

Over The Wire

A Beef Cattle E-Letter for Area Cattle Producers

Feeding Straw to Beef Cows

By: Jim Church
University of Idaho Extension

Do We Need To Look at Straw?

It appears that the hay crop in north central Idaho is going to be below normal this year in regards to yield. Cattle producers may have to buy additional hay for the winter feeding season or producers may want to consider feeding straw as a substitute for hay.

Straw can be successfully fed to beef cows during the winter if the proper supplements, vitamins and minerals are provided.

Which Straw is Best To Feed?

According to Dr. Reid Redden, Extension Specialist at North Dakota State University, oat straw is the most palatable and nutritious, followed by barley straw. Wheat straw has the lowest nutritional value of the main cereal crops. Dr. Redden put together the following table outlining the nutrient content of straws common to our area:

Nutrient Content of Barley, Oat and Wheat Straw:

Straw	DM %	TDN %	NE m	CP%	AD-F%	CA %	P%
Barley	90	43	0.38	4.1	52	0.37	0.11
Oats	90	47	0.45	4.5	50	0.27	0.10
Wheat	90	43	0.40	3.6	52	0.19	0.09



With hay supplies short, producers may want to consider using straw in their winter cow rations.

As you can see in the table, all the straws are low in crude protein and energy. Feeding straw as the only source of forage will not meet the requirements of cattle.

How Much Straw Can Be Fed?

Beef cows can utilize straw very well, in fact, rations can contain 50 to 60% straw if combined with a high energy feed and a feed high in crude protein.

Dr. Roger Brownson, former Beef Cattle Specialist at Montana State University, authored a publication called *Emergency Rations for Wintering Beef Cows*, that can be found in the Cattle Producer's Library. In this publication, Brownson

provided sample rations for dry pregnant cows weighing 1000 pounds and rations for 1,100 pound cows nursing calves. Two of the four suggested rations for both groups of cows are listed below:

Two Sample Rations for 1000 pound pregnant cows.

Feed	Intake (lb)	CP (lb)	Energy (ME) (Mcal)
<u>Daily requirement</u>	<u>19.6</u>	<u>1.6</u>	<u>17.3</u>
Ration #1			
Straw	11	0.3	7.4
Alfalfa hay	<u>11</u>	<u>1.6</u>	<u>10.4</u>
Total	22	1.9	17.8
Ration #2			
Straw	12	0.4	7.4
Barley	6	0.7	8.1
20% Supplement	<u>1</u>	<u>0.2</u>	<u>1.4</u>
Total	19	1.3	16.9

Ration #2 is marginal in protein and energy. Additional intake is needed and or more protein should be added in order to meet the requirements.

Two Sample Rations for 1,100 pound cows nursing calves.

Feed	Intake (lb)	CP (lb)	Energy (ME) (Mcal)
<u>Daily requirement</u>	<u>21.6</u>	<u>2.0</u>	<u>19.9</u>
Ration #1			
Straw	10	0.3	6.7
Alfalfa hay	<u>14</u>	<u>2.1</u>	<u>13.3</u>
Total	24	2.4	20
Ration #2			
Straw	12	0.4	7.4
Barley	7	0.8	16.3
20% Supplement	<u>2</u>	<u>0.8</u>	<u>2.8</u>
Total	21	2.0	26.5

All these rations included free choice mineral and vitamin supplements.

The rations listed above were formulated for small cows. Most of the mature cows in north central Idaho are much bigger than the 1000 pound cows listed in the example. Larger cows will have different intake and nutrient requirements than what is listed in the example.

How Much Does Straw Cost?

According to the University of Idaho Custom Farming Rate publication, the cost to swath, rake and bale straw averages at about \$30 per ton in the field. If the straw has been hauled and stacked in a stack yard, add \$10 per ton. Therefore the harvest cost would be around \$40 per ton. To establish a budget, I would figure the cost of straw to be somewhere between \$40 and \$50 per ton.

Wheat and barley straw is readily available in this area. Many of the oats are cut early for hay. If the stand is left for grain, the oat straw will make good feed.

Some grain growers, interested in reducing the amount of residue they have to manage, may allow for the harvest of the straw at a competitive price, especially if they don't have to do any of the baling and hauling. This would be something to keep in mind.

Summary:

The shortage of hay will challenge cattle producers this coming winter. I have heard of people already getting anxious about their feed supply. I would caution against panic buying. In most cases, getting in a panic will result in paying way too much for feed.

There are forage options available for producers. Straw is one of those options. In fact, in the past our ancestors fed a lot of straw during the winter months in this part of the country.

As was outlined in this letter, straw can be fed successfully to beef cows. Straw can be used in combination with grass hay, alfalfa hay, barley, corn, soybean meal, canola meal, commercial protein supplements and much more. There are a large number of combinations that can be used to balance a ration. If straw is used in the ration, it will be critical that the cows are on a good vitamin and mineral supplementation program.

If you are interested in formulating a ration using straw as one of the ingredients, please contact me. Good luck with the remainder of the haying season.

Contact Information: Jim Church, 320 West Main, Grangeville, Idaho 83530; email: jchurch@uidaho.edu; phone: 208-983-2667.

References:

Brownson, Roger., Emergency Rations for Wintering Beef Cows. Cattle Producer's Library, Drought and Other Natural Disasters Section, CL1120. Second edition; December 2008.

Redden, Reid R., Feeding Straw. North Dakota State University Extension Publication. May, 2012.

Rossi, Johnny., Feeding Straw to Beef Cattle. University of Georgia Extension Publication.

Patterson, Paul E., and Painter, Kathleen., Custom Rates for Idaho Agricultural Operations 2010-2011. University of Idaho Extension Publication Bul #729. September 2011.

To enrich education through diversity, The University of Idaho is an equal opportunity/affirmative action employer and educational institution.