

News Release:

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Feeding Straw to Beef Cows

This year has been terrible in terms of hay and forage production. I have heard many reports of drastically reduced forage yields. Some of the best reports were hay crops that were 50% of normal, but most of the producers I have spoken to indicate that the yield is a quarter to a third of what is produced on a normal year.

Why did this happen?

A couple of major events caused this to happen. First, we have been extremely dry since April. Rainfall amounts have been way below normal. In addition, there were many nights that had low temperatures around the freezing mark in late April and May. Add these factors together and we have very limited grass and forage growth which has resulted in a tremendous shortage of forage in Northern Idaho.

Many cattle producers are trying to locate hay to buy, but there just isn't any available locally. I have already heard of hay prices out of the area hitting \$300 a ton and more. At these prices, it will take the profit right out of the cattle business.

Cattle producers may want to consider buying and feeding straw as a substitute for hay this winter. Straw can be successfully fed to beef cows during the winter as a portion of the winter cow ration. Producers will have to balance the ration with proper supplements, vitamins and minerals to meet the cow's nutrient requirements.

Which Straw is Best to Feed?

According to Dr. Reid Redden, Extension Specialist with Texas A&M AgriLife Extension, 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 %	NEm	CP %	ADF %
Barley	90	43	0.38	4.1	52
Oats	90	47	0.45	4.5	50
Wheat	90	43	0.4	3.6	52

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 nutrient 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 entitled, *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. Below are a couple of rations suggested by Dr. Brownson:

1,000-pound pregnant cows

<u>Feed</u>	<u>Intake</u>	<u>CP</u>	<u>Energy (ME)</u>
	(lb)	(lb)	(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 grain	6	0.7	8.1
20% Supplement	<u>1</u>	<u>0.2</u>	<u>1.4</u>
Total	<u>19</u>	<u>1.3</u>	<u>16.9</u>

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.

1,100-pound cows nursing calves

<u>Feed</u>	<u>Intake</u>	<u>CP</u>	<u>Energy (ME)</u>
	(lb)	(lb)	(Mcal)
<u>Daily Requirement</u>	<u>21.6</u>	<u>2</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 grain	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 a different intake and nutrient requirements than what is listed in the example.

How Much Does Straw Cost?

I don't have an answer for that. It will be higher than in years past but still considerably cheaper than hay right now. Normal years the cost would be somewhere between \$40 to \$50 per ton.

Wheat, barley and oat yields will be lower this year as well. Some grain growers may be interested in selling straw to offset the loss in income from reduced yields. They may allow for the harvest of straw especially if they don't have to do any of the baling and hauling.

Summary:

The shortage of hay will challenge cattle producers this year. There are forage options available for cattle producers and straw is one of those options. 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 article, straw can be fed successfully to beef cows. Straw can be used in combination with grass hay, alfalfa, barley, corn, soybean meal, canola meal, commercial protein supplements and much more. There are many 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.

Good luck as we work through this difficult year.

(References are available upon request)

