Winter Feed Cost Dashboard, November 2019

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Winter Feed Cost Dashboard Diet cost, $ per cow per day November 2019			
Hay Quality	**Supplement fed, lbs**	**Diet cost**	
		Buy hay	**Raise hay**
Spring calving cows			
Good	2.0	$1.72	$1.13
Fair	3.2	$1.35	$1.16
Poor	5.2	$1.08	$1.24
Fall calving cows			
Good	2.8	$1.82	$1.21
Fair	4.8	$1.46	$1.27
Poor	6.3	$1.18	$1.34

Market comments

Quoted prices for mixed grass hay have retreated slightly from the peak of the previous winter, but remain high and at about the same level as this time last year when hay of any quality was being tightly held. USDA reports Missouri hay yields and production in 2019 were very strong. However, stocks at the beginning of the haying season on May 1 were drawn down to the lowest level reported in 35 years. Weather conditions will drive hay prices through the winter feeding season and until the next crop is harvested. Supplement prices are up 5-8 percent over last year.

Compared to two winters ago, mixed grass hay prices are running 25-30 percent higher. Computed diet costs have increased about 30 cents per day using purchased hay prices and about 10 cents per day if priced at cost of production.

Dashboard Frequently Asked Questions

Q: *What is the winter feed cost dashboard?*

A: The dashboard is a planning tool for cow-calf producers. It is basically a feeding budget with some twists. It is used to gauge the costs of procuring feed for beef cows when pasture has been depleted.

Q: *What does the dashboard show?*

A: The dashboard shows the costs of nutritionally balanced diets for beef cows in the winter months, consisting of mixed grass hay and appropriate grain supplement. There are three diets for spring herds and three diets for fall herds. Diets are distinguished by the quality grade of the hay and account for intake. Costs are for feed consumed, expressed as dollars per cow per day.

Q: *Why a feed cost dashboard?*

A: The goal is to help make sense of a system of many moving parts. The dashboard uses standardized diets to link commodity prices to expenses incurred by beef cow herds. It makes it easy to compare costs as markets change.

A: *How do I use the dashboard?*

Q: The dashboard can be used to compare diet costs for many practical management decisions. For example, compare:

a. Cost differences for a 150 day feeding period versus 100 days.
b. Costs of over-wintering spring calving cows versus fall calving cows.
c. Realized cost of feeding farm-raised hay versus purchased hay of different qualities.
d. Costs of feeding higher quality forage or providing more supplement.
e. Costs with different market conditions, say from year to year.

Q: *What are the hay quality standards for the dashboard?*

A: The standards for dashboard computations are as shown in the table. Grades were selected to represent the bulk of mixed grass hay fed to beef cow-calf herds, based on experience with forage testing results and USDA market report guidelines.

Dashboard hay quality grade standards

Hay Quality Grade	Crude Protein, %	TDN, %	Net Energy, m Mcal/lb
Good	10	58	0.56
Fair	8	53	0.52
Poor	6	48	0.47

Q: *What hay prices are used in the dashboard?*

A: Four hay prices are used in the dashboard. The "buy hay" column shows computed diet cost using three different prices for three hay quality grades. These prices are derived from USDA-AMS market reports and advertised hay. The "raise hay" column uses a single price to compute diets for each quality grade. This price is derived from MU Extension hay cost of production budgets. Hay and feed prices for the current dashboard are shown in the table below.

Q: *The dashboard uses multiple prices for hay. I was taught that the price of a farm-raised feed input is the price the input would receive in a cash market transaction.*

A: True. From an accounting standpoint, established market price is the appropriate method to consistently value a farm raised input for enterprise analysis and assign an inventory value to calculate accrual net farm income. The issue is which hay price to use? The dashboard attempts to capture the practical range of prices in the current market environment.

The market for beef cow hay is often ambiguous. It is not a consistent, portable product. Much of the Missouri grass hay crop is harvested as a scavenger enterprise, not treated as a profit center. Most does not have long-term storage potential, so it deteriorates rapidly. Much of the total supply on farms is obligated, not in free stocks ready to be offered to the cash market. In brief, hay is less fungible than grain.

And most importantly, without grades, standards and testing in the market channel for both quantity and quality, feed value cannot be verified. The result is the market for mixed grass hay behaves differently than other feedstuffs. Alfalfa hay is a different story.

Q: *How is the quantity of supplement derived?*

A: Multiple rations were balanced for each grade standard using common feedstuffs, such as, corn, soy meal and co-products to meet nutritional requirements to maintain a 1350 pound British

breed cow in winter at a body condition score of five. Hay intake levels adjust with hay quality. A composite quantity of bulk supplement is selected for each hay grade to represent dozens of practical feeding options. Diets are not for immature cattle.

Q: *How is supplement cost derived for the diets?*

A: Prices for concentrate ingredients are derived from USDA-AMS market reports with a modest handling and delivery charge to the farm. Computed supplement costs vary slightly depending on ingredients for each ration. Diet cost shown in the dashboard is the median of multiple rations for each hay grade, not least-cost or high-cost rations.

Dashboard ingredient prices, Nov 2019.

As fed ingredient	$ per ton
Purchased hay - good quality	100
Purchased hay - fair quality	75
Purchased hay - poor quality	50
Raised hay - any quality	62
Soybean meal-48%	290
Corn	138
Corn gluten feed, dry	125
Distiller grains, dry	145
Soyhull pellets	150

Q: *What costs are not included in the dashboard?*

A: Costs shown do not include the cost of storage, further feed processing or delivery to cows. Computations also do not consider storage or feeding shrink which can be substantial.

Q: *What is the extent of hay feeding in Missouri?*

A: Tremendous resources are used every year to carry cows through the winter. Our state has over two million beef cows, plus immature beef cattle, wintered on about 48,000 different farms. While we advocate extended grazing seasons as way to keep cost under control, virtually all beef cattle will consume a diet of harvested forage for at least a portion of the winter months.

The vast majority of the hay for beef herds is a mixed grass type harvested by 43,000 unique operations from about three million acres. That is roughly the same number of corn acres harvested each year. Reported yields for Missouri in the last ten years have ranged from 1.7 to 2.2 tons per acre.

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