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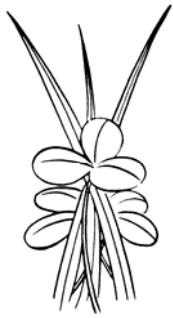
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FORAGE NEWS

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

NOVEMBER 2006

Garry D. Lacefield and S. Ray Smith, Extension Forage Specialists • Christi Forsythe, Secretary

KENTUCKY GRAZING CONFERENCE IN LEXINGTON, NOVEMBER 21

The 7th Kentucky Grazing Conference will be held November 21 at the Fayette County Extension Office. The morning program features seven Kentucky speakers and our keynote presentation. Mr. Ed Ballard from the University of Illinois is returning to our Conference by popular demand. Ed will discuss "New Options for Extending the Grazing Season".

The afternoon session will include the KFGC Business Meeting, KFGC Awards Program and the Forage Spokesman Contest.

We are planning for approximately twenty commercial and educational exhibits and our popular "Silent Auction".

Registration fee is \$15 (students \$5.00) and includes proceedings, educational materials, break and meal.

The program begins at 8:00.

- 8:00 Registration, Visit Exhibits, Silent Auction
- 8:30 Welcome – Jimmy Henning
- 8:40 Forages on the Web – Scott Flynn
- 9:00 Corn as a Grazing Crop – Chad Lee
- 9:20 Bermudagrass in Kentucky: Friend or Foe – David Ditsch
- 9:40 Everyday Cattle Graze is Money Saved – Garry Lacefield
- 10:00 Managing Pasture Growth & Quality with Grazing – Ray Smith
- 10:20 Break, Visit Exhibits, Silent Auction
- 10:40 Horse Pasture Evaluation Program – Tom Keene
- 11:00 Dollars & Cents of Intensive Grazing – Kenny Burdine
- 11:20 New Options for Extending Grazing – Ed Ballard
- 12:00 Discussion
- 12:15 Lunch, Visit Exhibits, Silent Auction
- 1:00 KFGC Awards and Business Meeting
- 1:30 KFGC Forage Spokesman Contest
(Forage producers that were nominated and selected will tell their "forage story" in the Forage Spokesman Contest. The winner will represent Kentucky at the AFGC Meeting in Pennsylvania.)
- 3:00 Adjourn

For more information, including a map to the Fayette County Extension Office, visit our website at www.uky.edu/Ag/Forage

CASH RECEIPTS HIGHLIGHTS - 2005

Woodford, Fayette, Graves, Bourbon, Webster and Hickman counties had cash receipts above \$100 million during 2005. Sales of horses and stud fees accounted for most of the cash receipts for Woodford, Fayette and Bourbon while poultry was the largest source of cash receipts in Graves, Webster and Hickman counties. Sixteen additional Kentucky counties had cash receipts above \$50 million for 2005.

Horse sales, including stud fees, continued to be the cash receipt's leader for Kentucky with \$1.01 billion. Receipts were up

\$60.0 million from the 2004 level. All poultry continued second with \$813.8 million in receipts, down less than 1 percent from 2004. Broiler receipts totaled \$704.3 million. Cattle and calves' sales were third with \$561.3 million. Tobacco was fourth with \$342.5 million.

Livestock made up 68 percent of total cash receipts for 2005. Sales of horses and stud fees were 37 percent of livestock and livestock products receipts during 2005. All poultry made up 30 percent of the livestock receipts with cattle and calves accounting for 21 percent of the livestock total.

Crops made up 32 percent of Kentucky's total cash receipts for 2005. Tobacco sales accounted for 27 percent of total crop receipts with corn making up 26 percent and soybeans 25 percent.

Top Cash Receipt Counties by Commodity - 2005

Horses	- Woodford	Tobacco	- Christian
Broilers	- Graves	Corn	- Union
Cattle	- Barren	Soybeans	- Henderson
Dairy	- Barren	All Hay	- Pulaski
		Wheat	- Christian

(SOURCE: Kentucky Agri-News, Vol. 25, No. 18, September 2006)

LOSS OF A LEGEND

On September 5, 2006, Kentucky and our Forage Industry lost a true friend and legend. Below is an edited obituary. Betty will be missed, but her contributions will live forever.

"THOMPSON Elizabeth (Betty) Goldsmith, 84, wife of Warren C. Thompson, passed away at St. Joseph Hospital Sept. 5, 2006 after a brief illness. Her parents were John Ira Thomas Goldsmith and Margaret Hale Goldsmith. Betty was a member of the Governing Board and Treasurer of the 14th International Grassland Congress co-sponsored by the University of Kentucky's College of Agriculture and the American Forage and Grassland Council. She was co-founder and Sec/Treas of the American Forage and Grassland Foundation until 1995. Her many awards include Kentucky's 'Seedsman' of the Year in 1973 and the National Merit Award from the Kentucky Forage and Grassland Council in 1985. She was a lifetime Episcopalian and a member of the Episcopal Church of the Good Shepherd in Lexington since 1958. She is survived by her husband, Warren Carr Thompson, Lexington, KY; a daughter, Kathryn Carr Thompson, Kokomo, IN; and two sons, Dr. David Warren Thompson (Valerie), New Port Richey, FL, and Major General Stephen Boyd Thompson (Barbara), Hendersonville, TN, five grandchildren and three great-grandchildren. She is also survived by a sister, Margaret Goldsmith Watson, Danville, CA and a sister-in-law, Anita Goldsmith, Worthington, OH."

Warren's contact information is: 3521 Lyon Drive, Lexington, KY 40513; Phone: (859) 224-7062; E-mail:

wcthompson@alltell.net

HAY IS IN THE BARN.....

Now that November is here our thoughts turn to the Holidays. Of man winter is not far away and feeding hay probably isn't too far away either. So now is a good time to take inventory of what your stored feed needs are going to be and then determine "do I have enough hay to carry me through until new grass in late March or early April"?

Take inventory of your bale numbers, then weigh a few bales, do the math and see exactly how many tons of hay you have in inventory. Next, have a nutrient analysis test done on your hay. Your county agent can help you with this. After the analyses are returned, work with your agent to balance a ration that will give the desired results (maintenance, pounds of gain, pounds of milk, etc.) you want for your livestock over the winter.

Once the calculations are made you should know if you are going to have just enough hay, not enough (and might have to buy some hay) or excess that could be marketed commercially. Whatever the outcome you'll have good numbers and can plan accordingly.

If you are going to have excess hay, depending on how your hay tested, you may be able to sell your higher quality hay for a good price and feed your lower quality hay, thus creating more farm income from the '06 hay crop. (SOURCE: Tom Keene, UK Hay Marketing Specialist)

NEW EXECUTIVE SECRETARY FOR AFGC

We are excited to announce the hiring of Bandy & Associates as our new executive secretary. Michael and Dee Dee Bandy, managing partners of Bandy & Associates, bring over forty years of experience in association management to AFGC. They have great visions for AFGC and bring many unique and innovative ideas to our organization. As of October 1st, Bandy & Associates will begin this transition. They will organize communications between members, affiliates and the executive board of directors. They will implement a comprehensive plan to lead AFGC in our quest to be a major voice in forage agriculture. The new AFGC contact information is: AFGC, 350 Poplar Avenue, Elmhurst, IL 60126, Phone: (630)-941-3240; E-mail: bandyassociates@bandyassociates.com (SOURCE: Bill Talley, President, AFGC)

ALFALFA'S MAKEOVER

Even though it's known as the queen of forages, alfalfa needs some retooling.

"It's getting harder for alfalfa to compete with the large and consistent supply of good-quality corn silage," says Neal Martin, director of the U.S. Dairy Forage Research Center (USDFRC), Madison, WI. "So our scientists are working on ways to enhance it."

Researchers estimate that forage producers will have access to redesigned alfalfa within five to 10 years. Using biotechnology and traditional breeding methods, they're working to improve the crop's fiber digestibility, protein utilization and yield.

Here's a synopsis of their progress:

"The fastest and best way to get the biggest gains in fiber digestibility is by either developing plants with less lignin or plants with a different type of lignin," says Martin.

To achieve that goal, scientists from the USDFRC and the USDA-ARS Plant Science Unit in St. Paul, MN, are collaborating with researchers from the Samuel Roberts Noble Foundation in Ardmore, OK, and Forage Genetics International, West Salem, WI. They've recently been successful at "down regulating" a gene so less lignin is produced, thereby improving digestibility.

The USDFRC estimates that a 10% increase in alfalfa fiber digestibility would lead to a \$350-million increase in U.S. milk and beef production annually, and a 2.8-million-ton annual decrease in manure solids.

Reducing protein degradation during ensiling is another priority, says Martin.

"In order to do that, we're researching ways to make alfalfa act more like red clover during ensiling," he says.

When alfalfas ensiled, protein degradation can reach 80-90%, compared with only about 20% for red clover, according to Martin.

Red clover's reduced protein degradation is due to enzymes called polyphenol oxidases (PPOs), which react with substrates to produce reactive molecules called quinones. The PPO-generated quinones combine with plant proteins to reduce protein breakdown.

The researchers are taking PPO-producing genes out of red clover and inserting them into alfalfa.

The next step is to find a mechanism for alfalfa to produce a suitable substrate or to add a substrate with similar activity. Chlorogenic acid, abundant in potato skins and coffee grounds, has been shown to work. So has caffeic acid. When alfalfa with a PPO gene has caffeic acid added during ensiling, it behaves like red clover, with less protein degradation.

The Noble Foundation is also spearheading research to engineer alfalfa to produce condensed tannins in leaves and stems. Condensed tannins bind with plant proteins to slow the rate of protein degradation in the rumen, increasing bypass protein. Tannin-containing forages are also non-bloating.

Scientists at several locations are working to improve alfalfa's yield potential. It's needed, says Mike Velde of Dairyland Seeds, Clinton, WI.

"As herd sizes continue to grow, the ability of dairy producers to harvest enough alfalfa becomes more difficult," says Velde. "Instead of 5 tons/acre, producers need to be getting 7-8 tons/acre on a consistent basis."

His company's approach is to develop hybrids with yield-enhancing heterosis.

"We're in the process of identifying high-yielding individual plants," says Velde. "Once we have the best plants, we cross them in different combinations to identify specific crosses that produce the greatest yields."

Yield increases are likely to be gradual, he adds. (SOURCE: Ann Behling, Hay & Forage Grower Magazine)

EFFECT OF SERICEA LESPEDEZA HAY ON GASTROINTESTINAL NEMATODE INFECTION IN GOATS

A natural alternative to chemical deworming of small ruminants is feeding hay of sericea lespedeza (SL), a perennial warm-season legume high in condensed tannins. To determine the level of SL needed to reduce gastrointestinal nematode (GIN) infection, naturally infected yearling Spanish/Boer/Kiko bucks were offered four different diets of 75% hay and 25% concentrate. The hay portion of each diet was a combination of ground SL (0, 25, 50, and 75% of the diet) and bermudagrass (BG; 75, 50, 25, and 0% of the diet). After a 3-wk adjustment, they were fed the treatment diets for six weeks. Fecal and blood samples were collected from each goat weekly to determine, respectively, fecal egg count (FEC), which estimates worm burden, and packed cell volume (PCV), which indicates level of anemia. Goats fed SL hay, regardless of amount, had lower FEC than control animals (75% BG hay) by the end of the trial, with a greater reduction as % SL in the diet increased. The 75% SL-fed goats had higher PCV than the 25% SL and control animals, while the 50% SL goats were intermediate. This study indicates that ground SL hay fed at between 50 and 75% of the diet has potential as a natural supplement to or replacement for chemical anthelmintics. (SOURCE: G.S. Dykes, et al., Fort Valley State University IN AFGC Proceedings 2006)

UPCOMING EVENTS

NOV 21 Kentucky Grazing Conference, Lexington
DEC 10-13 Third National Conference on Grazing Lands, St. Louis, MO

2007

JAN 11-13 KCA Annual Convention & Trade Show, Lexington
JAN 24-25 Heart of America Grazing Conference, Mt. Vernon, IL
FEB 22 27th Kentucky Alfalfa Conference, Cave City
JUN 24-27 American Forage & Grassland Council Annual Meeting, State College, PA
JUL 26 UK All Commodity Field Day, UKREC, Princeton

2008

JAN 26-FEB 1 SRM/AFGC Forage Conference, Louisville

Garry D. Lacefield
Extension Forage Specialist
November 2006