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FORAGE NEWS

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

May 2014

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

KENTUCKY GRAZING SCHOOL

The U.K. Grazing School will be held at the Woodford County Extension Office and C. Oran Little Research Center May 21-22, 2014. It is a most practical school consisting of classroom and field activities.

Tentative schedule includes:
Wednesday May 21, 2014

- 7:30 EDT Registration & refreshments
- 8:00 Introduction of staff and participants
- 8:15 Benefits of rotational grazing – Garry Lacefield
- 8:45 Meeting nutritional needs on pasture- Donna Amaral-Phillips
- 9:15 Grazing Math Concepts- Jeff Lehmkuhler
- 9:45 Introduce Field Exercise-Jeff Lehmkuhler
- 9:55 Travel to farm
- 10:20 Introduction to temporary fence- Jeremy McGill
- 10:45 Portable/seasonal water and shade systems- Kevin Laurent
- 11:15 Hands-on building a rotational grazing system in the field: assessing pasture yield and setting up small paddocks- Smith and Lehmkuhler
- 12:15 Lunch at farm
- 1:00 Methods to assess pasture production and determine stocking rate- Ray Smith
- 1:50 Travel to Woodford Co. extension office
- 2:15 Growth of grasses and legumes and their response to grazing- Ray Smith
- 3:00 Animal disorders – Michelle Arnold
- 3:30 Break
- 4:00 Fence chargers for effective grazing- Jeremy McGill
- 4:30 Fence building: Understanding how to build and use temporary fencing and high tensile fencing. – Jeremy McGill
- 5:30 Adjourn for the day-Supper on your own

Thursday May 22, 2014

- 7:30 Refreshments
- 8:00 Making tall fescue work on your farm- Garry Lacefield
- 8:30 Implementing a grazing system- Roy Burris
- 9:00 Filling the gaps left by tall fescue-Garry Lacefield
- 9:30 Cost share programs: County Programs- Adam Probst; NRCS Programs: TBA
- 10:00 Break
- 10:15 Minerals for grazing cattle- Donna Amaral- Phillips
- 11:00 Improving Existing Forage Stands – Ray Smith
- 11:30 Fundamentals of laying out a grazing system- Jeff Lehmkuhler
- 12:00 Lunch
- 12:45 Producer panel
- 1:45 Designing your own grazing system- all
- 2:30 Travel to farm
- 2:45 Field exercise. Observe grazed paddocks and hear reports of each group. Tour demonstration plots of spring grazing options
- 5:15 Final comments
- 5:30 Adjourn

Registration fee is \$50 and includes all materials, grazing notebook, breaks and lunch both days. Pre-registration is required to save a space since the class is limited to the first 45.

To register make checks payable to the Kentucky Forage & Grassland Council and send to Dr. Jeff Lehmkuhler, 804 W.P. Garrigus Building, University of Kentucky, Lexington, KY 40546-0215. For more information contact Jeff at 859-257-2853, e-mail jeff.lehmkuhler@uky.edu.

MILESTONE FORAGE PROGRAM DATES

Three major Forage Extension Events will celebrate milestone over the next year. The **35th Kentucky Alfalfa Conference** will be held February 26, 2015 at the Cave City Convention Center. The **20th Forages at KCA** will be at the KCA Convention in Owensboro, January 16-17, 2015 and the **15th Kentucky Grazing Conference** will be held October 23, 2014 at the WKU Expo Center in Bowling Green. Don't miss these milestone events as the program committee is working extra hard to make each very special historical events.

HAY QUALITY

This past winter was a "tough one" to say the least. We went into the winter thinking we had plenty of hay but before it was over some realized it was very close or they ran out. In addition to amount, many of us realized the quality was not as good as we wanted or needed. For many this required having to supplement to compensate for lower quality making our wintering cost higher. There are many factors that will impact the amount and quality of the hay we will go into next winter with. Certainly "weather" is always number one. Of the controllable factors, by far, the most important factor determining quality is "Stage of Maturity" when harvested. All forage plants will decline in quality with age. Our challenge as producers is to harvest to optimize yield-quality-persistence consistent with our ever changing Kentucky weather. That compromise occurs when the plants are changing from a vegetative (leafy) to reproductive (flowering) stage. That is happening as you read this. The optimum comprehensive stage is boot to early head for grasses and bud to early bloom for legumes. For more detailed information, see our website <http://www.uky.edu/Ag/Forage/ForagePublications.htm> for several publications on Hay and Quality.

MOUNTAIN AG WEEK AT UK ROBINSON CENTER

On September 22-27, 2014 the UK College of Agriculture, Food and Environment will be hosting their Mountain Ag Week at the UK Robinson Center for Appalachian Resource Sustainability in Quicksand, Kentucky. This biennial event features a week of activities for pre-school, middle and high school youth, and ends on Saturday the 27th with a more traditional field day schedule featuring field research tours, educational displays, and Appalachian food, crafts and music.

The theme of this year's Mountain Ag Week is "Appalachian Proud" in support of the recently announced eastern Kentucky initiative by Kentucky Department of Agriculture Commissioner, James R. Comer. According to Dr. David Ditsch, Director of the Robinson Center, "Mountain Ag Week is our attempt to showcase our applied research efforts and the many educational programs supported by our eastern Kentucky county extension offices". For more information on directions, research tour topics, and other field day activities, please visit the Robinson Center website (www2.ca.uky.edu/rcars) follow us on face book (www.facebook.com/ukrobinsoncenter), or call 606-666-2438.

FORAGE RECOVERY FROM THE WINTER OF 2013/14

We all know that it was a long cold winter in Kentucky and pastures and hay fields were slow to get started. Some of the slow start was caused by winter injury, but mostly we have just had a late spring. Below are some observations from our UK variety tests. Annual ryegrass is the cool season grass that had the most winterkill. About half of the varieties in UK tests suffered 70-90% winterkill, but other varieties showed no damage. If you are planting annual ryegrass for forage or as a cover crop this fall, make sure to review our UK variety reports to determine the most winterhardy varieties. Although only about 1 in 10 orchardgrass varieties in our tests suffered winterkill, there were many varieties from 1, 2 and 3 year old stands that were set back over winter. Most stands are recovering fine, but it will be especially important to make sure you maintain a good fertility program and maintain your cutting or grazing heights at 3-4" to insure a productive orchardgrass stand on your farm in 2014. Timothy and KY bluegrass varieties showed no winter injury this spring, and not surprisingly, there was no winterkill or even winter injury for tall fescue. Endophyte free and novel endophyte varieties are all doing well. With alfalfa, we have seen minimal winterkill in our variety tests or on farms this past winter, but there was some damage due to frost heaving and winter injury that caused thinning of older stands. If your alfalfa stand suffered winter injury then it's good to wait till early to mid-bloom for your first cutting to allow a full recovery. Alternatively, stands with significant winter injury should be rotated into another crop and replanted next year. Remember that allelopathy in alfalfa prevents interseeding into thinning established stands, but if a fall planted stand from last year is thin, then interseeding to thicken the stand is ok. Red and white clover stands in UK tests showed some winter injury, and we expect that stand life may be shortened in some fields. Watch your clover percentage in pastures and hayfields this summer to determine if you need to no-till more clover in late August or early September or frost seed next February.

HAY HARVEST STAGE IMPACTS QUALITY

Stage of maturity when harvested – Of all the factors affecting hay quality, stage of maturity when harvested is the most important and the one in which greatest progress can be made. As legumes and grasses advance from the vegetative to reproductive (seed) stage, they become higher in fiber and lignin content and lower in protein content, digestibility, and acceptability to livestock. The optimum stages of maturity to harvest for high quality and long stand life of many hay crops are listed in Table 1. Making the first hay cut early permits aftermath growth to begin at a time when temperature and soil moisture are favorable for plant growth and generally increases total yield per acre. The effects of stage of harvest on fescue hay quality and animal performance are shown in Table 2. (SOURCE: University of Kentucky. AGR-62)

Plant Species	Time of Harvest
Alfalfa	Late bud to first flower for first cutting, first flower to 1/10 bloom for second and later cuttings.
Bluegrass, Orchardgrass, Tall Fescue, or Timothy	Boot ¹ to early head stage for first cut, aftermath cuts at 4- to 6-week intervals.
Red Clover or Crimson Clover	First flower to 1/10 bloom.
Oats, Barley, or Wheat	Boot to early head stage.
Rye and Triticale	Boot stage or before.
Soybeans	Mid- to full-bloom and before bottom leaves begin to fall.
Annual Lespedeza	Early bloom and before bottom leaves begin to fall.
Ladino Clover or White Clover	Cut at correct stage for companion plant.
Sudangrass, Sorghum Hybrids, Pearl Millet, and Johnsongrass	40-inch height or early boot stage, whichever comes first.
Bermudagrass	Cut when height is 15 to 18 inches.
Caucasian Bluestem	Boot to early head stage.
Big Bluestem, Indiangrass, and Switchgrass	Early head stage.

¹ Boot is stage of growth of a grass just prior to seedhead emergence. This stage can be identified by the presence of an enlarged or swollen area near the top of the main stem.

Stage of Harvest	Dry Matter Intake lb./day	Percent Digestibility	Percent Protein	lb. of Hay Fed per lb. Gain	lb. of Hay per Acre 1st Cutting	lb. of Gain per Day
Late boot to head, cut May 3	13.0	68	13.8	10.1	1334	1.39
Early bloom stage, May 14	11.7	66	10.2	13.5	1838	.97
Early milk stage—seed forming, May 25	8.6	56	7.6	22.5	2823	.42

*Holstein heifers were used, average weight: 500 pounds.
SOURCE: Personal Communication, Monty Montgomery, University of Tennessee.

KFGC FIELD DAY

Breckinridge County will host the 2014 Kentucky Forage & Grassland Council Field Day on July 17. Carol Hinton, Calvin Bohannon and their committee are working on the details for the event. More details and program information will be available later. Mark your calendars and plan to attend the KFGC Field Day July 17 in Breckinridge County.

UPCOMING EVENTS

- MAY 21-22 Kentucky Grazing School, Woodford County Extension Office, Versailles
 - JULY 17 KFGC Field Day, Breckinridge County
 - SEPT 22-27 Mountain Ag Week, UK Robinson Center, Jackson
 - SEPT 25 Beef Bash, U.K. Research & Education Center, Princeton
 - OCT 23 15th Kentucky Grazing Conference, Western Kentucky University Expo Center, Bowling Green
- 2015**
- JAN 11-13 American Forage & Grassland Council Conference, St. Louis, MO
 - JAN 16-17 20th Forages at KCA, KCA Convention, Owensboro
 - FEB 26 35th "Anniversary" Kentucky Alfalfa Conference, Cave City Convention Center, Cave City, KY



Garry D. Lacefield
Extension Forage Specialist
May 2014

"Thomas Edison dreamed of a lamp that could be operated by electricity, began where he stood to put his dream into action, and despite more than ten thousand failures, he stood by that dream until he made it a physical reality. Practical dreamers do not quit."

— Napoleon Hill: Early pioneer of personal-success literature; one of the great writers on success