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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>

May 2011

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

ALFALFA CONFERENCE PHOTOS

Photo highlights of the 31st Kentucky Alfalfa Conference have been posted on our website at <http://www.uky.edu/Ag/Forage/ProceedingsPage.htm>. Our thanks to Adam Probst, Woodford County Extension Agent for Agriculture and Natural Resources for providing the photos.

32ND KENTUCKY ALFALFA CONFERENCE DATE SET

The 32nd Kentucky Alfalfa Conference will be held February 23, 2012 at the Cave City Convention Center.

GRAZING CONFERENCE SET FOR BOWLING GREEN

The 12th Kentucky Grazing Conference will be held at the Western Kentucky University Expo Center in Bowling Green on **October 13, 2011**.

AMERICAN FORAGE AND GRASSLAND COUNCIL ANNUAL MEETING - JUNE 12-15, 2011

Plan to attend the **American Forage and Grassland Council annual conference** in French Lick, IN, for the very best in education, exhibits and networking. The location is just one hour west of Louisville. You will hear relevant presentations about forage production and utilization practices that will help you be more profitable. From the opening program to the closing session, you'll find activities and information designed to help you navigate today's forage and grassland environment. The Forage Spokesperson Competition, Forage Bowl, National Hay Show, Emerging Scientist Competition, Photo Contest and more await you in French Lick, IN, June 12-15, 2011.

For more information go to the UK Forage Website (www.uky.edu/Ag/Forage) and click on the AFGC meeting under upcoming events. Online registration is now available or you can download the registration form and mail it in. The full agenda is also available online. Feel free to call AFGC headquarters if you have questions 800-944-2342 or to have the agenda and registration mailed to you.

Conference highlights include:

- Sessions addressing our most pressing issues.
- The best products and services displayed on the exhibit floor.
- Networking opportunities designed to keep you connected with your peers.
- One day registration fees to accommodate schedules.
- Tours of local operations hosted by farm owners/operators and guided by local volunteers.
- Contests, awards, research displays, and much more.

GRAZING SCHOOL

Thirty-three participants from four states attended the Spring Grazing School held at the University of Kentucky Research & Education Center in Princeton April 13-14. Participants enjoyed wonderful weather for the two-day event that involved classroom activities as well as many field activities including designing and constructing fencing and watering systems, paddock layout, pasture assessment and allocating animals to pasture.

Mr. Russell Hackley and Mr. Jim Landis were guest speakers for the school sharing their experiences with "grazing".

On behalf of the Grazing School staff, we want to welcome our new Grazing School Coordinator Ms. Lyndsay Jones. She did a great job with her first Kentucky School – Welcome Aboard Lyndsay!

The next Grazing School will be August 15-16, 2011 in Woodford County.

MOB GRAZING MISCONCEPTIONS

Mob grazing is a hot topic in the grazing world. I've reported on my own experiences with it during the past two years but it remains misunderstood. In a moment I'll try to clarify some misconceptions.

Mob grazing is a popular name for ultra-high stock density grazing. What is meant by 'ultra-high' is debatable but many folks consider three hundred thousand pounds of animals per acre as the minimum to qualify for this category. That means you need around two hundred or more cow-calf pairs per acre. If you only have one hundred cows, then they need to crowd on just one-half an acre. And so forth.

Of course, you can stay on that small piece of ground for only a brief time with that much animal pressure. So this mob of animals is moved to fresh pasture several times each day.

Mob grazing can increase forage utilization. Since animals don't have much chance to graze selectively when tightly crowded they eat most of what they can get to. It also improves nutrient cycling as animals trample lots of grass into the soil and spread manure quite uniformly across the small area they are grazing.

Both goals are accomplished best when yield is quite high, often when grass is at heading. If short grass is mob grazed, the mob needs to be moved many times each day to satisfy intake demand. Less trampling occurs and manure may not get spread as evenly since animals often move to a new area before they make a fresh deposit.

So, mob grazing is not a season-long method of grazing. Instead, it works best when there is much stemmy growth, especially old growth from the previous year or where weeds have taken over. You might use it for a couple of months, or maybe only a day or two. Primarily use it as a way to rejuvenate overgrown pasture.

Used correctly, mob grazing can help almost everyone.
 (SOURCE: Bruce Anderson, University of Nebraska)

LETTER TO THE EDITOR

Editor's Note: It is always good to get feedback to our newsletter. We often get calls, letters, e-mails and personal contacts with positive comments. One of our most faithful readers and encouragers is a twenty plus year farmer-friend from Texas. Bill Wilson is an outstanding hay producer and sends information periodically about his experiences and observations with making hay in Texas. Bill sent the following in response to last month's Forage News (Best Practices to Hasten Field Drying of Grass & Alfalfa). Thanks Bill for your observations and Yes, I certainly agree that there is a geographic difference in all aspects of haymaking and each of us need to apply "Best Practices" as it applies to our temperature-moisture-wind, etc. relating to hay curing. Thanks Bill.

"My opinion is with a full width swath (70% or better) the hay will be 60% moisture after 2.5 hour. Be 48% moisture after 3.75 hours. Be 40% moisture after 5.0 hours. Possibly 25% moisture after 8 hours. At least the leaves will have dried to these levels in these times. The second day of curing the rate of drying is not near as fast. I have no science to justify this opinion."

KENTUCKY LAND VALUES AND RENTAL RATES

In October 2010, Agriculture and Natural Resource (ANR) agents were surveyed to estimate land values and rental rates for various types of farmland. A total of 65 ANR agents completed this survey out of 120 counties, representing 54% of the state total. These responses were evenly distributed between the three reported regions: western KY (22), central KY (21), and eastern KY (22).

Average land values in these three regions ranged from \$2,300-4,400 for cropland, \$1,800-3,700 for hay, \$1,500-3,300 for pasture, and \$1,100-2,500 for woodland. Average land rents in these three regions ranged from \$70-130 for cropland (corn, soybeans, wheat) and \$170-270 for tobacco. Hay and pasture rents were largely consistent: \$45/acre for hay in all three regions and \$30-40/acre for pasture.

Cropland values increased throughout most of the state. This was most dramatic in the western region with an average increase of \$400/acre for cropland. Hay-ground and pasture, on the other hand, were down in the central and eastern regions on average. The western region showed increases in land values for both hay-ground and pasture with increases of \$500/acre and \$300/acre respectively. Woodland values were down through most of the state.

Cash rents were largely unchanged for hay and pasture ground in all regions. For cropland however, there was an average increase of \$20/acre in the western region, going from \$110 to \$130/acre. Although the agent survey did not specifically ask about rents on individual tracts, reports in the last year indicate dramatic increases in maximum rents on individual tracts.

The dynamics driving the land value and rental changes are likely due to the following:

- 1) Record profitability in the corn and soybean sector in the last few years has resulted in increased demand for cropland. This may explain why, in general, the western region that grows the bulk of the corn and soybeans in the state experienced a dramatic increase in land values (except woodland) and would also explain the increase in cropland rental rates in this region. A number of agents in the western region noted in the survey that much of the hay-ground and pasture that sold in the last year was being converted to cropland. This would explain why hay-ground and pasture increased in the western region and did not in the other regions.
- 2) A decrease in disposable income caused by the recession and more difficulty in obtaining credit has resulted in a decrease in demand for recreational-type land. This would explain the dramatic decreases in woodland value in most of the state.
- 3) Poor profitability in the cow-calf sector, combined with increased difficulty obtaining credit, resulted in reduced demand for hay and pasture ground. This would explain the decrease in land values for hay-ground and pasture in the central and eastern regions of the state.

For more details, consult the publication "Kentucky ANR Agent Land Value and Cash Rent Survey (AEC 2011-01)" available at: <http://www.ca.uky.edu/cmspubsclass/files/ghalich/ANRLandValueandCashRentSurvey2010.pdf> (SOURCE: Greg Halich, UK Ag. Economist)

Table 1 - Regional Land Values in Kentucky

Region	Cropland	Hay	Pasture	Woodland
Western	\$3,700	\$2,800	\$2,500	\$1,800
Central	\$4,400	\$3,700	\$3,300	\$2,500
Eastern	\$2,300	\$1,800	\$1,500	\$1,100

Per acre value based on October 2010 survey of Agriculture and Natural Resource County Extension Agents. Total of 65 completed surveys.

Table 2 - Regional Cash Rents in Kentucky

Region	Cropland	Tobacco	Hay	Pasture
Western	\$130	\$270	\$45	\$40
Central	\$100	\$260	\$45	\$35
Eastern	\$70	\$170	\$45	\$30

Per acre rental rate based on October 2010 survey of Agriculture and Natural Resource County Extension Agents. Total of 65 completed surveys.

ECONOMIC STUDY PROVES VALUE OF LEGUMES & NON-TOXIC FESCUE IN PASTURES

For many years, Auburn University has been at the forefront of stocker cattle grazing system research. Numerous studies have been conducted comparing average daily gains and animal gains per acre with various forages and forage systems. Auburn Extension Forage Specialist Don Ball and Extension Economist Walt Prevatt recently completed a detailed summary of 37 grazing studies in which they compared pasture costs per pound of stocker gain for each of these

different pasture forage systems. Total pasture costs per pound of stocker gain ranged from \$.30 to \$1.49. Of the top ten lowest cost forage systems, eight included legumes alone or in pasture mixes of fescue, orchardgrass or winter annuals. The two lowest cost grazing systems were tall fescue with ladino clover and orchardgrass with ladino clover. The researchers cited (1) improved forage quality and (2) the reduction in the amount of nitrogen fertilizer needed as key advantages of the lowest cost grazing schemes.

Dr.'s Ball and Prevatt also reported the significant effect toxic fescue has on cost of gain compared to non-toxic fescue. They found that "in general, the higher the percentage infestation by toxic endophyte in tall fescue, the more costly the gains". They reported that among treatments at the Black Belt Research Center, the total pasture cost/lb. of gain was almost double (\$1.12 vs. \$.65) in the high versus low endophyte treatments.

These findings support numerous stocker cattle studies done more recently with Jesup MaxQ non-toxic, novel endophyte tall fescue and/or Durana or Patriot white clovers. Trials across the country have shown significant improvements in animal gains and gains per acre when these forages were used in the grazing system. (Information for this article adapted from "Stocker Cattle - Performance and Calculated Pasture Cost" - Ball & Prevatt - Publication ANR-1348 - Alabama Cooperative Extension System.) (SOURCE: Pennington Forage News, Spring 2011 Newsletter)

LOW SOIL PH REDUCES FERTILIZER EFFICIENCY

Failure to maintain soil pH at proper levels decreases fertilizer efficiency resulting in lower yields and wasted money. Uptake of the major soil nutrients - nitrogen, phosphorus and potassium - is optimized at a soil pH range of 6.3 to 7.0. When the soil pH drops below this range, N, P & K uptake efficiency is reduced.

According to UGA Extension Forage Agronomist Dennis Hancock, nutrient uptake efficiency on soil with a pH of 5.6 is reduced 35% for N, 50% for P and 10% for K when compared to uptake at a soil pH of 6.2. For hayland, this can result in lost fertilizer value totaling \$60 or more per acre annually (see table).

Comparison of annual value of decreased fertilizer efficiency in a soil with a pH of 5.6 relative to a soil with a pH of 6.2				
Nutrient	Amt. lbs/ac/yr	Price (\$/lb)	Decreased Efficiency	\$ Value of Decrease
N	200	\$.60	35%	-\$42
P ₂ O ₅	50	\$.30	50%	-\$8
K ₂ O	150	\$.67	10%	-\$10

Source: Dr. Dennis Hancock, UGA Agronomy Dept.

In most areas of the country, the prorated annual cost of aglime needed to raise a pH of 5.6 to 6.2 would approximate \$15/acre or less. Keeping in mind potential yield loss, wasted value of fertilizer applied and the positive economics of applying lime, one can easily see the significant benefits of maintaining proper soil pH in pastures and hay fields. (SOURCE: Pennington Forage News, Spring 2011 Newsletter)

TERMINOLOGY FOR GRAZING LANDS AND GRAZING ANIMALS

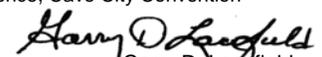
The first edition of "Terminology for Grazing Lands and Grazing Animals" was published in 1991. The second edition has gone "global" with authors from around the world. This International Project has been lead by Dr. Vivien Allen at Texas Tech University. The new edition has been released as an electronic edition and will be the "standard" for use in journals around the world. A pdf version is available on our website at <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2494.2010.00780.x/pdf>. Thanks to Dr. Allen and her International Team for making this available.

UPCOMING EVENTS

JUN 13-15 AFGC Annual Meeting, French Lick, IN
 JUL 21 UK All Commodity Field Day, Princeton
 AUG 15-16 Kentucky Grazing School, Woodford County
 OCT 13 Kentucky Grazing Conference, Western Kentucky University Expo Center

2012

FEB 23 32nd Kentucky Alfalfa Conference, Cave City Convention Center, Cave City


 Garry D. Lacefield
 Extension Forage Specialist
 May 2011