

Winter Feeding Cost Cut by Balancing the Ration

You all know that winter feed costs can account for 60% of your expenses. This year is no different. Much of the state has experienced drought, fires or both and hay prices are high. A sure way to decrease this cost is to feed the cows according to her needs and not her "wants." A cow has a requirement for protein and energy and is dependent upon her body size and performance requirement (i.e. milking ability, age, and growth). Feed should be analyzed for cost according to the amount of energy or protein provided by the feed.

Grass Hay:	6.5% CP 52% TDN	\$130/Ton	\$1.087/lb of CP	\$0.136/lb of TDN
Alfalfa:	18% CP 58% TDN	\$140/Ton	\$0.432/lb of CP	\$0.134/lb of TDN
Liquid Protein:	46% CP 40% TDN	\$315/Ton	\$1.352/lb of CP	\$0.606/lb of TDN

A cow weighing 1200 lbs will eat around 2.25% of her body weight. This translates into around 24 lbs. If you were to provide her with strictly grass hay, she will be on a diet that will cause her to lose 0.6lbs/day. Obviously this situation is not desirable. In order to keep her from losing that weight, additional protein and energy should be supplied. There are numerous feedstuffs that can do this for you, but, as a manager you need to find an economical feedstuff that is also practical. Alfalfa is typically used as a protein and energy source and lick tubs are also marketed for additional protein supplementation. In this example, in order to balance the diet, a cow would need an additional 2.63 lbs of Alfalfa or 1.42 lbs of liquid protein. So what supplement do you choose? Well, it would cost \$0.18/hd/day for alfalfa whereas it would cost \$0.22/hd/day for the liquid protein in order to balance the diet for protein requirement. However, there is still more to consider. By choosing the liquid, the cattle are still deficient in energy value and still will lose weight at a rate of 0.56lb/day, so additional supplementation with an energy source is still needed. However, if you choose to feed the alfalfa, the cow will satisfy the protein requirement and nearly satisfy the energy requirement, a loss of only 0.05 lb/day will occur. Common sense tells us we can live with this small weight loss and is both biologically and economically the smart choice.

There are endless combinations of feedstuffs you can use. You need to evaluate your choices according to how the diet will affect your cow herd biologically, financially and managerially. Dr. David Bohnert from Eastern Oregon Agricultural Research Center has created software that can aid you in balancing a ration for the requirement of the cow and by cost. This software allows you to adjust the cow size, breed, gestation and performance requirements to reflect your cow herd. There are several feedstuffs listed with nutritive values that can be analyzed and also allows you to input your feedstuff nutrient analysis. Diets can be balanced to allow for weight gain or loss over the course of the feeding period.

Email barbi.riggs@oregonstate.edu or david.bohnert@oregonstate.edu to request a copy of this software. It truly is easy to use and an invaluable tool that has the potential to save you thousands of dollars.

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