

300 DAY GRAZING TRIP HIGHLIGHTS

UPCOMING EVENTS

- **2013 Kentucky Fall Grazing School**
August 21-22, 2013
Versailles, KY
- **Kentucky Forage and Grassland Council Field Day, August 1, 2013**
Prospect, KY
- **14th Kentucky Grazing Conference**
October 10, 2013
Lexington, KY

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This summer, the University of Arkansas Cooperative Extension Service provided the opportunity to share their success of the 300 Day Grazing Program with the University of Kentucky Cooperative Extension Service by inviting us for a private two-day tour of the program. Three University of Kentucky Extension specialists, three Agriculture and Natural Resource county Extension agents, a representative from the Kentucky Beef Network, and the Master Grazer Program Coordinator (myself) teamed up to travel throughout Arkansas to learn about the program in preparation of developing a similar program in Kentucky. We toured farms that have implemented managed grazing practices and discussed the results of the program with Arkansas county Extension agents, producers, University of Arkansas Extension specialists, and the 300 Day Grazing program coordinator.

The Arkansas 300 Day Grazing Program began in 2008 with the goal of educating producers, agents and related agencies about ways to reduce livestock production expenses, help mitigate impact of drought

and other climatic challenges, and to improve sustainability of livestock operations. This program is a successful collaboration between producers, county agents, extension and research-farm staff. Demonstrations were conducted on both individual producers' farms and at the university research farm. Key management practices illustrated in these demonstrations included: stockpiling tall fescue, stockpiling bermudagrass, growing legumes, growing summer annual forage, growing winter annual forage, improving grazing management, reducing hay losses in storage, and reducing hay losses during feeding.

All demonstration farms used in the 300 Day Grazing Program were able to extend their grazing season and feed less hay during the year. All producers also had economic savings as a result of managed grazing practices. As a result of the program, more than one producer said, "I'm still grazing when my neighbors start to feed hay." One producer was even able to graze all year and

didn't have to feed hay at all. These results are also what caught the attention of the Kentucky group and prompted interest to learn how to implement similar programs in Kentucky.

The Arkansas tour consisted of five different farms that provided demonstrations for the 300 Day Grazing Program: four producer demonstration farms and the Batesville Livestock and Forestry Research Center. Advice that seemed to be reiterated at each farm by each producer included two things. 1) In order to be successful with the program, producers must plan a few seasons ahead and manage their farms



From left, bottom row: Dr. Ray Smith, Dan Miller

Middle row: Daniel Wilson, Tommy Yankey, Kimberly Poe, Dr. Donna Amaral-Phillips, Kelly Kramer

Top Row: Dr. Jeff Lehmkuhler, Kenny Simon

GRAZE 300 TRIP HIGHLIGHTS (CONT)

accordingly. 2) No two farms will have the same management system. It's important for producers to learn to manage what they have and find what works for them. One producer explained that the program taught him, "It's all about working not that much harder, but working smart-

er." In most cases, each demonstration farm would start by incorporating one new practice. For example, interseeding legumes or adopting temporary fencing so they could rotational graze. Rotational grazing was a theme of all the demonstration farms, one of the core principles that

greatly contributed to the success of the program.

The University of Kentucky would like to thank the University of Arkansas Cooperative Extension Service for their time and preparations, as well as the many producers they came in contact with.

"No two farms will have the same management system. It's important for producers to learn to manage what they have and find what works for them."

HOW TO USE VARIETY TRIAL PUBLICATIONS

When renovating or establishing pastures, an important consideration is the selection of forage species and varieties. Forage species, as well as varieties within a species, vary significantly in yield, quality, and stand persistence, which combine to greatly impact performance and economic return to the operation. In addition to choosing an appropriate variety, proper seeding rates and seedbed preparation are necessary for the successful establishment of the selected variety.

Beginning in 2001, University of Kentucky researchers have published annually the results of trials comparing the performance of commercially available varieties of the most common forage species in Kentucky. Specific species include alfalfa, red

and white clover, tall fescue, orchardgrass, annual and perennial ryegrass, timothy, Kentucky bluegrass, bromegrass, and annual warm-season grasses. Reports of these trials offer detailed information on forage yield, seedling vigor, stand persistence and grazing tolerance of the selected varieties. Variety trial publications include many tables of scientific data which prompts the question, "How can I use this to help decide on a variety?"

One of the first things to note is that the trials were conducted at different University research locations throughout the state: Lexington, Princeton, Jackson, and Owenton. Because climatic conditions vary between sites and years (and are included in the publication) you would want to use a variety that is

well adapted to your region; take into consideration differences in weather and growing conditions between the site of the trial and your operation. Favorable adaptation to the region is indicated by a high and consistent level of performance across multiple years and locations.

Forage yields will often be the primary factor used when choosing varieties. For each location, the total yield for when the variety was evaluated is listed and includes an indication of whether this yield is

statistically different from the highest yielding variety. As shown in the example (see table), yields of varieties with an asterisk are not considered different and will produce at similar levels under similar weather conditions. Besides forage yield, persistence and maturities can also be used to select varieties.

Please refer to the UK Forage website for access to the complete set of variety trial publications, located at <http://www.uky.edu/Ag/Forage> or printed copies from your local county extension office.

Commercial Variety	Yield Total (tons/acre)
Variety A	4.25*
Variety B	4.13*
Variety C	3.89

The total yields of varieties A and B are not different and would be expected to perform similarly. Variety C is lower yielding than varieties A and B. This table is to illustrate a typical variety trial and does not reflect any specific variety trial.

IDENTIFY FIELDS FOR STOCKPILING

With the rising cost and limited availability of hay over the past few years, Kentucky cattle farmers have been looking for ways to extend the grazing season and reduce the need to feed hay during the fall/winter months. Stockpiling forage is one way to meet both of these objectives. The definition of stockpiling is to “grow pasture for a later use.” The species of forage that respond best to stockpiling will vary between different regions of the US. In Kentucky, cool-season grasses respond favorably to nitrogen applications in the fall. Tall Fescue is especially renowned for stockpiling because of its inherent ability to maintain high levels of nutrients during the winter months than other cool-season species.

Stockpiled forages typically receive nitrogen in late July/August and grazing is deferred from these areas until the late fall and early winter when the available forage in other pastures becomes limiting. Having a source of forage available for grazing during the winter months lowers the amount of hay fed and subsequently reduces the financial investment by the producer. According to [Profitability of Nitrogen Appli-](#)

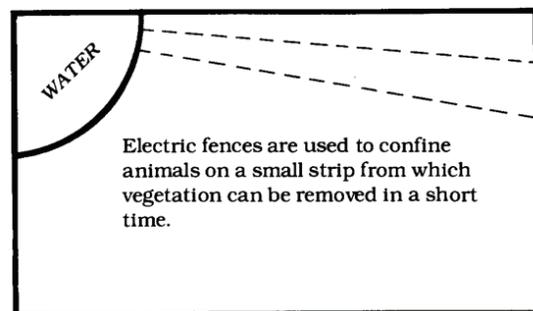
[cations for Stockpiling Tall Fescue Pastures](#), with this year’s nitrogen and hay prices (at or above \$60/ton), it has been shown that stockpiling tall fescue offers moderate savings at a high forage growth rate in pure stands.” A high growth rate means that tall fescue responded very well to nitrogen applications due to favorable soil type and moisture.

First you must decide which fields to apply nitrogen. Growth responses to nitrogen rely heavily on soil moisture content. Fields that are deeper and are less drought prone are the best candidates. Areas that receive more rainfall will have a higher growth response to nitrogen applications. Soil moisture will likely be adequate for stockpiling for most areas of Kentucky due to the abundant rainfall during the growing season. While selecting pastures for stockpiling, target those with thick stands of tall fescue, and low amounts of species that are undesirable or less responsive to stockpiling, such as weeds or clover.

The stockpiling process should begin early to mid August. This timeframe avoids fertilizing weedy grasses, such as crabgrass, and



Tall Fescue is a reliable forage to stockpile, especially for producers located here in central Kentucky.



Above is an example of strip grazing. Strip grazing is achieved by fencing off a small portion of the pasture using temporary fencing supplies and forcing cattle to be less selective.

Photo credit: *Efficient Pasture Systems*, <http://www2.ca.uky.edu/agc/pubs/agr/agr85/agr85.htm>

increases the efficiency of converting nitrogen into available forage. Areas should be grazed or mowed to 3 to 4 inches to remove older, low-quality growth. Pastures should not be overgrazed, as a result of limited rainfall or overstocking as this will reduce initial forage growth. After applying 40 to 100 pounds of nitrogen per acre, grazing should be deferred for at least a month (8 to 12 weeks is more ideal) to allow growth to accumulate.

Strip grazing stockpiled forages reduces the amount of forage lost to trampling and defecation and increases utilization of the accumulated forage. Strip grazing is achieved by fencing off a small portion of the pasture using temporary fencing supplies and forcing cattle to be less selective. Once this area is grazed to 3 to 4 inches, the fence is then moved to include more of the pasture. For more information on stockpiling fields for winter grazing, please see the publication, *Stockpiling for Fall and Winter Pasture*, available at or your local county extension office or online at <http://www2.ca.uky.edu/agc/pubs/agr/agr162/agr162.pdf>

FORAGE TIP OF THE MONTH: COMMON VS CERTIFIED SEED

Once you have selected a forage species and variety, it is recommended to buy a quality seed that is high in germination rate and free of weed seed. Buying certified seed guarantees that the requirements for both of these parameters has been met and should be the first purchasing option.

Non-certified seed, or common seed, does not guarantee a certain level of performance as the specific variety is unknown, whereas certified seed has met federal and state certifications to verify that the performance of the variety has not been compromised or contaminated via cross pollination with lower-producing varieties. Once a seed source has been located, be sure to order seed well in advance of planting to assure that it will be available when needed.



Selecting a quality seed is essential in successful establish of a new stand.

IMPORTANT REMINDERS FOR AUGUST

- Select fields for stockpiling fescue for fall and winter grazing. Apply nitrogen in early to mid-August and remember to mow or graze forage to three to four inches of height prior to nitrogen application.
- Plan ahead for any fall seedings. Plan details such as soil testing, no till or conventional till, fertilizing requirements and removing animals from the field to allow time for establishment.
- Follow up with any soil test results to decide on fertilizer needed for the fall. To take a soil test, contact your local county extension agent. Most fields should be sampled every three to four years and any high-value crops should be sampled annually.



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