

MFA March 2007 Forage Focus Research Update

MINNESOTA

Windrow Grazing Shows Promise in Northern Minnesota

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Late fall grazing of windrows of Italian ryegrass (IRG) and an alfalfa/tall fescue/Italian ryegrass mixture (MIX) by pregnant dry beef cows effectively reduced feed cost by extending the grazing season without negatively impacting cow performance. The research was conducted at the North Central Research and Outreach Center in Grand Rapids, MN.

Preliminary data in 2005 indicated that the concentration of nutrients in Italian ryegrass and alfalfa left in windrows didn't change significantly from October cutting/windrowing well into November. So in 2006, pregnant dry beef cows were assigned to one of two treatment groups within two pasture types: 1) cows fed baleage (BLG) harvested from one-half of each pasture type, and 2) cows grazing windrows on one-half of each pasture type (WIN). The two pasture types were IRG and MIX. Pastures were seeded in late May 2006, grazed beginning mid-July, then cut/windrowed in early October. Stocking rates for each treatment were based on forage yield providing 2% BW in DM lasting 30 days beginning November 8. Cows in WIN grazed 10 three-day strips using temporary electric fencing.

For MIX, average daily gain (ADG) was greater for baleage (3.7 lb) vs. windrow grazing (2.1 lb). For IRG, ADG was similar (1.9 lb) for baleage vs. windrow grazing. All four treatment groups had similar average body condition score. For IRG, forage loss was greater with windrow grazing than with baleage; but similar for MIX. Forage crude protein over time remained similar for both treatment groups, but TDN declined slightly for the WIN vs. BLG group in both pasture types. Feeding cost per head per day averaged 2.5 times greater for cows fed baleage vs. windrows.

Table 1. Forage characteristics, pregnant dry beef cow performance, and cost associated with windrow grazing vs. baleage feeding for two pasture types at Grand Rapids, MN.

		DM Yield	DM	TDN Oct.	TDN Nov.	TDN Dec.	Forage Loss	Feed Duration	ADG	Cost
		<i>Lb/ac</i>	----- % -----					<i>days</i>	<i>lb/day</i>	<i>\$/hd/day</i>
Italian Ryegrass	Windrow Grazing	3500	22	64	60	61	14	35	2.0	0.35
	Baleage	4010	16	65	65	64	4	27	1.9	1.26
Alfalfa/Tall Fescue/Italian Ryegrass	Windrow Grazing	2150	39	66	62	61	7	25.5	2.1	0.54
	Baleage	2310	36	67	65	66	5	22	3.7	0.99