

FORAGE NEWS

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

JUNE 2006

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

UK ANIMAL RESEARCH CENTER FIELD DAY

The UK ARC Field Day will be held at the Woodford County Farm on US 60 just 2.5 miles northwest of Versailles on June 15, 2006. The Field Day will begin with registration from 2:00-4:30. Tours will depart at 3:00 and conclude at 6:00. Dinner lines will open at 6:00 with a welcome from the College of Agriculture at 6:30. Displays will be available for viewing during the entire time. Tours include: Swine Production/Environmental Stewardship, Beef Walking Tour, Beef/Sheep Grazing, and a Forage Tour emphasizing "Optimizing Forage Management". Tour stops for the Forage Tour include: Nitrogen Management on Pastures (Dr. Greg Schwab), Successful Establishment and Legumes in Pastures (Dr. Ray Smith and Dr. Garry Lacefield), Growing Corn for Grazing (Dr. Chad Lee), and New Options in Pasture Weed Control (Dr. J. D. Green and Dr. Bill Witt). Tours leave at approximate 30 minute intervals from 3:00-4:30. For more information, visit our website at www.uky.edu/Ag/Forage.

KENTUCKY WELCOMES DR. REBECCA McCULLEY

We are pleased to welcome Dr. Rebecca McCulley to the UK Forage Team. She has extensive experience in grassland ecology and will be a real asset with student training, research, and collaborative projects. Originally from Texas, Rebecca completed her undergraduate training in biology at Rice University; then went on to obtain a masters in rangeland ecology and management at Texas A&M University and a PhD in ecology from Colorado State University. Most recently Rebecca completed a post-doc with Dr. Robert Jackson at Duke University. Rebecca comes to UK with a national reputation in Grassland Ecology, a strong publication record, but most importantly a genuine interest in conducting basic and applied research projects to benefit Kentucky's forage farmers. When you see Rebecca at meetings this summer and fall make sure to give her a warm Kentucky welcome. Rebecca, her husband Jim, and young daughter Lizzie (7 months) are almost unpacked and settling into life in Lexington.

Effect of Storage Method on Round Bale Hay Loss

| Treatment | Percent Loss |
|-----------------------|--------------|
| 1 On ground, no cover | 37 |
| 2 On tires, no cover | 29 |
| 3 On ground, covered | 29 |
| 4 On tires, covered | 8 |
| 5 Net wrap on ground | 19 |
| 6 In barn | 6 |

(SOURCE: University of Tennessee)

KENTUCKY MILK PRODUCTION

Milk production in Kentucky during 2005 totaled 1.37 billion pounds, down from the 1.42 billion pounds in 2004. Production per cow averaged 12,934 pounds, up 7 pounds from 2004. An average of 106,000 milk cows were on Kentucky farms during 2005, down 4,000 from the previous year. Producers sold 1.34 billion pounds of milk to plants during 2005. Twenty-eight million pounds were used on farms as milk, cream and butter, or fed to calves and other livestock. Milk sold to plants averaged \$16.20 per cwt. in 2005 compared with \$17.00 per cwt. in 2004. Receipts to producers totaled \$218 million for 2005, down 8 percent from 2004. (SOURCE: Kentucky Agri-News, Vol. 25, No. 9, May 2006)

AVERAGE PRICES RECEIVED BY FARMERS— (DOLLARS)

| Commodity | Unit | Kentucky | | | US |
|----------------------|------|--------------|----------|--------------|----------|
| | | Apr 2005 | Mar 2006 | Apr 2006 | Apr 2006 |
| | | Entire Month | | Mid-Month a/ | |
| All Corn b/ c/ | Bu. | 2.19 | 2.34 | 2.45 | 2.11 |
| Soybeans b/ | Bu. | 6.17 | 5.81 | 5.60 | 5.39 |
| Winter Wheat b/ | Bu. | 3.17 | C | 3.30 | 3.91 |
| Alfalfa Hay, baled | Ton | 110.00 | 120.00 | 120.00 | 110.00 |
| All Other Hay, baled | Ton | 64.00 | 70.00 | 70.00 | 93.20 |
| All Hogs | Cwt. | 48.70 | 42.60 | 38.50 | 39.10 |
| Barrows & Gilts | Cwt. | 49.00 | 43.00 | 39.00 | 39.60 |
| Sows | Cwt. | 41.00 | 33.00 | 27.00 | 28.80 |
| All Beef Cattle d/ | Cwt. | 95.30 | 89.00 | 87.50 | 85.20 |
| Steers & Heifers g/ | Cwt. | 109.00 | 102.00 | 100.00 | 89.70 |
| Cows | Cwt. | 52.00 | 48.00 | 48.00 | 48.70 |
| Calves f/ | Cwt. | 132.00 | 128.00 | 126.00 | 136.00 |
| Milk Cows g/ | Each | 1,690.00 | - | 1,830.00 | 1,770.00 |
| Sheep | Cwt. | - | 49.00 | - | - |
| Lambs | Cwt. | - | 100.00 | - | - |
| Milk Wholesale - All | Cwt. | 15.90 | 14.00 | 12.80 | 12.10 |
| Hog-Corn Ratios h/ | Bu. | 22.2 | 18.2 | 15.7 | 18.5 |

a/ Preliminary. b/ Includes contract sales paid during month. c/ Includes yellow and white corn. d/ "Steers and heifers" and "cows" combined. e/ 500 lbs. and over. f/ Under 500 lbs. g/ Published only in Jan., Apr., July & Oct. h/ Number of bushels of corn equal in value to 100 lbs. of hog live weight. C—Confidential.

(SOURCE: Kentucky Agri-News, Vol. 25, No. 9, May 2006)

BIOTERRORISM & HAY

By December of 2006, new regulations regarding the transportation of hay go into effect for all size operations. These regulations are designed to help farmers and emergency personnel track hay shipments should one of those shipments be targeted as a terrorist threat to the general citizenry of the US.

These regulations pertain to hay that is being earmarked to be fed to livestock that will enter the food chain i.e. beef, dairy, sheep, etc.

Below is a summary of the regulations and how they might affect Kentucky produced hay.

1. If you grow hay on your farm(s) and use it for your own livestock production, then there is no change in current procedures or new record keeping necessary.
2. If you sell, barter, give away or otherwise ship hay off of your farm for livestock whose products may end up in the food chain (dairy, beef, etc), according to the new law certain documentation must be kept. If someone other than the farmer does the hauling, then this transporter is required to maintain certain documentation of the hay being shipped.
3. This documentation must be kept for a period of one year from the date of shipment.
4. Below is the required documentation that is to be kept by the transporter.

Requirements for Transporters to Establish and Maintain Records
Sec. 1.352 What information must transporters establish and maintain?

If you are a transporter, you must establish and maintain the following [Page 71654] records for each food you transport in the United States. You may fulfill this requirement by either:

- (a) Establishing and maintaining the following records:
 - (1) Names of the transporter's immediate previous source and transporter's immediate subsequent recipient;
 - (2) Origin and destination points;
 - (3) Date shipment received and date released;
 - (4) Number of packages;
 - (5) Description of freight;
 - (6) Route of movement during the time you transported the food; and
 - (7) Transfer point(s) through which shipment moved; or
 - (b) Establishing and maintaining records containing the following information currently required by the Department of Transportation's Federal Motor Carrier Safety Administration (of roadway interstate transporters (49 CFR 373.101 and 373.103) as of December 9, 2004:
 - (1) Names of consignor and consignee;
 - (2) Origin and destination points;
 - (3) Date of shipment;
 - (4) Number of packages;
 - (5) Description of freight;
 - (6) Route of movement and name of each carrier participating in the transportation; and
 - (7) Transfer points through which shipment moved; or
- Most of the above described information is usually provided for on a regular Bill of Lading (BOL).

These regulations should not have a tremendous impact for most Kentucky hay producers as they utilize their own hay however as more information becomes available we will pass it along to you. (Tom Keene, UK Hay Marketing Specialist)

REDUCING BROILER LITTER APPLICATION RATES CAN STILL PRODUCE HIGH YIELD AND QUALITY IN SORGHUM SUDANGRASS

The 350% increase in the number of broilers in Kentucky over the last decade has led to increases in the amount of poultry litter produced and problems utilizing and/or disposing it. Broiler litter is often over-applied and may cause water pollution and soil nutrient imbalances. We studied broiler litter

fertility regimes that would produce comparable forage yield and quality to that of inorganic fertilizers while reducing the potential for excessive accumulation of soil nutrients. The fertility treatments were: broiler litter applied at recommended nitrogen (N) rate (Litter N); recommended phosphorus (P) rate plus supplemental inorganic N; recommended P rate (Litter P); and inorganic fertilizer. Forage from Litter-N plots contained 44% higher Cu concentration than those from Litter-P plots and there was a 60% increase in Fe concentration from 2001 to 2003 in Litter N plots. Plots receiving litter at high rates (Litter N) had crude protein concentration similar to forage receiving low rates of litter to meet P needs and then supplemented with inorganic N (Litter P+N). There was little difference in ADF and NDF over the three year period. Lower rates of broiler litter, applied based on the P requirement of the crop and supplemented with inorganic N can, in some cases, produce forage with similar nutritive value to that fertilized with inorganic nutrients only or broiler litter applied to meet crop N requirements. (SOURCE: B.B. Sleugh, R.A. Gilfillen, W.T. Willian, and M. Futrell, IN 2006 AFGC Interpretive Summaries, Vol. 15, p. 54)

MEASURING VARIATION IN ALFALFA YIELD AND STAND USING CONVENTIONAL REMOTE SENSING TECHNIQUES

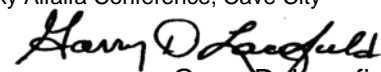
Though accurate tools for assessing yield variation and site-specific management exist for nearly all other economically important crops, no such commercially available system exists for alfalfa. Remotely sensing light reflected from a crop canopy is routinely used to quantify and assess vegetative biomass in other crops. This study evaluates a commercially available remote sensing system that currently is being used in grain production to assess the potential of adapting it for use in alfalfa production. Using the sensor, canopy reflectance was measured in a conventional alfalfa hay field. The amount of light reflected in visible and near-infrared wavelength bands were used to calculate conventional vegetative indices. Regression techniques were used to assess the ability of the indices to model alfalfa yield and stand parameters. Results indicate significant relationships exist between the indices and yield or stand parameters, though these were relatively weak compared to their use in other crops. Strong correlations with reflectance in visible bands indicates the potential for successful modeling of yield and stand variation through more sophisticated multivariate regression techniques. Further analysis is on-going to assess the full potential of this and other commercially available tools for site-specific management of alfalfa. (SOURCE: D.W. Hancock and C.T. Dougherty, IN 2006 AFGC Interpretive Summaries, Vol. 15, p. 59)

UPCOMING EVENTS

| | |
|-----------|--|
| JUN 15 | Beef/Forage Field Day, UK Woodford County Farm, Versailles |
| SEP 12 | KFGC Field Day, Dobbs Shady Meadow Farm, Campbell County |
| SEP 28 | UK College of Ag Field Day, Robinson Station |
| NOV 21 | Kentucky Grazing Conference, Lexington |
| DEC 10-13 | Third National Conference on Grazing Lands, St. Louis, MO |

2007

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|-----------|---|
| JAN 11-13 | KCA Annual Convention & Trade Show, Lexington |
| JAN 24-25 | Heart of America Grazing Conference, Mount Vernon, IL |
| FEB 22 | 27 th Kentucky Alfalfa Conference, Cave City |



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