



# FORAGE NEWS

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

**AUGUST 2004**

*Garry D. Lacefield, Extension Forage Specialist • Christi Forsythe, Secretary*

## **WARREN THOMPSON RECEIVES INTERNATIONAL RECOGNITION**

Mr. Warren Thompson was inducted into Honorary Membership of the North American Alfalfa Improvement Conference at the Awards Banquet in Quebec City, Canada July 21, 2004. Congratulations Warren!!!

## **FORAGE WEBSITE**

Our THANKS to all who have passed on compliments and suggestions for our new Forage Website (see address in the box above). We are continuing to make changes. Check our latest addition concerning Poisonous Plants available on the Publication link. Also, remember our latest variety test information is also on the Variety Test link.

## **5<sup>TH</sup> KENTUCKY GRAZING CONFERENCE**

The program committee has finalized the program for the 5<sup>th</sup> Kentucky Grazing Conference to be held October 26, 2004 at the WKU Expo in Bowling Green. A draft of the program is listed below and more details will be available soon. See the Forage Website for more information. A registration fee of \$15.00 (\$5.00 students) will cover materials, proceedings, breaks, and lunch.

- 8:00 Registration, Visit Exhibits, Silent Auction
- 8:30 Welcome
- 8:45 Role of Legumes in Pasture Systems – Dr. Garry Lacefield
- 9:00 Fertilizing Pastures for Profit – Dr. Byron Sleugh
- 9:20 Present & Future Tall Fescue Varieties – Dr. Tim Phillips
- 9:40 Will Improved Grazing Pay for Extra Fencing & Watering Cost? – Mr. Ken Johnson
- 10:00 Grazing: Getting From Where You Are to Where You Want to Be – Dr. Gary Bates
- 10:20 Discussion
- 10:30 Break, Visit Exhibits, Silent Auction
- 11:00 Stocking Decisions: They Make or Break You – Dr. Glen Aiken
- 11:30 Strategies to Minimize Stored Feed Requirements – Dr. Don Ball
- 12:00 Discussion
- 12:15 Lunch, Visit Exhibits, Silent Auction
- 1:15 KFGC Business Meeting and Awards
- 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 Meetings in 2005)
- 3:00 Adjourn

## **FORAGE SPOKESMAN NEEDED**

The Kentucky Forage and Grassland Council will select a State Forage Spokesman following the contest in Bowling Green October 26

in cooperation with the 5<sup>th</sup> Kentucky Grazing Conference. Forage Spokesmen will speak for approximately 12 minutes on their forage program. The winner of the State Contest will represent Kentucky at the American Forage & Grassland Council National Contest in Illinois in 2005. If you would like to nominate a farmer for the contest, contact: Ken Johnson, e-mail [Ken.Johnson@ky.usda.gov](mailto:Ken.Johnson@ky.usda.gov) phone 270-487-6589 or Garry Lacefield, e-mail [glacefie@uky.edu](mailto:glacefie@uky.edu) phone 270-365-7541, Ext. 202.

## **ADVANCES IN FORAGE-BEEF PROGRAMS RESULTING FROM AGRICULTURE DEVELOPMENT FUNDS**

Over the past three years, over \$52 million dollars has been spent across Kentucky in support of the beef-forage enterprise of the state. In a time when other states have used the Master Settlement Funds to balance budgets, political leaders in Kentucky decided that a good portion of these funds should go back to help those farmers and communities that will suffer financially as tobacco declines.

Other farmer-oriented programs from across Kentucky have benefited from Ag Development Board funds, including Master Cattleman and CPH-45 sales. In addition, better cattle genetics, more handling facilities and investments in better forage will also pay dividends in the days ahead.

The Ag Development Board investment in improved beef genetics has helped producers purchase approximately 13,000 bulls. Most of these sires should improve calf weaning weights by 25 pounds. Assuming 30 cows per bull and 80% calf crop and today's prices, Kentucky farmers should realize a \$7,800,000 increase in cattle income. Farmers, thus seeing the benefit of improved sires are now using their own dollars to purchase additional improved sires thus improving their cattle income even more.

ADB funds have helped farmers greatly improve their forage programs by encouraging them to take advantage of cost share programs to seed hay and pasture crops that will produce 30-50% more yield than their basic grass fields. These improvements will also improve forage quality leading to greater beef production at less cost. UK Extension Agents have done the soil testing and have given producers recommendations to utilize over \$17.1 million in Ag Development funds. Most of this has gone to support new seedings of alfalfa and red clover. Considering the improved yield and forage quality, this investment should be worth as much as \$400 or more per acre seeded over the life of the stand for alfalfa and about \$240 for red clover due to better varieties alone. At an estimated \$110 per acre seeding cost, at least 300,000 acres of improved forage have been established. Based on the yield improvement alone (from using better varieties), this practice should generate at least \$30,000,000 in increased forage value.

Over \$13.5 million in ADB funding has been matched by farmers to purchase or make improvements to cattle handling facilities. An estimated 11,000 handling facilities have been added or improved across Kentucky. Based on the 50 calves per facility and \$15 per calf income gain as the result of improved health and management

programs the value of this Extension/GOAP/local organization effort totals \$8,250,000 more potential income for Kentucky producers.

The Kentucky Master Cattlemen program is a 4-hour extension educational program that receives support from the Kentucky Beef Network, funded by ADB funds. In Master Cattlemen, agents and specialists teach producers to manage their cattle to the best economic advantage. Participants learn about all areas of cattle production and marketing. Since 2000, 1000 producers from 101 counties have gone through Master Cattlemen. In 2003, producers representing a total of 51,000 cows were in Master Cattlemen. Due to their adoption of these profit oriented recommended practices, these producers are realizing increased economic returns of \$12,000 annually (based on the average herd size of 102 cows).

In 2003, UK Extension Agents in partnership with KBN facilitators and the Kentucky Department of Agriculture assisted local cattle groups in hosting 31 special CPH-45 health and management feeder calf sales at 13 locations around the state. Over 30,000 feeder calves were marketed. The average premium per hundred weight over the average sale price was \$7.27. These calves gained on the average an additional 80 pounds for a total of 2,400,000 pounds. Considering the premium and the weight gain, these Kentucky producers increased total income by over \$4.7 million. Extension is increasing the educational effort for this program hoping to help many more producers improve their beef income.

UK and the county agents of the Kentucky Cooperative Extension Service have invested countless hours to determine county priorities for ADB dollars and to get the funds in the hands of farmers. The financial impact on Kentucky's beef industry has already been significant. There is a new spirit of excitement and a renewed vision for Kentucky agriculture in the Governors Office on Ag Policy regarding the future projects for the Ag Development Board Funds. These investments will impact Kentucky for a lifetime. (SOURCE: Dr. Jimmy Henning, Assistant Director for Agriculture and Natural Resources, University of Kentucky)

## ALFALFA ACREAGE UP OTHER HAY DOWN

**Alfalfa hay** acreage was estimated at 260,000 acres, up 10,000 from the 2003 crop. **All other hay** acreage was estimated at 2.00 million acres, down 200,000 acres from the previous year. Harvesting conditions this spring and early summer have been difficult due to frequent showers and poor drying conditions. Quality has been hurt by over maturity. (SOURCE: Kentucky Agri-News, Vol. No. 23, Issue No. 13, July 2004)

## TRANSITION FROM TOXIC TALL FESCUE TO NON-TOXIC NOVEL ENDOPHYTE TALL FESCUE

Toxic tall fescue (*Festuca arundinacea*) infected with the *Neotyphodium coenophialum* endophyte reduces animal gain, calf crop, milk production, and can be lethal to mares and foals. Destruction of the stand eliminates forage production for six to twelve months. The advent of glyphosate tolerant corn (*Zea mays*) and soybean (*Glycine max*) opens up new possibilities for toxic tall fescue renovation. A pasture containing toxic tall fescue was sprayed with paraquat in March and glyphosate tolerant corn and soybean were no-till planted in April. Glyphosate was applied in May. Yield of corn was 90 to 120 bu/Ac and soybean yield was 30-35 bu/Ac. MaxQ tall fescue was planted in October. Half the plots were also overseeded to wheat. Inclusion of wheat increased first year forage yield without substantial effects on tall fescue stand. Forage yield was 162 to 188% greater following soybean compared with following corn. Tall fescue can be successfully established without tillage following corn or soybean. Wheat can be used during the year of establishment to increase grazable forage production. Forage yield was increased by 212 to 338% by inclusion of wheat with the tall fescue planting. (SOURCE: D.J. Lang, et al IN 2004 AFGC Proceedings, Vol. 13)

## EFFECT OF ALFALFA SEEDING RATE ON STAND LONGEVITY

Alfalfa seeding rates really affect the number of alfalfa plants after one year. However, we wanted to know if heavier seeding rates would affect the number of plants sufficiently over time, to extend the viability of the stand. Different alfalfa cultivars were spring seeded at rates ranging from 3 to 24 lb/a. Stand densities were determined at various intervals over a seven year period. Increasing seeding rates resulted in near linear increases in plant densities from 9 to 74 plants square

foot within three months after planting. However, higher seeding rates experienced eight times higher plant deaths the first year after planting compared to lower seeding rates. In general, higher plant densities associated with seeding rates greater than 15 lb/a did not persist beyond six months after planting. Seeding rates of 9 and 15 lb/a had similar plant densities by 24 months after planting in 75% of the location-years. Seeding rates greater or slightly less than those recommended have little to no effect on the life expectancy of an alfalfa stand. (SOURCE: M.H. Hall, et al IN 2004 AFGC Proceedings, Vol. 13)

## FORAGE YIELD AND QUALITY OF WINTER HARDY CEREALS AND WINTER SENSITIVE SPECIES FOR GRAZING

Increased production costs for livestock producers in the Midwest have prompted research for methods of extending the grazing season. By extending the grazing season producers can reduce reliance upon expensive stored hay and silage. One possible way to increase the grazing season is with cereal grains. The use of cereal grains will provide both late fall and early spring grazing while permanent pastures are stockpiled for winter grazing. Cereal grains for extended grazing can be planted in a rotation with fields chopped for corn silage. This practice would aid in soil retention after corn silage has been removed from the field. The goal of this study was to determine fall and spring forage yield and quality of winter rye and winter sensitive forage species planted alone and in binary mixtures under grazing by cattle. Results show that oat or spring triticale will increase yield of common rye in the fall, but have little benefit when planted with an improved forage-type rye. Seed costs are comparably low for oat compared to other species used in this study. Both oat and rye had apparent greater consumption by cattle compared to other forage species in this study. (SOURCE: J.S. McCormick, et al IN 2004 AFGC Proceedings, Vol. 13)

## FORAGE PRODUCTION AND FORAGE MIXTURE COMPLEXITY

Forage mixtures composed of many well adapted species could increase forage production and improve its seasonal distribution. Mixtures could reduce seasonal fluctuations in production and thereby increase seasonal sustainability of forage systems. However, previous research with simple (2 or 3 species) mixtures and complex (more than 3 species) mixtures was unable to show differences in forage production. This study was undertaken to ascertain if there were differences in forage production and its seasonal distribution between simple mixtures and complex mixtures under rotational grazing. Seasonal distribution of dry matter (DM) was unaffected by the number of species in the mixtures. Differences in DM distribution were chiefly dictated by climatic conditions. Complex mixtures produced more DM than simple mixtures. The most important factor determining forage yield was the particular species that composed the mixture. Red clover appeared as the best adapted species to the environment. Consequently, mixtures that had red clover as one of its components yielded more forage than other mixtures. Data from this study indicates that it is more important for producers to focus on species selection than mixture complexity in order to achieve high yield over time. (SOURCE: A. Deak, et al IN 2004 AFGC Proceedings, Vol. 13)

## UPCOMING EVENTS

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|---------|---|
| OCT 3-5 | Fourth Eastern Native Grass Symposium, Lexington                          |
| OCT 26  | 5 <sup>th</sup> Kentucky Grazing Conference, Bowling Green                |
| 2005    |   |
| FEB 24  | 25 <sup>th</sup> Kentucky Alfalfa Conference, Cave City Convention Center |



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