



Feeding Straw

By John McGregor, MFGA Extension Support

Over the past few months I have received a number of inquiries about forages; for the most part they have focused on price, availability and management. Lately, I have been getting questions on feeding and rations with an emphasis on straw.

As an Ag Rep I was very familiar with programs like [Cowbytes](#), but I also realize that just plugging in numbers and coming up with a ration doesn't always mean it would be the best choice as there are many variables that only someone with a lot of nutritional experience would catch.

If you look at the Hay Situation and Price Report that MFGA puts out monthly you will see that hay and straw prices are up from previous years and although higher prices may be a concern, the biggest challenge may be the availability of feed.

To meet this limited supply, producers are culling and/or looking at lower quality forage sources such as straw supplemented with grain and a protein source to meet their cattle's needs.

For this article I have looked at a number of sources and compiled a few articles that focus on utilizing straw in beef rations. These sources are informative but do not provide rations. Before embarking on any changes to your feeding program it is advisable to have all your forages tested and then to work with your nutritionist or give your local Manitoba Agriculture Livestock Specialist a call and ask for assistance in putting together a feeding program for the coming winter.

Here are a few of the resources that I have found:

[Straw-grain ration and the cost versus benefit of various supplements](#)

This article looks at Straw-grain rations and its limits with supplying protein and mineral and vitamins. It provides some easy examples on how to determine cost comparisons between various protein sources. The author also mentions some of the mineral shortfalls of feeding straw and how to make adjustments to your rations.

[Using Straw in Cattle Rations - Frequently Asked Questions](#)

This article looks at straw as a low energy, low protein feed that is not as digestible as hay or silage. It has some general information on straw quality and points out some of the things to be aware of when using straw in a beef ration. One of the important points

it mentions is that straw and grain are high in potassium (K); a ration high in K can cause a magnesium deficiency which results in winter tetany, which is similar to grass tetany or milk fever.

Winter Feeding Programs for Beef Cows and Calves

This fact sheet doesn't specifically focus on straw rations but it does have a wealth of information on beef rations and a section on feeding low quality feeds in a ration. One of the key points is that as we get further into the winter, temperatures are bound to drop. Cattle on a high straw diet, even with some grain supplementation may not be able to consume enough energy, especially if their gut is full of fiber from straw. Producers need to watch this and find ways to meet the cow's needs during extended cold periods.

Straw as an Alternative Roughage Source for Wintering Beef Cows

This factsheet looks at the general nutritional requirements of the breeding herd. Looking at your herds requirements you quickly realize that straw can't meet those needs. It also covers some of the factors that you may need to consider when feeding a straw-based diet as well as some ration examples using various feedstuffs.

FeedPlan Feed Ingredient Cost Calculator

This spreadsheet is very useful when calculating the cost of energy and protein sources especially if you are trying to formulate a least cost ration or comparing the cost of various protein sources to make the best economical choices.

FeedPlan - Feed Ingredient Cost Calculator

Feed Ingredient	Price/Unit (as fed)	Weight (as fed)	% Moisture	% TDN (DM Basis)	% CP (DM Basis)
alfalfa/grass hay	\$ 100.00	2000	12.6	57.6	13.1
alfalfa hay	\$ 120.00	2000	12.1	63	19.2
native grass hay	\$ 90.00	2000	11.1	55.5	9.9
oat greenfeed	\$ 95.00	2000	15.0	59.6	9.9
corn silage	\$ 40.00	2000	71.2	66.4	9.3
barley silage	\$ 45.00	2000	63.2	65.5	11.9
barley straw	\$ 40.00	2000	10.9	46	5
wheat straw	\$ 40.00	2000	10.9	44	3.1
barley grain	\$ 4.50	48	11.5	83.1	12.5
corn grain	\$ 4.50	56	11.0	88.2	10
feed wheat grain	\$ 5.83	60	11.8	88.9	15.6
oat grain	\$ 3.15	34	9.8	76.2	11.3
12% pellets	\$ 190.00	2205	10.0	72	12
feed peas	\$ 7.00	60	11.8	87.2	23.9
corn DDG	\$ 220.00	2205	10.0	88	28
34% canola meal	\$ 325.00	2205	8.0	70	34
47% soybean meal	\$ 450.00	2205	10.0	78	47
32% liquid suppl.	\$ 405.00	2205	41.5	87.4	32
22% lick tub	\$ 160.00	200	5.0	80	23.1
25.6% molasses	\$ 382.00	2205	50.0	65.8	51.3
(enter new feed)	\$ -	1	0.0	1	1
(enter new feed)	\$ -	1	0.0	1	1

Beef Cow-Calf Production Costs 2019

This guide is designed to provide you with planning information and a format for calculating costs of production of a cow calf enterprise in Manitoba. Scrolling down to page 9 Winter Feed Costs & Requirements Worksheet this gives you the opportunity to put in your costs and play around with different variations to get to a least cost situation. You can find the excel sheet at this location <https://www.gov.mb.ca/agriculture/farm-management/production-economics/cost-of-production.html>

There are lots of other sources for information on feeding straw to beef cattle including a quick internet search. As I have mentioned, when balancing rations using straw or low quality feed, be sure to have your feed tested and if you have any doubts as to how to balance a ration, check with your nutritionist or contact your Livestock Specialist with Mb Ag.