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DAIRY-UPDATE

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FULL FORAGE FEEDING
Pros & Cons

By Colin Pool

We have been talking about forage feeding for the last couple years. On trips to Quebec visiting Patrice's herds, we have seen what can happen when the program is fully implemented. When talking with the Quebec producers, it becomes very evident that they are extremely pleased with this type of feed management. They are very bold when they tell you why they have done it, and the benefits enjoyed. The first thing they boast is healthy cows; the second is high fertility; and the third is quota utilization and profit.

We must realize this is not a one year plan

It can take two to three years to reap the full rewards. Producers understand that forage quality begins with themselves. They take full responsibility when the forage is not optimum quality. Good forage = good year and conversely, bad forage = bad year. Great pride is taken letting you know that the forage equipment is tuned up and fields are being monitored for their maturity. They know when optimum cutting time is and they plan to capitalize on it. Will it work in Ontario? You bet it will, and is!

There are a couple things that pique the farmers' interest when they look into the high forage diets. The first one is the reduced cost in grain purchases and the other is better health and conception.

When a producer decides to be a high forage feeder, there will be steps that your herd will go through:

1. *First, get your mind ready for a total change in cow management and focus on being a **forage master**. You will have to make the best forage you have ever made.*
2. *You will cut it young (at bud stage).*
3. *You will lay it out flat and preferably with no crimp. This way you can cut and harvest within a day so you capitalize on the sugars and nutrients that the crop has to offer.*
4. *Cut the haylage at 3/8" or less theoretical cut so the cows can optimize intake.*
5. *The grain portion of the ration will be decreased because with the increased forage intake, you will want to prevent the onset of acidosis caused by too many fines in the ration.*

What will you notice with your cows?

That all depends how fast you decide to transition the herd. I have had couple producers go "cold turkey" and the first thing they noticed was a drop in milk production. This happens because grain has been restricted, and we should expect this result. Once over the initial shock, the butter fat test creeps up to compensate for lower production. Cows start showing stronger heats and conception rates really came along.

As the forage quality increases, the milk will follow, as the rumens do what they are created to do…digest fiber. The best form of amino acids for the cow is rumen bugs, and the next best form is young haylage. When the rumen is happy, the cow will be happy. As cows stay on the program for a couple years, you will see higher milk yields like you normally are used to seeing, but this time forage driven and not grain induced. Days in milk is no longer an issue because cows are breeding well and with higher conception, replacements become a "cash crop" again.

High forage feeding is a mind set

You need to believe in rumen health and trust your forage-making ability. When it is all working well, dairying is a snap. You must have a plan to make it work when you decide to go that way. The Quebec producers we visited have no intention of going back to the high concentrate feeding. They are filling over a kilo of quota per cow and the profit margins continue to rise.

We met producers who were in a financial chokehold and had no choice but to go this way. Now they show profits that they can't believe and expansion or quota purchases are a possibility that they need to entertain. Believing in your heart that it will work is the biggest hurdle to get over. After that, allow the cows to do what they are meant to do.

Your role in this game is to make the best forage in the world, and feed them like crazy and let them be cows!

Upcoming BSC DAIRY DAYS:

Watford United Church
February 3, 2010

BSC, St. Marys Plant
February 4, 2010

How to Cope with Poor Forages

By Nathalie Gentesse, M.Sc. Agr.

The weather has a major influence on fiber composition and quality in forage. The photo-synthesis process occurs in plants on sunny days, and drives the production of energy and sugar. On cloudy days, the plant reduces its photosynthetic activity. On rainy days, the plant uses its sugar reserve to make cell walls and lignin to lengthen the stalk. The end result of a cloudy, rainy summer is forages that have low sugar levels, lots of fiber and low digestibility.

When the forage digestibility is low, the first consequence for the cow is a lack of energy in the ration. The first step is re-adjusting the energy level of the mix. If possible, dilute the low digestibility forage with higher quality corn silage that will be more digestible. Some byproducts that have very high digestible fiber can also be used - soybean hulls, beet pulp, or citrus pulp. Usually, this kind of ration change will encourage cows to increase their dry matter intake and their milk production within 5 to 10 days.

The next step is to adjust grains and protein quantity. Often, it is not possible to add more grain or fat because the high producers are already at a maximum. However, finer grain milling could improve the energy availability. Protected fat sources can also increase energy intake without affecting digestion in the rumen.

It is also beneficial to improve rumen conditions to maximize production of microbial protein and volatile fatty acids. This in turn will provide a greater level of amino acids and energy to the cow.

- Feed buffer agents (sodium bicarbonate) or alkalizing agents (magnesium oxide). This will prevent the rumen from becoming too acidic.
- Use Yeast Culture. Studies show dry matter intake and NDF digestion improvement when cows eat yeast cultures.
- Choose a soluble protein source to maintain a stable nitrogen concentration for rumen bacteria.
- Some enzyme additives can improve NDF ruminal digestion and improve bacteria colonization with cellulolytic activity or fiber digestion.
- Evaluate mycotoxin levels. Mycotoxins threaten bacteria efficiency for rumen fermentation as well as cow health. Dilute, redirect or discard contaminated forage. Keep an eye on forage that has been rained on, and remained in the field for a long time – the deterioration is already visible in the field.

Lower quality forage should be fed only to heifers or late lactation cows because their energy requirements are lower.

DAIRY UPDATE is published in the interest of helping dairy producers become more profitable. We welcome your comments.

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