and has excellent drought tolerance and high yield potential.

This KFGC sponsored project has also allowed collaboration with the UK Department of Biosystems and Agricultural Engineering on the development of efficient techniques for ethanol production from switchgrass. If this project is successful, switchgrass could provide a great opportunity for producers in this area and throughout the state to be on the forefront of the emerging biomass market. Ideally, switchgrass and similar grasses may even become important dual use crops for KY for livestock producers. For example, during drought years it could be cut at a leafy stage to provide quality hay, and then allowed to regrow and harvested in the fall as biomass. For the current project, the switchgrass was allowed to grow for the entire season and then harvested in early November. For more information about switchgrass, go online to the KY Forage website (www.uky.edu/Ag/Forage), and look under the publications section for “Biofuel and Forages.”

**Upcoming Events**

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<td>JAN 6</td>
<td>Kentucky Small Ruminant Grazing Conference</td>
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<td>JAN 8-10</td>
<td>Kentucky Cattlemen Association Annual</td>
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<td>JAN 9</td>
<td>Forages at KCA, Lexington</td>
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<td>JAN 21-22</td>
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<td>FEB 19</td>
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<td>JUL 23</td>
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Garry D. Lacefield
Extension Forage Specialist
January 2009