



FORAGE NEWS

 Research & Education Center
 Princeton, KY 42445

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

June 2011

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AMERICAN FORAGE AND GRASSLAND COUNCIL ANNUAL MEETING - JUNE 12-15, 2011

If you have not yet signed up for the American Forage and Grassland Council Annual Conference in French Lick, IN June 12-15, you still have time to do so. If you cannot make the whole conference one day registrations are available. The location is just one hour west of Louisville. For more information go to the UK Forage Website (www.uky.edu/Ag/Forage) and click on the AFGC meeting under upcoming events. Online registration is available or you can download the registration form and mail it in. Feel free to call AFGC headquarters if you have questions 800-944-2342.

U.K. ALL COMMODITY FIELD DAY

Mark your calendars for July 21 and plan to attend the University of Kentucky All Commodity Field Day at the University of Kentucky Research and Education Center in Princeton. Commodity tours, youth activities, Family and Consumer Science programs and exhibits, as well as over 40 Educational Exhibits under one of the big tents will be available from 8:00 – 3:00 Central time. Lunches prepared by various Kentucky Commodity groups will be available for purchase.

A personal invitation to participants in the Forage Tour. This wagon tour will last 1 hr 15 minutes and features four stops dealing with Novel Endophyte Tall Fescue, Grazing Research, Variety Testing and Forages for Biofuel and Feed.

For more information, see our website at <http://www.uky.edu/Ag/Forage/> or stop by your County Extension Office.

EQUINE EXHIBIT EXPANDED FOR U.K. ALL COMMODITY FIELD DAY

The U.K. Equine Team will combine talents with an expanded area in the Exhibit Tent at the U.K. All Commodity Field Day in Princeton July 21. Six booths will be combined and will feature the Kentucky Forage & Grassland Council, Pasture Weed Control, Plant I.D. and Pasture Evaluation along with publications on many areas involved in Equine Science.

CLOVER POWERPOINT RELEASED

A new Clover PowerPoint has been released by the Oregon Clover Commission titled "Ten Great Reasons for Growing Clover". It is available on our website at <http://www.uky.edu/Ag/Forage/Forage%20Related%20Powerpoints.htm>.

KENTUCKY GRAZING SCHOOL

Registration is now open for the Kentucky Grazing School to be held at the Woodford County Extension Office in Versailles August 15-16, 2011. This two-day school offers classroom and field activities. Registration fee is \$50 and includes all materials, grazing manual, breaks and lunch both days. To register, contact Lyndsay Jones 859-257-7512 or Lindsay.jones4@uky.edu. See our website for a complete program and directions <http://www.uky.edu/Ag/Forage/>

ALFALFA INTENSIVE TRAINING SEMINAR

The National Alfalfa and Forage Alliance (NAFA) will sponsor the 33rd National Alfalfa Intensive Training Seminar on November 15-17, 2011 at the Philadelphia Airport Embassy Suites Hotel. This has been the most successful educational program ever developed for training farmers and professionals in the alfalfa industry about alfalfa - "From seed to feed and beyond". This program started in Kentucky in March 1993 and has been held 32 times since from Canada to New Mexico and California to New York. It has had participants from 37 states and 9 countries. For more information on the seminar including registration costs, program, speakers, schedule and hotel, call 590-585-5460 or visit <http://www.alfalfa.org/training.html>.

NEW PAGE ADDED TO FORAGE WEBSITE

A new page "Forage Related PowerPoint's" has been added to the U.K. Forage Website. PowerPoint's on growing clovers, how grasses grow, grass grazing responses and forage seedling growth are posted with more to be added. To view these and other forage-related items, go to

<http://www.uky.edu/Ag/Forage/Forage%20Related%20Powerpoints.htm>

NEW NATIVE WARM-SEASON GRASSES PUBLICATIONS AVAILABLE

Dr. Pat Keyser and colleagues at the University of Tennessee have just released four new extension bulletins on Native Warm Season Grasses. They include:

Native Warm-Season Grasses for Mid-South Forage Production (SP731-A)

Establishing Native Warm-Season Grasses for Livestock Forage in the Mid-South (SP731-B)

Grazing Native Warm-Season Grasses in the Mid-South (SP731-C)

Producing Hay from Native Warm-Season Grasses in the Mid-South (SP731-D)

The publications are available on their Extension publications website. They are listed both under Animals and Livestock, subhead Forages for Livestock; and also under Wildlife and Fisheries, subhead Native Warm-Season Grasses. You can see them here:

<https://utextension.tennessee.edu/publications/Pages/animals.aspx>

FILMING COMPLETED ON FORAGE DVD

Kentucky was selected as one of the states to have producers nominated and selected to participate in a Forage DVD. Other states to be included are Alabama, Illinois and Indiana. In early May, a film crew from Indianapolis arrived in Kentucky for filming with Garry Lacefield and Gene Olson in Lexington. From there, Garry and the crew traveled to Bill Payne's farm in Lincoln County where Bill Payne and County Agent Dan Grigson were featured. Traveling next to Barren County for a stop with Jim & Baker Landis and on to Hart County where Clayton & Christopher Gerald's were featured. The film crew was most impressed with Kentucky's forage-livestock program and the excellent-professional-dedicated farmers that they worked with. The DVD is scheduled for release late this year. My thanks to Gene, Dan, Bill, Jim & Baker, Clayton & Christopher and their entire crew for going the extra mile.

HARVESTING AND MANAGING FLOODED FORAGE

Flood damaged forage may have elevated levels of ash and/or bacterial contamination. Both must be considered when feeding this forage to animals.

Internal mineral content of forages is usually 6 to 8% and forage normally has 2 to 4% soil contamination to give a total of 10 to 12% ash (see table). The soil contamination is largely silica and of no nutritional value to animals. This means that forage fed to animals should be increased when ash levels above are 10 to 12% and the value of forage reduced correspondingly.

Ash Content of Forage Samples 2005 to 2010, University of Wisconsin Marshfield Forage Lab		
Type	Statistic	% Ash
Haylage	Average	12.3
	Maximum	28.0
	Minimum	5.7
Hay	Average	10.3
	Maximum	17.6
	Minimum	8.8

Horses can be particularly sensitive to high ash content in the hay as the silica builds up in the intestinal tract of the horse and causes Sand Colic. The sand/silica causes pain by two methods: 1) Sand presses on the bottom of the intestine, preventing blood from entering the area. This causes the long term, low grade pain that can cause a horse to eat poorly without ever really acting colicky. 2) Eventually sand can build up to the point that it totally blocks a loop of intestine. This causes a very painful buildup of hay and water in front of the blockage. Once pressure builds to a certain point, it either pushes out the sand blockage or pops the intestine like an overfilled balloon. Intestinal rupture is always fatal.

A second major problem caused by flooding is that bacteria and other microorganisms may have contaminated the forage, especially if flood water flowed across manure piles or city sewage facilities or include runoff from manured land. Flood water may contain *Escherichia coli* and *Campylobacter jejuni* which can cause illness and death in both humans and animals. Other manure-borne pathogens can be present, including *Giardia lamblia* and *Cryptosporidium parvum*. Additionally manure-borne protozoan parasites are infectious at very low doses and may be able to survive in manure and surface water for long periods.

Bacteria and fungi may grow and produce mycotoxins on alfalfa/grass lying in the field. This is less of a problem on corn harvested for silage due to openness of the plant and reduced microbial growth. This microbial growth may be less of a problem if harvested forage is fermented because the associated heat will reduce microbes; though forage may still contain mycotoxins. The stated microbial populations will be less problem for cattle than sheep, horses, and other animals. (SOURCE: Dan Undersander, University of Wisconsin)

SPRAYING ROUNDUP READY ALFALFA

Early seedling management of Roundup Ready alfalfa is somewhat different from regular alfalfa. In particular, it is important to spray Roundup Ready alfalfa when it reaches the third or fourth trifoliate leaf stage – whether weeds are a problem or not!

Of course, it makes sense to spray if you have weeds. Eliminating competition will help establish thicker, more productive stands more rapidly.

But why spray if weeds are not a problem. Alfalfa varieties are different from Roundup Ready corn and soybeans. Not all seedlings of Roundup Ready alfalfa will be resistant to Roundup. For most varieties, around five percent of the seedlings will be susceptible to the herbicide. So to avoid future problems with these plants dying after Roundup application, you should eliminate them while all plants are still very young.

During the seeding year, alfalfa stands naturally thin as more vigorous plants out-compete smaller plants. The surviving plants fill the gaps and become even more productive as competition is reduced. By removing Roundup-susceptible plants as young seedlings, the gaps they leave will be filled easily by remaining Roundup-resistant plants. But if you wait until the stand is well established before making your first Roundup application, gaps left as susceptible plants die may not be filled as easily.

Most weeds should be easy to control in Roundup Ready alfalfa. To make sure your alfalfa stand also remains thick and productive, spray Roundup early to eliminate all susceptible plants. (SOURCE: Bruce Anderson, University of Nebraska)

NET WRAP CUTS LOSSES, SAVES TIME

Compared to twine, net wrap might seem like a pricey proposition given equipment costs of \$3,000-4,000 and plastic wrap at 75¢-\$1 more per bale than twine. But several factors can offset the added costs, says Bruce Anderson, forage specialist with University of Nebraska Extension.

Net wrap reduces harvest losses roughly 1%, according to Wisconsin research. "That's how much you lose while bales are spinning many times when wrapping with twine," he says.

Storage losses are quite a bit less with net-wrapped bales because they shed water better. "Under the Wisconsin conditions, twine-wrapped bales lost 11% of their weight, but net-wrapped bales only lost 7% during five to 12 months of outdoor storage. That's an extra 4% feed from net wrapping and doesn't even count the better forage quality found in net-wrapped bales.

"A couple percent here and there may not sound like much," Anderson adds, "but if you add the harvest and storage losses together to save 5% of your hay – and it costs a dollar to wrap each bale – hay only needs to be worth about \$35/ton to pay for the net-wrapping material."

Time saving may give net wrapping its biggest advantage compared to twine. "Net wrapping only takes a couple turns of the bale compared to 15, 20, even 30 turns for twine. Waiting to finish twine wrapping wastes time, burns fuel and adds to tractor wear and tear. As a result, you can make 30% more bales per hour using net wrap." (SOURCE: eHay Weekly, May 17, 2011)

KEYS TO A PROFITABLE FORAGE PROGRAM

If you were asked to list the "keys" to sustainable-profitable forage production, what would you list? I have thought of this question for many years. In conjunction with Drs. Don Ball and Carl Hoveland, we have put together the following "TEN". The "Ten Keys" document with explanation of each is on our website at <http://www.uky.edu/Aq/Forage/Ten%20Keys.pdf>. I would be interested in your opinion. Do you agree with these "10"? What others do you feel should be included? Which of these could be deleted?

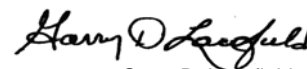
- (1) KNOW FORAGE OPTIONS AND ANIMAL NUTRITIONAL NEEDS.
- (2) ESTABLISHMENT IS CRITICAL.
- (3) SOIL TEST, THEN LIME AND FERTILIZE AS NEEDED.
- (4) USE LEGUMES WHENEVER FEASIBLE.
- (5) EMPHASIZE FORAGE QUALITY.
- (6) PREVENT OR MINIMIZE PESTS AND PLANT-RELATED DISORDERS.
- (7) STRIVE TO IMPROVE PASTURE UTILIZATION.
- (8) MINIMIZE STORED FEED REQUIREMENTS.
- (9) REDUCE STORAGE AND FEEDING LOSSES.
- (10) RESULTS REQUIRE INVESTMENTS.

UPCOMING EVENTS

JUN 13-15 AFGC Annual Meeting, French Lick, IN
JUL 21 UK All Commodity Field Day, Princeton
AUG 15-16 Kentucky Grazing School, Woodford County
OCT 13 Kentucky Grazing Conference, Western Kentucky University Expo Center

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FEB 23 32nd Kentucky Alfalfa Conference, Cave City Convention Center, Cave City



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