

Purchasing Quality Hay

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Severe forage shortages for North Dakota dairy producers are likely because of greater demands on existing feed supplies due to increased buying pressure from out of state and projected cropping intentions. Regardless, forage is critical in dairy diets.

Midwest dairy farmers need a minimum of 5 to 7 pounds/cow/day of excellent quality hay (relative feed values > than 160) and paying prices of \$105 to \$170 per ton. Using the University of Wisconsin Feed Val program, the value for 19 percent crude protein alfalfa was valued at \$96 before adjusting for any waste. The following comparison table is an attempt to put a comparative value on some of the forages you may be forced to consider to maintain minimum forage levels in your dairy diets. Note the several assumptions listed. Use the table as a means of comparing different forages for feed value. The table is not intended to set market prices, but for users to compare various forages for their replacement value in a diet. BE SURE to consult your dairy nutritionist when altering your diets so they meet minimum fiber levels as well as the requirements for energy, protein, vitamins and minerals.

Break-even prices and comparative feed values of some forages (based on crude protein, energy, calcium and phosphorus).

Forage	Value (\$/cwt DM)	Value \$/Ton--as Fed		
		Feeding Loss (%)		
		0	7.5	15
Alfalfa First Flower (19% CP)	10.64	213	197	181
Alfalfa Mid Bloom(16% CP)	9.67	193	179	164
Alfalfa Full Bloom (13% CP)	8.70	174	161	148
Alfalfa-Grass, Mature (12% CP)	8.26	165	153	140
Grass, Mature (7% CP)	7.33	147	136	125
Corn Silage -Excellent (8.2% CP)	9.27	185	171	158
Corn Silage- Fair (7.5% CP)	8.39	168	155	143
Corn Silage w/100 lb Urea (11.5% CP)	9.58	192	177	163
Oats and Peas (16.0% CP)	9.99	200	185	170
Small Grain, Early (12.8% CP)	9.25	185	171	157
Sorghum-Sudan, Late (8.5% CP)	8.08	162	149	137

Assumptions: shelled corn @ \$5.50 bu, SBM (48%) @ \$345/ton, limestone @ \$7.50/cwt, dicalcium phosphorus @ \$27/cwt. priced in April 2008, FOB Fargo using the University of Wisconsin FeedVal Comparative Values Program, Howard and Shaver.

Iowa State specialists developed similar equations for pricing forages considering energy (\$5.50 per bushel for corn) protein (\$345 per ton for soybean meal), and fiber (\$110 per ton for average hay quality). High quality hay value was worth about \$160 per ton using the Iowa system.

Energy: $0.057 \text{ (constant)} \times \$196.43/\text{ton (shelled corn)} = \11.20

Protein: $0.191 \text{ (constant)} \times \$345/\text{ton (soybean meal)} = \65.90

Fiber: $0.742 \text{ (constant)} \times \$110/\text{ton (average hay)} = \81.62

Total of \$158.72 per ton

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