Graze 300 – Master Grazer Educational Program 2013-2014 Bi-annual Report (January 1, 2013 – December 31, 2014)

UK Grazing News Newsletter

20 issues of the monthly newsletter (10 issues per year) were sent electronically to 120 KY
Agriculture and Natural Resource Extension agents for use in local newsletters as well as an
additional 250 electronic subscribers. Hard copies were mailed out to an additional 170 households
who have requested printed copies.

<u>Master Grazer Website</u> (www2.ca.uky.edu/grazer)

New material was added monthly to the UK Master Grazer Website. The home page contains
current and previous articles found in UK Grazing News Newsletter, informational video clips,
upcoming events and programs, reports and accomplishments, links to other useful websites,
electronic subscription to our newsletter, and important contacts.

"Grazing for Cash" Demonstrations and Associated Educational Programs

- Decreasing the reliance on stored forages by grazing livestock and/or improved management of forages grazed or fed can increase the profitability of livestock enterprises.
- On-farm demonstrations were implemented in 2014 and economic and forage yield data collected, when feasible, which illustrate:

Dave Burge moving cattle

Grazed Field

Rotational Grazed Field

- 1. Improved weed control in pastures (2 farms),
- 2. Use of stockpiled fescue to reduce feeding stored feed (5 farms),
- 3. Use of rotational grazing versus continuous grazing (2 farms),
- 4. Improving pastures with interseeded clover (2 farms).
- Two regional field days were held to illustrate the merits of the practices implemented.
 - Use of Rotational Grazing Field Day: This field day was held at the David Burge cow-calf operation in Anderson County on July 28, 2014. Mr. Burge explained to the 27 participants how he divided his pasture into multiple paddocks, used a temporary watering system, and implemented control of broadleaf weeds. He also described how these practices improved forage quality and quantity compared to pastures managed with continuous grazing. The rotationally grazed acreage resulted in an increased carrying capacity of over 0.5 acre per cow-calf pair. As a direct result of this field day, the local extension agent has had 10 calls from the participants wanting help designing rotational grazing systems for their operations.
 - Stockpiled Fescue Field Day: This regional field day
 demonstrating the use of stockpiled fescue to extend the grazing season was held at the
 Springdale Woods Farm in Oldham County on December 2, 2014. Dr. Stetten explained to the
 35 people in attendance (represented 1055 animals) how he uses stockpiled fescue to extend

the grazing season and how he rotationally grazes to improve pasture utilization on his farm. A discussion and accompanying handout illustrated the economic benefits of stockpiling fescue (\$24/ton for stockpiled fescue vs \$76-86/ton hay) for this operation and improved forage quality of stockpiled fescue compared to typical quality of fescue hay fed in KY. In addition, applying 40 lbs of nitrogen per acre improved forage yield by 1464 lbs per acre. For the 14 acre demonstration field and 24 heifers grazing this area, this additional yield would have resulted in 21 more grazing days (34 versus 55 grazing days). Dr. Stetten indicated to the group that he did not see a difference in applying nitrogen, but, after seeing the difference in yields measured, he would strongly consider applying nitrogen in the future.

• Demonstration Results:

- Weed control demonstrations:
 - <u>Lewis County:</u> Approximately 2 months after herbicide application (September 26, 2014) to primarily control tall ironweeds and horsenettle, weeds were effectively controlled (421 lbs dry matter/acre versus 9 lbs DM /acre) and an additional 700 lbs dry matter per acre of forage (1246 lbs DM/acre vs 1946 lbs DM /acre) was available for grazing. If this forage had been grazed in September, an additional 12 cow-grazing days per acre would have been available for grazing.
 - Mercer County: At Mercer county site, field plots were established and treated with Weedmaster at 3 pt/A on August 19, 2014. A variety of different weeds were present at this site, predominately common ragweed, broadleaf plantain, curly dock, and chicory. At time of treatment the percentage of vegetation within the study area consist of 15% forage grasses, 20% forage legume (clover), and 65% weeds. As a general observation, after herbicide application weed growth had been greatly suppressed within the herbicide treated strips. However, biomass data could not be collected in the fall (2 months following treatment) since the field site had been heavily grazed prior to our intended sample date in early October. Forage sampling is planned for the next forage season to determine forage growth and weed content.
- Stockpiled fescue demonstrations: For each of the 5 demonstrations (Meade, Warren, Oldham, Pulaski, and Madison Co), fescue fields were mowed and 40 units of nitrogen/acre was applied to a test strip within fescue field. Forage samples were collected and weighed before fields were grazed. Strips of stockpiled fescue where 40 units of nitrogen was applied showed an average increase in yield of 1202 pounds forage dry matter per acre. This increased yield could increase the number of cow grazing days by 20 per acre. Data



- are being summarized and will be presented during meetings planned for 2015.
- Managed grazing demonstrations: Anderson and Woodford County, see results from Anderson Co under "Use of rotational grazing field day".
- <u>Interseeding with clover:</u> Demonstrations were established in Washington and Fayette counties to improve pastures by interseeding clover into grass pastures, but due to the growing season each location was unsuccessful at getting an adequate stand of clover.

Kentucky Grazing School-

- A two day, intensive and hands-on educational program was held at the Woodford County Extension Office and the C. Oran Little Research Center.
- 2014 School, held on May 21-22, 2014, was attended by 38 participants representing 17 KY counties and 3 other states totaling 6576 acres of farm land and 2540 animals. Three participants represented agricultural industries that impact over 900,000 livestock animals in KY. 83% of participants said they plan to decrease hay feeding by extending the grazing season by using corn, stockpiled fescue, small grains or other forage or method. 83% of participants also said they will design a watering system to provide access to any grazing paddock, and use



Dr. Ray Smith explaining ways to improve the forages they already have.

- temporary electric fencing to create more grazing paddocks. 75% said after attending the grazing school they will begin to increase or start using stockpiled fescue.
- **2013 School,** held August 21-22, 2013. Thirty-six participants attended representing 20 KY counties and 2 other states totaling 6452 acres of farm land and 1875 animals. Four participants represented agricultural industries that impact over 1.2 million livestock animals in KY. 81% of participants said they will begin soil testing pastures, renovate pastures using legumes, design watering systems to provide access to all grazing paddock, and use temporary electric fencing to create more grazing paddocks.

Advanced KY Grazing School

- This one-day course was designed for those who had participated in a previous grazing program
 and was meant to be used as a refresher course and to go more in-depth on important forage and
 animal topics.
- The 2014 Advanced Grazing School was held on September 11, 2014 at the Eden Shale farm in Owenton, KY. 47 participants representing 2 states and over 10 KY counties attended. Topics, tours, and demonstrations included: Warm Season Annuals, Opportunities Using Stockpiling Fescue and Winter Annuals, Creep Grazing Alfalfa, Clover Management, Pasture Renovation, Warm-Season Perennials, Seed Suppression of Tall Fescue, and Manage Intensive Grazing. 88% of participants intend to take soil samples and lime and fertilize according to recommendations. 88% of participants also said they plan to inter-seed clover as an alternative to nitrogen fertilizer.
- The 2013 Advanced Grazing School was held on June 18, 2013 at the University of Kentucky Research and Education Center in Princeton, KY. 46 participants representing 2 states and over 27 KY counties attended this program. Topics, tours, and demonstrations included: managing for long-term profitability in grass-clover pastures, alfalfa grazing and production, tall fescue varieties and opportunities, advantages of warm-season grasses for grazing, forages and grazing management for a year round grazing system, trace minerals for grazing cattle, managing livestock on warm-season forages, and the grazing wedge concept. 75% of participants intend to decrease hay feeding by extending the grazing season by the use of warm-season grasses, stockpiled fescue small grains, or other methods. 75% of participants plan to utilize clover in pastures as an alternative to nitrogen fertilizer.

<u>Tweaking your Grazing System</u> – Program designed to help producers increase utilization of forages currently on their farm as it relates to spring and fall management practices.

East Region Programs

- 2014 Spring Program: Morgan County held an East Region Grazing Field Day on June 21, 2014 at the Morgan County Extension Farm. The goal of this one day course was to teach participants how to improve pasture quality and methods of rotational grazing. Thirty-eight participants attended from 14 different Kentucky counties, and some were even from Ohio. 95% of participants intended to soil test pastures after attending the program. 90% of participants intended to apply lime and fertilizer according to soil test recommendations. 76% of participants said they will use certified seed and will control pasture weeds using chemical or management methods.
- <u>2014 Fall Program:</u> Morgan County held a fall Eastern Region Grazing Field Day on August 23, 2014 at the Morgan County Extension Farm. The goal of this one day course was to teach participants about practices they can do in the fall season to improve pasture conditions for next year. 42 participants attended from 6 Kentucky counties, one participant from Idaho, and three from Ohio.
- <u>2013 Program:</u> Morgan County held the East Region Grazing Field Day on April 27, 2013 at the Morgan County Extension Farm. The goal of this one day course was to show participants how to improve productivity from their pastures. Fifty-five participants attended from 3 different Kentucky counties.

West Region Programs

- 2014 Spring Program: Monroe County held a West Region Grazing Field Day on May 10, 2014 at the Monroe County Extension office and a local producer's farm. The goal of this program was to teach participants about rotational grazing and different forage varieties. Twenty participants attended representing three Kentucky counties.
- <u>2014 Fall Program</u>: Monroe County held a fall program on September 16, 2014 at the Holland Family Farm in Fountain Run, Kentucky. The goal of this one day course was to teach participants about fall pasture management practices. 55 people were in attendance representing 5 Kentucky counties.

Regional Grazing Networks

- Western KY- Dairy Emphasis: The Western KY Network held a pasture walk on June 14, 2013 in Pembroke, KY at an Organic Dairy. Attendees included participants from both Kentucky and Tennessee.
- <u>Central KY:</u> On September 3, 2013, a pasture walk was held at the Univ. of KY C. Oran Little Research Center. Participants included producers from Anderson County and a dairy group from Indonesia.
- Eden Shale: A pasture walk was held August 3, 2013 and was attended by 80 people representing 22 KY counties. Dr. Lehmkuhler and Dan Miller from the Kentucky Beef Network discussed the Graze 300 Educational Program.

Assessment Tool for Cow-Calf Operations

- A survey, assessment tool was developed for cow-calf operations to help producers identify and prioritize gaps in their grazing system. This self-assessment tool asks questions regarding type of forages grazed during spring, summer and fall grazing seasons, management of the grazing program, use of temporary fencing, accessibility to water in different paddocks, and number of days currently feeding stored feed. With their local county agents assistance, producers can complete the questionnaire and develop a plan for implementing changes in their grazing operation.
- Two additional assessment tools are in the development stages for dairy heifer and beef stocker operations.



<u>Grazing Record Notebook:</u> The contents for a notebook to record rotational grazing practices has been developed. At this time, the final stages of layout are completed with a goal of distributing this resource to producers in January 2015.

2013-2014 County Impact Map for Graze 300-Master Grazer Educational Programs

In addition, producers and allied industry partners residing in all 120 KY counties received <u>UK Grazing News</u> Newsletter.

