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Forage News

Keeping Forage-Livestock producers in Kentucky informed
Dr. S. Ray Smith and Krista Lea, MS.~ Editors

March 2019

UK to host Novel Tall Fescue Renovation Workshop

Kentucky 31 tall fescue is a double-edged sword for many forage and livestock producers because of its toxin-producing endophyte. University of Kentucky forage extension specialists are teaming up with the Alliance for Grassland Renewal to host a workshop to teach producers how to renovate their tall fescue pastures with a novel endophyte variety.

The Novel Tall Fescue Renovation Workshop will take place March 20 at Central Presbyterian Church in Princeton.

Producers have widely used tall fescue in pastures for decades, because it survives well under many conditions including drought, cold, overgrazing, insects and diseases. However, the most common variety, KY-31, also contains toxins that can severely affect cattle and horse performance.

"Toxic tall fescue reduces livestock weight gains and lowers their reproductive performance," said Chris Teutsch, extension forage specialist in the UK College of Agriculture, Food and Environment.

By replacing it with a novel endophyte variety, producers can keep the beneficial aspects of the grass while reducing its negative impacts.

"There are a growing number of novel or friendly endophyte tall fescue varieties on the market, including UK's own variety Lacefield MaxQ II," said Ray Smith, UK extension forage specialist. "This workshop will help producers learn how they can begin to incorporate these varieties into their operation."

During the workshop, participants will hear from Kentucky producers, UK specialists, forage experts from across the U.S. and industry representatives. In the afternoon, they will tour research plots at the UK Research and Education Center Farm in Princeton. The cost to attend is \$60 per person before March 8. After that date, it is \$75 per person. For more information or to register, visit the UK Forage Extension website at <http://forages.ca.uky.edu/>.

Round Bale Binding Materials Evaluated

Haymakers now have several options to bind round bales. The binding option chosen impacts the time it takes to bale a hayfield and the preservation of forage quality if the bales are stored outdoors.

University of Minnesota researchers recently reported on the first-year results of a study comparing twine wrap to net wrap or B-Wrap. They shared their results at the American Forage and Grassland Council's Annual Conference, which was held last week in St. Louis, Mo.

The researchers recorded wrapping time in the field

for each wrap type, determined bale weights, and monitored forage quality in bales over a 12-month period. Hay cores to a depth of 18 inches were taken from the sides of bales at harvest and then every three months thereafter until the one-year storage time had been reached. The bales were stored outdoors on wooden pallets.

Two different alfalfa varieties were harvested and evaluated, one of which contained the HarvXtra, reduced-lignin trait. A total of 24, 4- by 5-foot bales were harvested in June 2017 (12 of each variety, four of each wrap type within a variety).

Wrapping time. In the context of this study, net wrap took the least amount of binding time with an average of 18 seconds per bale. The B-Wrap was the next quickest at 28 seconds. Twine easily had the longest wrapping time with an average of 56 seconds per bale.

Variety. During the initial year, no significant forage quality differences were measured between the two tested varieties for crude protein (CP), acid detergent fiber (ADF), neutral detergent fiber (NDF), and nonstructural carbohydrates (NSC). Therefore, results were averaged across the two varieties.

Dry matter. Overall, dry matter losses were minimal compared to those measured in previous studies. Twine-tied bales averaged a 5.3 percent dry matter loss, followed by net wrap with a 4.9 percent dry matter loss. The B-Wrap bales exhibited 0 percent reduction in dry matter.

The minimal amount of dry matter lost in the study

Forage Timely Tips: March

- ✓ Continue pasture renovation by no-tilling seeding legumes.
- ✓ Place small seed at 1/4 to 1/2 inch deep and check depth several times during planting; slow down for more precise seeding.
- ✓ Continue feeding hay until adequate forage exists in the pasture for grazing.
- ✓ Spring seeding of grasses should be done in early to mid-March (but fall is preferred)
- ✓ Begin smoothing and re-seeding hay feeding and heavy traffic areas.
- ✓ Graze pastures overseeded with clover to reduce competition from existing grasses. <Pull off before grazing new clover plants.>
- ✓ Provide free choice high-magnesium mineral to prevent grass tetany on lush spring growth.

bales can be partly attributed to storing the bales on pallets, which helped preserve the integrity of the bottom of the bale where high losses occur if the bales are placed directly on the soil surface.

Forage quality. No significant differences between the three wrap types were measured for CP, ADF, or NDF following 12 months of storage time. However, the twine-wrapped bales had significantly lower NSC than either the net wrap or B-Wrap bales. ~ Hay and Forage Grower, Jan. 2019

The Impact of Tedding on the Economic Production of Alfalfa Silage

Two treatments, tilled and untilled, were applied to an alfalfa field to determine their impact on the quality of the resulting forage. The tilled treatment area was tilled after the cutting of the field, and the untilled treatment was left in its original swath. The tilled treatment area dried at a greater rate than the untilled treatment area in all cuttings and replications. Crude protein, water-soluble carbohydrates, ash content, and neutral detergent fiber were also observed to be different, with the tilled treatment having lower crude protein, higher water-soluble carbohydrates, lower ash, and higher neutral detergent fiber than the untilled treatment. A difference was not observed between the treatments for total digestible nutrients. ~ Lindsey Murry and Matthew Digman, NAFA checkoff/AFRP/APRI Research Summaries

Proceedings - 38th KY Alfalfa and Stored Forages Conference: Barn Considerations for Cash Hay Operations

A well designed and built a barn can be invaluable for cash hay operation. Barns provide opportunities to reduce losses in dry matter and help maintain quality throughout the winter. There are numerous styles of barns that hay producers can purchase or build themselves. Wood frame structures, often with metal roofs and metal sides, are fairly common. You can also build barns with a steel structure with or without metal siding on the walls. Hoop barns are another common hay storage structure - particularly common with round bale storage. All, however, provide valuable storage for hay. There are four areas of consideration for ensuring the barn style chosen will be effective on a specific hay operation: site selection, barn sizing, construction approaches, and ventilation. ~ Dr. Morgan Hayes, full proceedings available on the UK Forage website.

Publication of the Month: Planning Fencing Systems for Intensive Grazing Management

Intensive grazing may result in better utilization of Kentucky's forage resources. Improved forage management through controlled grazing allows producers to increase returns to the farm. To effectively develop a controlled grazing system, the producer must use fencing, which subdivides the pasture into sub-fields or paddocks. The animals may then be rotated among the paddocks to optimize forage and beef production from the system. When you develop the layout for a fencing system, consider the following points:

- Fixed resources on the farm, such as acreage, soil type, slope, rockiness;
- Semi-fixed resources, such as water

supply, existing fences, existing grass base;

- Changeable resources, including forage type, temporary fences, cattle numbers;
- Other factors, including seasonal usage patterns, economics and land use for other enterprises.

New advances in fencing technology provide the needed "tools" for an intensive grazing system. High tensile fence, brought to this country from New Zealand, offers an alternative to traditional woven and barbed wire for fence construction. Also, temporary electric fencing continues to be improved. Once you have evaluated the resources and tools available, you can develop your fencing plan. Download the full publication on the UK Forage website.

Kentucky Spring Grazing School

The 2019 Spring Grazing School will be April 23-24 in Princeton, KY. Informational sessions will be held at the Central Presbyterian Church, with hands-on activities taking place at the University of Kentucky Research & Education Center. Hosted by the Master Grazer program, the school begins at 7:30am and ends at 5:30pm CST. Presenters will offer valuable grazing methods for new and experienced graziers with the goal to extend the grazing season and minimize stored feed. Every day we can meet the animal's nutritional needs from a grazed pasture is money saved!

On the first day, participants will work in groups to install a rotational grazing system then allocate cattle to the paddocks constructed by each group. On the second day, participants will observe the grazed paddocks and hear reports from each group. Representatives from UK College of Agriculture, Food and Environment and Gallagher North America will present a variety of topics like benefits of rotational grazing, temporary fencing, portable/seasonal water systems, economics of grazing, and rejuvenating run-down pastures as well as local producers discussing what works on their farms. Sponsors include the Kentucky Forage & Grassland Council, UK Master Grazer Program, Kentucky Agricultural Development Fund, and the Kentucky Beef Network.

Preregistration is necessary, and enrollment is limited to the first 45 participants. Registration is only \$50 and includes all materials, grazing manual, breaks and lunch for both days. For more information or to register, visit the UK Forage Extension website (<https://forages.ca.uky.edu>) Mail printed registration forms to Rehanon Pampell, 1205 Hopkinsville Street, Princeton, KY 42445 or call 270-365-7541.

Upcoming Events (see website for details and online registration)

- MAR 20 - Novel Tall Fescue Workshop, Princeton, KY
- APR 9 - Spring KY Fencing School, Lexington, KY
- APR 11 - Spring KY Fencing School, Burkesville, KY
- APR 23 - Spring Grazing School, Princeton, KY
- MAY 30 - Spring KY Fencing School, Russellville, KY

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Kentucky Spring Fencing School

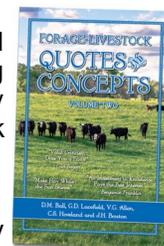
The 2019 Spring Fencing School will be held in three locations on three separate dates: April 9 at the Pirri Equine Teaching Pavilion in Lexington, KY; April 11 at the Cumberland County Extension Office in Burkesville, KY; and May 30 at the Logan County Extension Office in Russellville KY. Hosted by the Master Grazer program, the school begins at 7:30am and ends at 4:30pm local time. Presenters will offer the newest fencing methods and sound fencing construction with classroom and hands-on learning.

The first half of the day is spent in a classroom reviewing fence construction basics, Kentucky fencing laws, and electric fencing basics. After a catered lunch, participants will venture to a local farm and install two types of fences: fixed knot high tensile woven wire fencing and electrified smooth high tensile fencing. Sponsors include the Gallagher North American, Stay-Tuff Fencing, UK Master Grazer Program, Kentucky Agricultural Development Fund, and the Kentucky Beef Network.

Preregistration is necessary, and enrollment is limited to the first 30 participants. Registration is \$30 and includes all materials, fencing manual, breaks and lunch. You can find all three events at <https://forages.ca.uky.edu/Events>. Register online or mail your registration to Rehanon Pampell, 1205 Hopkinsville Street, Princeton, KY 42445.

Quote of the Month: Bull Can be Compared to Forage Varieties

Every forage-livestock producer should keep in mind that genetics are important. Cattlemen and other livestock producers are usually quite aware of the importance of animal genetics. In fact, choosing a bull determines half of the genetics of all of the animals he sires. However, selection of a forage variety determines all of the genetics of that forage crop in the acre(s) in which it is grown. Forage-Livestock Quotes and Concepts, vol. 2 is available online at foragequotebook.com.



The Sun Will Come Out...

...at least I hope so. Our Kentucky Forage and Grassland Council board met recently, and they challenged all of us in forage leadership to get as specific as possible about what producers should do about mud. What follows is a synthesis of thoughts about the path forward after what amounts to two years of incredibly wet winter weather.

Henry Ford said 'Obstacles are those frightful things we see when we take our eyes off the goal. With that in mind, I am going to challenge us all to think beyond the short term problem of a pugged up field to the ultimate goal to be accomplished. We need to get a thick stand of grazing and traffic tolerant grass on these areas before going into the next winter feeding period.

So instead of thinking now about the next 60 days, let's start with ways to get a thick stand of grass by fall of 2019. To do that, we need to have the damaged field in shape to seed to permanent cover by mid-August. I said ready to seed. Lord only knows what the summer will bring, assuming we get one. In terms of the type of grass to seed, I think the only hope for holding these feeding area fields together is tall fescue. The choice between a novel tall fescue variety or ordinary KY 31 is perplexing, even for me. The novel fescues are clearly tough, and this is clearly an opportunity to upgrade a field.

No-till seeding will help preserve the soil structure that you build with interim forages (or weeds unfortunately) next summer. You will want to use seeding rates on the high side of the range (25 lb per acre or more) and you will want to drill in two directions with a half rate each time. Realistically, this strategy will only provide about 6 to 8 inches of growth going into fall, but it is permanent cover.

What you do just prior to the fall seeding window is flexible, much of it driven by when you can get animals off the damaged field, your need for forage from that field and how much smoothing that field needs. I am sure that you are thinking, "I'd get them off of there tomorrow if I had any other options." That said, let's say the best case scenario is you get access to the field on April 1. We routinely spring seed red clover in April and get 2 tons of dry matter and more. You are going to have to smooth up the field in order to get good seed-soil contact.

Red clover will not provide any hoof support but it is easily managed so fall seedings of grass are possible. We are putting out some demonstrations using a mix of crabgrass and red clover as well. Based on our goal of permanent grass cover, manage the vegetation present so the grass seeding has the advantage; that means you may want to use a non-selective herbicide to prepare for a fall seeding.

Summer annuals (sorghum-sudangrass, sudangrass, pearl millet) give us more time to get the ground smoothed, as they are usually seeded beginning in May depending on soil temperature. These grasses have the advantage of providing high yields as well as utilizing the nutrients provided from the manure and urine in hay feeding areas. Indications are that seed supplies of these products will be tight because of poor harvest conditions last year. So if that is your plan, book your seed early. Consult AGR-229, Warm Season Annual Grasses in Kentucky (Google AGR-229 UKY) to see which one is right for you.

Finally, it is still conceivable that ryegrass (planted right away) can provide some quick cover, and spring oats can actually yield 2 tons plus if planted my mid-March. The likelihood of getting a seeding window in the next two weeks is dwindling, but the option is there. Summarizing all of this, our goal is a good stand of permanent cover on our winter feeding areas. Everything we do has to work towards that goal. Happy foraging.

~ Jimmy Henning, published in Farmers Pride