

# GRAZING NEWS

MAY 2013

A publication of the Master Grazer Program

## WESTERN KY SPRING PASTURE WALK: JUNE 14, 2013

### UPCOMING EVENTS

- Pasture Walk, June 14 2013, Christian Co.
- Advanced Grazing School, June 18, 2013 Princeton, KY
- AFGC National Tour, May 22-24 2013, Syria, VA

The Western Kentucky Spring Pasture Walk is scheduled for June 14, 2013 at Amos Fisher's Dairy Farm in Christian county. The pasture walk includes a tour of the farm with discussion of both current forage and grazing management practices. Dairy Extension Specialist Dr. Amaral-Phillips and Forage Extension Specialist Dr. Smith from the University of Kentucky will

be there to lead discussions and present research. Topics to be discussed include managing highly diversified pastures, alfalfa, management for grazing and hay production, perennial forages, selecting warm season grasses, and other pasture management tips for dairy operations. Address is 1615 Bradshaw-Fidelio Rd, Pembroke. Call 270-886-6328 & RSVP



## ADVANCED GRAZING SCHOOL: JUNE 18, 2013

The second advanced grazing school is scheduled for June 18, 2013 at the University of Kentucky Research and Education Center in Princeton, KY. This one day program will reexamine important concepts and demonstrate grazing principles for managing both pastures and livestock. Specialists from the University of Kentucky will present useful information and findings from recent research. Demonstrations and hands on activities will be part of this program to increase participants' knowledge and understanding of proper grazing management.

Registration will begin at 8:30 AM EDT at the UK Research and Education Center located at 1205 Hopkinsville Street, Princeton, KY 42445. Pre-registration is necessary with a registration fee of \$20.00 which includes lunch, snacks, and materials. Registration deadline is July 2. For complete program details, please go to <http://www2.ca.uky.edu/grazer/>. To register, send name, address, and email with a check made out to Kentucky Forage and Grassland Council (KFGC) to:

Kelly Kramer  
804 W.P. Garrigus Building  
University of Kentucky  
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For more information contact Kelly Kramer, program coordinator, at (859)257-7512 or [kelly.kramer@uky.edu](mailto:kelly.kramer@uky.edu).



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## KELLY KRAMER AS THE NEW MASTER GRAZER COORDINATOR

We would like to introduce you to Kelly Kramer the Coordinator for the Master Grazer Program. Many of you know Lyndsay Jones who was the coordinator of the program over the last 2 years. Lyndsay has just started a master's degree in Crop Science at Colorado State focusing on hay production of alpine meadows. We wish Lyndsay the best and look forward to having Kelly as our new coordinator. The role of the coordinator is to help plan and implement our regular and advanced Grazing Schools, farm demos, pasture walks,

edit and help write our monthly Grazing News, and many other responsibilities.

Kelly is originally from West Virginia and will be graduating May 5 from the University of Kentucky with a Bachelor of Science in Equine Science and Management through the department of Animal Sciences. Kelly excelled in her undergraduate degree and is one of the top rated students graduating this year in Animal Science. She was involved in many extracurricular activities throughout University including the UK

Dressage and Eventing team, and was an officer her senior year. One of the courses that Kelly enjoyed most was Forage Crops with Dr. Ben Goff. During the last year, Kelly has been an intern for the University of Kentucky Pasture Evaluation Program, and has been one of the best interns or summer student (out of over 20) that we have had working with this program over the last 7 years.



## MANAGING LEGUMES IN SPRING PASTURES FOR BLOAT, BY DR. JEFF LEHMKUHLER, EXTENSION BEEF SPECIALIST

Pastures were slow to green-up with the cool weather this spring. However, the past few days of warm weather has really made the grass pop. I noticed today, April 18, that some of the timothy and bluegrass was beginning to flower. Now is a good time to be investigating pasture stands for legume content.

Legumes are recommended additions to our tall fescue-based pastures. The inclusion of legumes dilutes the endophyte and its negative impact on performance. In addition, legumes improve forage quality as they tend to be higher in crude protein and often digestibility. Legumes also provide an opportunity for bacteria attached to their root system to capture and utilize atmospheric nitrogen. This nitrogen fixation process lowers the need for fertilizer sources of nitrogen.

The addition of legumes into existing pastures is often accomplished by interseeding red and/or white clover. Some will utilize other legumes like alfalfa, lespedeza, birdsfoot trefoil, and others. However, the ease of frost seeding clovers and their ability to thrive in less than ideal soil conditions makes them the preferred legumes. Many producers will frost seed a few pounds to the acre of red clover in February. It is an economical method of interseeding and improving forage stands. Additional information on frost seeding can be found in previous newsletters or at the Master Grazer website <http://www2.ca.uky.edu/grazer/>.

Establishing legumes into pastures is not without risk,

though the risk is minimal. Legumes can induce a rumen disorder referred to as frothy bloat. This typically occurs when cattle selectively graze legumes from the pasture in high proportions or when the stand is dominated by legumes. Pastures that contain in excess of 50% legumes have an increased risk of inducing bloat. The most prominent bloat inducing legumes in Kentucky are white clover, alfalfa and red clover.

In recent years, bloat losses have been largely associated with white clover. The drought conditions led to a weakening of the pasture, lowering competition and providing an opportunity for white clover to establish and thrive. In many cases the

white clover began to dominate the stand making up in excess of 50% of the forage allowing cattle to selectively graze and consume mostly clover. The microbial population in the rumen responsible for digesting the forages are thought to produce a bacterial slime when a large percentage of their diet is fresh legumes. This slime captures or traps the gas released from the fermentation of the forage forming a froth layer in the rumen. This froth prevents the animal from being able to eructate or belch and release the gaseous products. As fermentation continues, more and more gas builds up in the rumen. Eventually, the rumen begins to press against the diaphragm causing labored

breathing and eventually suffocation if not corrected.

Legume bloat can be managed. Commercial feed additives can be utilized and have been shown to be effective in reducing the severity and incidence of bloat. These feed additives must be consumed at the target levels daily to be effective.

Poloxalene is the active ingredient in the bloat prevention blocks and feed products. It is also the active ingredient in the commonly used drench product. This detergent-type additive breaks up the foam layer and allows the gas to escape.

Monensin has been shown to aid in controlling forage induced bloat as well. Oklahoma researchers have demonstrated monensin to be quite effective at preventing wheat pasture bloat which is similar

to that caused by legumes. Monensin lowers the formation of the foam layer in laboratory settings by selectively inhibiting the growth of some bacterial species in the rumen. However, the product label does not claim to lower the severity or incidence of bloat.

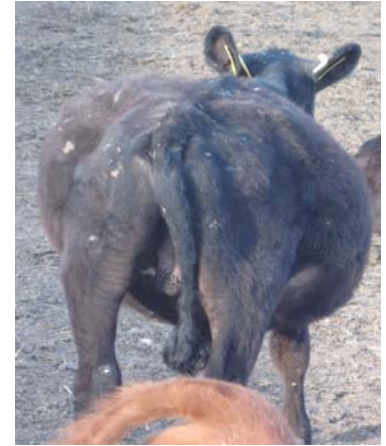
General management changes can be made to lower the risk of bloat as well. Avoid turning cattle on to pastures with a high proportion of legumes when hungry. Allowing legumes to mature to flowering can lower the risk. When possible, avoid grazing legumes that have moisture on their leaves following a rain or heavy dew. Offering a leafy, highly palatable, grass hay is recommended as well. Routinely check cattle as bloat symptoms occur rapidly and death losses may occur as quickly as 3-4 hours after

consuming a large amount of legumes.

This fall pasture renovation may be required to establish grasses back into the stand. A variety of options exist and you should contact your county Extension office for additional details on pasture renovation. The last straw may be to eliminate the legume from the stand to lower the competition level and provide the grass an opportunity to reestablish. Once the grass has been reestablished, legumes can be introduced into the stand again. Maintaining 30-40% legumes in the pasture is a good target allowing for the improved performance, nitrogen benefit, and minimal bloat risk.

Get out in the fields now and assess your pastures. If you have a lot of legumes in your stands, develop and imple-

ment management strategies to reduce livestock losses. For additional information, considering reading *Managing Legume Induced Bloat in Cattle* as well as visiting your local Extension office.



The risk of bloat can be greatly reduced if managed properly.

## WARM-SEASON ANNUALS

Warm-season annuals such as sorghum, sudangrass, sorghum X sudangrass hybrids, and millets are useful forages for summer grazing. When deciding which of these forages might fit into your grazing system, it is important to recognize the different traits and common uses of each.

**Sorghum** is a single cut crop typically used for silage and grazing; it has a thick stem which decreases lodging problems.

**Sudangrass** can be harvested multiple times throughout the season and is commonly used for grazing and hay. This species has a thinner stem, lower lignin con-

tent, and higher digestibility in comparison to sorghum.

**Sorghum X sudangrass hybrids**, often referred to as Sudex, can be harvested multiple times and is used for grazing, silage, and hay. This hybrid has a thicker stem than sudangrass and lower lignin content than sorghum.

There is a potential for prussic acid poisoning when grazing the above species. Rapid screening tests are now available to ensure the forage is safe to graze.

**BMR (Brown Mid-Rib) Varieties** are available for all above species. These are genetically modified to reduce lignin content and in-

crease digestibility.

**Millets**- Although millets are lower yielding, they are free of risk for prussic acid poisoning. They have smaller stems and are leafier than the above species. Pearl millet can be harvested multiple times while foxtail millet, which is shorter and finer stemmed, is a one cut crop. Foxtail millet is ideal for grazing and hay. Varieties for grazing can be found for all above species. Contact your county agent to find varieties best suited to your area or contact your local seed dealer.



Warm-season annuals make useful forages for summer grazing or hay production.



## ASSESSING PASTURES: FORAGE IDENTIFICATION

When planning a grazing management plan for your pastures, it's important to realize that pasture is the most economical and efficient way to feed your animals. When managing pasture, both the animal nutrient needs and pasture requirements should be considered. To start, begin by identifying the forage species in a pasture. Next estimate how much of it is there. During most of the spring and fall in Kentucky, you will find cool-season grasses along with some legumes.

**Kentucky Bluegrass** can be identified by its signature mark of the boat shaped tip at the end of the blade. KY Bluegrass is a thin, upright grass that has a rolled stem at the base of the plant, and forms a dense sod, almost like a mat. You may also notice it before other cool season grasses as it typically seeds sooner than orchardgrass or tall fescue.

**Tall Fescue** is one of the most prominent forages in Kentucky, and one of its most obvious forms of identification is the feel of the blades. The blades of

Kentucky 31 Tall Fescue, the most prevalent variety, are very rough and thick feeling, particularly if you slide your hand down the plant towards the base. The base is a rolled stem, and has a prominent auricle where the leaf attaches to the stem. Tall fescue is a bunch grass, and tends to grow straight up from the base of the plant.

**Orchardgrass** is also a bunch grass, but has a softer, smoother feel than tall fescue. It is more of a flexible and pliable grass. It is also one of the few plants to have a flat stem at the base, making it easy to identify. While color may vary slightly, orchardgrass looks more of a lighter gray/blue green, while tall fescue tends to be a darker green. This species will typically only persist in a stand for 5 or 6 years, as it is less tolerable to heavy grazing.

**White Clover** and **Red Clover** can appear very similar at first glance but have very distinguishable features setting them apart. While both are clovers with true trifoliate leaves, white clover produces a white flower while red clo-

ver produces a red bud. Red clover also has hairs on the stem, and white clover does not. White clover tends to grow smaller leaves closer to the ground, while red clover will grow a bit more upright producing larger leaves. White clover also has stolons, or underground runners, which allow the plant to grow more horizontally and cover more surface area.

**Perennial Ryegrass** is another cool season grass you may see in your pasture. Perennial ryegrass can look similar to tall fescue, but the grass has a smoother, thinner leaf. Also, this grass tends to have a glossy sheen at times. This grass is less persistent than most cool-season grass, as it is less winter hardy and not very drought tolerant.

After identifying grasses in your pastures, it will be much easier to create a grazing management plan. Be sure to consider animal nutrient requirements, species and quality of pasture grasses, amount of weeds and bare soil, and stocking rates when making decisions regarding pasture

management. Your local county extension agent can assist you with managing your pasture effectively.



Species composition of forage varies in each pasture, so be sure to evaluate each pasture separately.

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