



Getting More Out of Your Hay

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Shorter days and cooler temperatures signals winter is on its way and hay feeding season will soon be in full swing. Feed is one of the greatest variable costs that influence profitability. These costs can account for 40-60 percent of a cattle operation's budget.

When it comes to the availability and the price of hay, anything you do to reduce waste during storage and feeding will have a positive economic impact on the operation.

The MFGA September e-Bulletin article [Do you know how much forage feed you really have?](#) looked at determining forage inventories and forage needs for the winter feeding period but it also briefly made mention of waste.

Understanding forage waste can help producers get more out of their hay with less waste.

Storage

Hopefully by this time most hay is off the field and in storage. Hay storage methods after harvesting has been extensively researched over the years and lots of good articles have been written on how to reduce spoilage.

TABLE 1	The average percentage of spoilage and dry matter loss after six months of storage						
	Bare ground	On gravel or pallets		On bare ground covered			Inside building
	No cover	No cover	Covered	Tarp	Wraps	Roof	
Average percentage	27	22	8	33	13	5	5

Source: Iowa State University Extension and Outreach

This table is a good indication of what losses you might expect depending on how your hay is stored. Although the cheapest and easiest way to store hay is outside on bare ground, it has the greatest potential of loss. Storage losses can be reduced if the hay is stored on elevated or well drained areas using gravel or other materials to break contact with the soil. In fact, anything that can be done to reduce the weatherization and spoilage of bales will help ensure the palatability and digestibility of stored forages.

If your hay is already in storage there likely isn't the opportunity to make changes to reduce spoilage this year. However, by realizing there is the potential for hay spoilage due to storage methods, it allows you to make adjustments in inventory or feeding strategies to account for these losses.

Feeding

How you feed your forage can and does affect the amount of hay that doesn't get in to the cow. If a bale feeder allows for 15 percent of the hay to be trampled on then that hay isn't going into the ration and needs to be accounted for by feeding 15 percent more feed to meet the animal's needs.

These same calculations need to be made whether you are bale feeding, rolling out your bales on pasture, or winter grazing. Feed wastage needs to be accounted for so that the cows aren't short changed on their dietary requirements, which affects pregnancy rates, calf survival or size and growth rates.

Feed waste isn't necessarily wasted. It can be utilized as bedding once on the ground or fertilizer once it's put back in the field.

Feed Testing

Another way to get more out of your forage is by feed testing. Over or underfeeding your cows are forms of feed waste. By overfeeding you may be using feed that the cow can't use at that time and these excess nutrients either cause the animal to become overweight leading to health and calving issues or those excess nutrients are passed thru the animal in the urine and feces. Underfeeding like overfeeding can have an impact on the cow's health and the health of the calf leading to open cows, small calves at birth and lower weaning weights. All of these factors affect your bottom line.

Be sure to forage test all your feeds. Send your samples to the lab in a sealed container like a Ziploc bag so that moisture isn't lost during shipment and indicate which analysis you require. Most forage testing labs have a website where you can determine the test that you need. If you have questions contact the lab and/or your livestock specialist or feed representative for information on what will be required to balance your rations.

Finally, be sure to indicate what the forage is. Labs may use different predictive equations for different feed types such as alfalfa, grass, straw, greenfeed etc. This is especially true with NIRS (near-infrared spectroscopy). If the forage species is omitted from the sample information, laboratory personnel will make an educated guess about the forage species that may be correct, but if they are wrong, it could affect the NIRS prediction equations applied to the sample and/or the energy calculations used for reporting.

When estimating waste, remember it can change with time and conditions. The longer bales are exposed to the elements the greater the chance of spoilage. These increases may not be reflected in your feed analysis so working with your [Manitoba Agriculture Resource Development livestock specialist](#) and/or feed representative can help you get more out of your hay.