

OPTIMIZE GRAZING – MINIMIZE STORED FEED

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The title “Optimize Grazing – Minimize Stored Feed” appears to be a bit redundant at first glance. Indeed if we optimize grazing, we will certainly minimize the amount of stored feed required to winter our animals. Putting both concepts together can serve as a reminder of the tremendous benefit of both.

Grazing represents the cheapest source of nutrients for our beef industry. Several studies have shown that the best predictor of profitability in the beef industry is cost of stored feed. In Kentucky, specifically, that means cost/amount of hay required to winter on beef animals.

Last winter I had the opportunity to be on a grazing program with Jim Gerrish. Jim is one of the leading grazing people in the U.S. He told me of a survey he had done concerning number of days the average beef producer feeds hay. His first survey was in Wisconsin where the average number of days for hay feeding was 140. He indicated this was not a big surprise since Wisconsin is one of our most northern states with a lot of snow and cold weather. At the time, Jim was a faculty member at the University of Missouri so he conducted the same survey there and to his surprise found that beef producers in Missouri feed hay for an average of 140 days. Determined to find a lower number, he surveyed beef producers in Mississippi and lo and behold, the average there was 140 days.

A few weeks ago I was on a forage program in Conroe, Texas (near Houston). I asked the county agent there how many days the average beef producer feeds hay. His answer was 90 days which surprised me since we were that far south. I asked participants at our spring grazing school in Bowling Green how many days they feed hay per year averaged over the past five years. The average was 117 days with a range of 56-160.

I have talked to several individuals who have accepted my challenge to “develop grazing strategies that will reduce your hay feeding by ½”. I have had many tell me they fed hay 45± days last year and have a goal to cut this to 30 days or less.

This past summer I was on the program at the University of Illinois and the speaker before me discussed feed cost. He indicated that the average beef producer in Illinois fed hay 120-150 days with a winter feed cost of \$1.25-\$1.50 per cow/day. He indicated the average feed cost for wintering a beef cow there was \$205 with a range of all

producers of \$54-\$530. I was particularly interested in the feeding program of the “top profit” producer with the lower winter feed cost. Some used stockpiled tall fescue to cut their days of grazing from 140 to 60. Others used small grains or ryegrass, and some had the opportunity to use corn crop residue.

The following data was presented by Jim Gerrish at the Heart of America Grazing Conference. The data was compiled from several studies conducted by Jim and colleagues at the University of Missouri. He compared annual ryegrass, stockpiled tall fescue and hay and found that cost per pound of dry matter consumed was 16 cents for annual ryegrass compared to 8 cents for tall fescue and 35 cents for hay (Table 1).

	Annual		
	Ryegrass	Stockpile	Hay
Forage yield	7000	3895	2000
Utilization	70%	70%	80%
Harvested forage	4900	2727	1600
Cost/lb/dm consumed	\$0.016	\$0.008	\$0.035

Cost of gain was lowest for stockpiled tall fescue (Table 2) and highest for hay. In another study (Table 3) he found that cost per cow per day was five cents for cornstalks, thirty-one cents for stockpiled tall fescue, sixty-one cents for ryegrass/cereal rye and \$1.32 for hay.

	Annual		
	Ryegrass	Stockpile	Hay
Cow weight	1350	1350	1350
Intake	0.028	0.028	0.028
Lb forage/cow/day	37.8	37.8	37.8
Cost/cow/day	\$0.62	\$0.31	\$1.32
Calf ADG	2.45	2.24	2.02
Cost/lb/gain	\$0.25	\$0.14	\$0.65

Table 3. Daily and seasonal forage costs for alternative wintering strategies at typical yields, costs, and period of use based on 100-cow herd.

Winter feeding period from Dec 1 to April 10				
Forage Source	Hay	Cornstalks	Stockpiled tall fescue	Ryegrass + cereal rye
\$/cow/day	\$1.32	\$0.05	\$0.31	\$0.61
Days of use	130 hay	60 stalks	90 graze	90 graze
		70 hay	40 hay	40 hay
Wintering cost	\$172	\$122	\$70	\$108

Our challenge is to develop grazing strategies to optimize grazing and minimize amount of stored feed required to winter our cows.