



University of Kentucky
UKnowledge

Forage News

Plant and Soil Sciences

11-1-2003

Forage News [2003-11]

Department of Plant and Soil Sciences, University of Kentucky

Follow this and additional works at: https://uknowledge.uky.edu/forage_news



Part of the [Plant Sciences Commons](#)

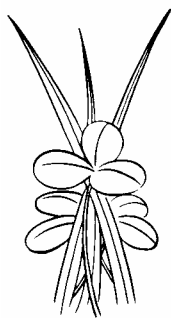
[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

Repository Citation

Department of Plant and Soil Sciences, University of Kentucky, "Forage News [2003-11]" (2003). *Forage News*. 172.

https://uknowledge.uky.edu/forage_news/172

This Newsletter is brought to you for free and open access by the Plant and Soil Sciences at UKnowledge. It has been accepted for inclusion in Forage News by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.



FORAGE NEWS

NOVEMBER 2003

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

4TH KENTUCKY GRAZING CONFERENCE IN LEXINGTON

Our 4th Kentucky Grazing Conference will be held at the Fayette County Extension Office on November 25, 2003. The program will begin with registration at 8:00 a.m. All exhibits will be open at 8:00 and you can browse and bid on the many "Silent Auction" items. The program gets underway at 8:45. Below is the agenda for all the day's activities:

- 8:00 Registration, Visit Exhibits, Silent Auction
- 8:45 Welcome - Dr. Jimmy Henning
- 9:00 Optimize Grazing – Minimize Stored Feed - Dr. Garry Lacefield
- 9:20 Opportunities for Warm Season Grasses - Mr. Ken Johnson
- 9:40 Grazing Systems for Dairy - Dr. Donna Amaral-Phillips
- 10:00 Break, Visit Exhibits, Silent Auction
- 10:20 Grazing Systems for Beef - Dr. John Johns
- 10:50 Environmental Benefits with Improved Grazing - Mr. David Stipes
- 11:20 Economics of Improved Grazing - Mr. Ed Ballard
- 12:00 Lunch, Visit Exhibits, Silent Auction
- 12:45 KFGC Business Meeting and Awards, Silent Auction
- 1:15 Efficient Use of Pastures for Horses - Dr. Bob Coleman
- 1:45 Grazing Systems for Goats - Mr. Terry Hutchens
- 2:15 Efficient Grazing Systems: Putting Pieces Together - Dr. Chuck Dougherty
- 2:45 Discussion
- 3:00 Adjourn

A registration fee of \$15.00 (\$5.00 students) will cover proceedings, refreshments, meal and other related handouts and publications. It is not necessary to pre-register for this important conference. If you have questions, contact Garry Lacefield, Conference Chairman (Phone: 270-365-7541, Ext. 202 or by E-mail: glacefie@uky.edu); Christi Forsythe, Conference Secretary (Phone: 270-365-7541, Ext. 221 or by E-mail: cforsyth@uky.edu); or, Ken Johnson, KFGC President and Exhibit Chairman (Phone: _____)

BUTTERCUP CONTROL IN COOL-SEASON GRASS PASTURES

Buttercups are a problem in cool-season grass pastures and easily recognized in early spring by their bright yellow flowers. This attractive 'wildflower' possesses several weedy characteristics that make it difficult to control in pastures.

Buttercup populations are greater in low areas of fields that tend to remain wet for a long period and in pastures with poor stands of grass. Overgrazing the forage usually increases the buttercup population.

Most buttercups are short-lived perennial weeds of cool-season grasses such as tall fescue and orchardgrass and occur throughout Kentucky. There are several species found in Kentucky: bulbous buttercup (*Ranunculus bulbosus*), small flower buttercup (*Ranunculus abortivus*), hairy buttercup (*Ranunculus sardous*), creeping buttercup (*Ranunculus repens*), and tall buttercup (*Ranunculus acris*). The bulbous and small flower buttercups tend to be the more common species that occur in grazed pastures.

Pasture management techniques that promote growth of the pasture grasses will provide competition with the buttercups and inhibit their growth. These practices include proper soil fertility and pH, avoidance of overgrazing, timely mowing, and timely herbicide treatments.

Herbicides were evaluated for bulbous buttercup control in a tall fescue/orchardgrass pasture in Hopkins County in 2003. The following table contains weed control and pasture grass injury eight weeks after treatment. It is important to remember that bulbous buttercup is a perennial and the control of such plants cannot be determined until one year after treatment. The data in Table 1 indicate the control of the top growth of bulbous buttercup and gives an indication of the potential for these treatments to prevent formation of new seeds. This study revealed that many herbicides labeled for cool season grass pastures were effective in providing excellent top growth control of bulbous buttercup. However, there are issues that this study did not address. The susceptibility of the other buttercups to the herbicides in this study is unknown (most herbicide labels use the term 'buttercups' and do not distinguish among the species). Likewise, the control of these perennial plants the year after treatment is undefined.

General guidelines for effective control of buttercups with herbicides:

- scout fields in November through February
- treat with the herbicide before flowering
- treatments after flowering may require greater amounts of herbicides
- treatments made after flowering will not prevent seed formation
- follow label directions for spray coverage and addition of surfactants

Table 1. Buttercup Control 8 Weeks after Treatment in a Tall Fescue/Orchardgrass Pasture in Hopkins County. All treatments were applied in early April, 2003.

Treatment	Amount/Acre	Buttercup Control	Grass Injury
1. Redeem R & P	1.5 pt	53	0
Activator 90	0.25%		
2. Redeem R & P	2.0 pt	73	0
Activator 90	0.25%		
3. Redeem R & P	2.5 pt	60	0
Activator 90	0.25%		
4. Redeem R & P	3.0 pt	83	0
Activator 90	0.25%		
5. 2,4-D ester	1.0 qt	100	0
6. 2,4-D ester	2.0 qt	100	0
7. Weedmaster	2.0 pt	98	0
8. Weedmaster	3.0 pt	100	0
9. Crossbow	2.0 qt	100	0
10. Crossbow	3.0 qt	100	0
11. Cimarron	0.2 oz	98	15
Activator 90	0.25%		
12. Untreated	0	0	0

Table 2. Waiting interval after herbicide application before grazing livestock or harvesting for hay. The data below are for the herbicides listed in Table 1 and at those rates. Check the product label for more specific information on rates other than those listed.

Herbicide	Waiting Interval (days)			
	Grazing		Hay	
	Beef	Lactating Dairy	Beef	Lactating Dairy
2,4-D (Numerous products)	0-14	7-14	30	30
Cimarron*	0	0	0	0
Crossbow	0	365**	14	365**
Redeem R & P	0	14	7	365**
Weedmaster	0	7	37	37

*Cimarron—the active ingredient in this product was marketed previously as Ally.

**The wording on the label indicates grazing or haying for lactating dairy animals should not occur until the next growing season.

(SOURCE: W.W. Witt and J.D. Green, University of Kentucky)

DOES THE "ENDOPHYTE" IN STOCKPILED TALL FESCUE IMPACT ANIMAL PERFORMANCE?

Yes, in all of the animal feeding studies that I am aware of, when animals consume tall fescue containing the endophyte, performance is reduced. The magnitude of this reduction is affected by many factors including temperature and has lead many to conclude that with cooler temperatures of late fall and winter, the endophyte does not affect performance. The following data from Kentucky and Oklahoma clearly demonstrate the reduced animal performance resulting from the presence of the endophyte even with cooler temperatures associated with grazing stockpiled tall fescue.

Calf ADG of fall accumulated tall fescue with and without the endophyte.

Endophyte	Kentucky	Oklahoma
E+	1.49 lbs	1.85 lbs
E-	2.17 lbs	2.47 lbs

UPCOMING EVENTS

NOV 25 4th Kentucky Grazing Conference, Fayette County Extension Office, Lexington

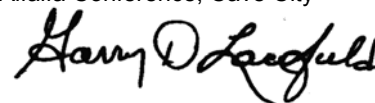
DEC 7-10 National Conference on Grazing Lands, Nashville, Tennessee

2004

JAN 9 Forages at KCA, Bowling Green

JAN 22 Heart of America Grazing Conference, Evansville, IN

FEB 26 24th Kentucky Alfalfa Conference, Cave City



Garry D. Lacefield
Extension Forage Specialist
November 2003

Forage Quality Parameters for Selected Forage Crops¹

Crop	CP ²	ADF	NDF	TDN	RFV
Alfalfa					
Bud	22-26	28-32	38-47	64-67	127-164
Early flower	18-22	32-36	42-50	61-64	113-142
Mid bloom	14-18	36-40	46-55	58-61	98-123
Full bloom	9-13	41-43	56-60	50-57	90-110
Corn silage					
Well eared	7-9	23-30	48-58	66-71	105-138
Fair to poorly eared	7-9	30-39	58-67	59-66	81-105
Tall fescue, orchardgrass					
Vegetative-boot	12-16	30-36	50-56	61-66	101-122
Boot-head	8-12	36-42	56-62	56-61	84-101
Ryegrass					
Vegetative-boot	12-16	27-33	47-53	63-68	111-134
Boot-head	8-12	33-39	53-59	59-63	92-111
Switchgrass, Caucasian bluestem					
Vegetative-boot	10-14	35-40	55-60	58-62	90-104
Mature, head	6-10	40-50	60-75	50-58	62-90
Bermudagrass					
4 week old	10-12	33-38	63-68	52-58	81-93
8 week old	6-8	40-45	70-75	45-50	67-77
Pearl millet, sorghum-sudangrass	8-12	35-40	55-70	50-58	77-104
Red clover					
Early flower	14-16	28-32	38-42	64-67	142-164
Late flower	12-14	32-38	42-50	59-64	110-142
Annual lespedeza	12-16	35-40	45-55	58-62	98-127

¹These are estimates. Forage quality varies as a result of many factors. Except for RFV, values in these columns are expressed in terms of percent dry matter.

²Abbreviations over columns are: CP=crude protein; ADF=acid detergent fiber; NDF=neutral detergent fiber; TDN=total digestible nutrients; RFV=relative feed value.

Source: J.C. Henning and G.D. Lacefield, University of Kentucky IN Southern Forages 3rd Edition, 2002.