



Beef Tech-Line



Managing the Hay Supply in Cow/Calf Operations

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Hay is a vital part of most cattle operations whether being used for winter feeding, as part of a growing or finishing diet, or as a supplement to limited pasture. An increasingly common situation is limited hay availability and high prices due to drought and/or hay acres being diverted to row crops. Cow calf producers are asking what they can do to stretch their hay supply.

Utilizing the right feeder is a key part of extending the hay supply. Hay that is simply placed in the pasture without a feeder or unrolled on the ground will suffer significant wastage. A three year demonstration project in North Carolina illustrated this difference; cows that were fed hay without hay rings consumed an average of 0.68 tons of hay/head/year more than cows fed hay in conventional hay rings. Other research has shown that not protecting hay fed on pasture can waste up to 45% of the hay fed.

Table1. Percent Waste from Different Types of Hay Feeders

Type	% Waste*	% Waste**	Rank
Cone	3.5	5	1
Sheeted Ring	6.1	13	2
Open Ring		21	3
Wagon	11.4		4
Cradle	14.6		5
Unprotected			6

*Buskirk et al., J. Anim. Sci. 2003. 81:109–115

**Lalman et al., 2011. Feedstuffs

Table 1 shows the waste from different types of hay feeders. Hay feeders that prevent hay from coming out of the bottom of the feeder have lower losses. This is because the cows are not trampling the hay that escapes from the feeder into the ground. Cone feeders and modified cone feeders tend to have reduced losses compared to sheeted bottom hay rings. The cone feeders hold the hay in the middle of the feeder and force cows to reach for the hay. Both ring and cone feeders mimic the normal grazing position of cows and can prevent cows from throwing hay over their heads.

You don't know how much hay you are feeding unless you have an accurate estimate of how much the bales weigh. A hay producer survey showed estimates ranging from -86 lbs. to +400 lbs. of the actual weight of the bales. High estimates could lead to some serious shortages of hay before the end of the winter.

Another strategy is limiting the amount of time cows have access to hay. Studies in Minnesota and Illinois showed a 22% average reduction of hay intake when cows had limited (6 hours) access to hay compared to unlimited access. All cows gained weight in these studies but the limit fed gained less weight. This program should only be used for cows in moderate or better body condition (BCS=5) as cows that are already thin will possibly have reduced performance, poor calf health, and reduced reproductive efficiency. A possible concern for this program is the ability to move cows in and out of an area as well as the strength of your fences. If cows are limited on intake they will feel hungry and will test the fences more than normal.

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The use of Rumensin containing supplements and minerals can lead to reduced hay intake while not affecting weight gain. A recent brood cow study in Oklahoma showed that the addition of Rumensin (200 mg) improved body condition score by almost half a score and improved average daily gain by 0.5 lbs./hd/d. Rumensin improves forage digestibility leading to improved cow performance. The addition of 200 mg/hd/d of Rumensin has been shown to decrease feed intake, while reducing loss of body weight (Table 2). With the same level of Rumensin the calving interval is shortened while the percent bred is increased.

Providing a supplemental feed other than hay in times of low hay supply will decrease the need for hay. Most concentrates and supplements will be more nutritionally dense than forages providing more nutrients per pound than forages. Supplements allow the cows to maintain body condition score while consuming less overall feed. Hubbard has been accomplishing this goal with block, cake and other dry feed supplements for decades.

Table 2. Effects of Rumensin when fed to the cow herd.

	Rumensin, mg/hd/d	
	0	200
Wt. Change	-47	-39
Feed intake, % of control	100	89.2
Days from calving to conception	93 ^a	87 ^b
Percent Conception	90.9	97.0

^{a,b}Means within a row with different superscripts differ P < 0.05

¹Rumensin Freedom of Information Summary (NADA 95-735).

Cone Feeder



Ring Feeder



Ring Feeder



Skirted Ring Feeder



Wagon Feeder



Cradle Feeder



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