

CENTRAL NEW YORK DAIRY NEWS



May 2011 Volume 4 Issue 1

High Grain Prices Got You Down? Get on Board to Combat Them

As I write this newsletter the cash price in Chicago for #2 corn is \$7.37 a bushel and the soybean price is \$13.81 a bushel. That's great if you are growing and selling corn and soybeans, but it's terrible news if you are buying them. The bushel prices above translate into \$263.21 per ton for corn grain and \$460.33 per ton for soybeans!

Although milk prices have been good lately (by historical standards), the higher milk prices have essentially been eaten up by higher grain and fuel prices. The Milk-Feed Price Ratio was calculated at 1.96 in January, but got up to 2.18 in March. The worst number we have seen was 1.47 in June of 2009. The January 2008 number was 2.65. The Penn State income over feed cost calculation (for 65 lbs. of production/cow/day) shows March 2011 (April not yet published as I write this) at \$9.38. The last time we have seen a number this good was in January of 2008 at \$9.90. With all the uncertainty in commodity prices only time will tell where we will find ourselves for the remainder of the year. One thing for sure is that these high grain prices are very hard to take. So, what can you do to combat these high grain prices?

- **Take advantage of intensive grazing.** This fits for some people and not for others. However, nothing can beat the quality of forage that a well managed intensive grazing system can provide. Well managed systems can minimize (not eliminate) grain needs while maintaining good production levels.
- **Be sure to always feed a balanced ration.** Test your forages every time they change. Have your nutritionist rebalance the ration as necessary. Our precision feeding project really brought out the fact that too many herds do not keep up with feed changes. The result is wasted feed expense and/or lost production.
- **Produce and feed top quality forage to your lactating cows.** Knowing when to harvest that top quality hay crop is only one step in the process. Getting it done at that time is another. Years of research data, dairy producer experiences, and our recent work with precision feeding all show that high quality forage results in lower grain costs, increased production, and much better overall bottom line financial results. Some of our top precision feeding herds (consistently hit the precision feeding benchmarks) run from 70 to 85 lbs. of milk/cow/day with 3.2 to 3.3% protein, 4.0 to 4.2% butterfat, MUN's from 8 to 12 on 2X milking, no rBST (Holsteins). They consistently feed 65 to 70% forage with dietary Crude Protein (CP) levels below 16.5%. Forage quality is consistently high.

Team Web Site: <http://cnydairylc.cce.cornell.edu/index.html>

- Receive current local information** on the progression of the hay crop this spring and guidelines on when to harvest for lactating cow quality. Alfalfa height is a proven predictor of forage quality (for both alfalfa and nearby grass). Last year recommended harvest dates were nearly 2 weeks earlier than normal. Many people were caught off guard, but many of our precision feeding participants harvested on time because of the info they received.

Below is an example of the kind of information you will receive (we take measurements in all six counties we cover). The ideal form of communication for this is email because it can be so timely. **Send an email to: herkimer@cornell.edu to be put on the forage quality notification list.**



County	Town	Road Name	Elevation Feet	Alfalfa Height Inches	Predicted Grass % NDF	Predicted 50/50 Mix % NDF	Predicted Alfalfa % NDF	Predicted Date to Cut Grass	Predicted Date to Cut 50/50 Mix	Predicted Date to Cut Alfalfa
Otsego	Example 1	Hill Road	1341	13	50.0	35.4	27.6	5/11/10	5/22/10	6/4/10
Schoharie	Example 2	Valley Road	757	26	61.2	46.6	36.7	4/29/10	5/7/10	5/17/10

So, what does this information mean to me? NDF stands for Neutral Detergent Fiber. It's a measurement in the lab that is determined by the use of a neutral detergent, henceforth the term Neutral Detergent Fiber. It consists of cellulose, lignin, and hemicellulose. It is essentially the total cell wall. As plants mature the NDF content increases. Therefore, the lower the NDF the higher the quality. There is also a relationship between NDF levels in feed and the amount of that feed an animal can consume. The lower the NDF the higher the forage consumption and the lower the grain consumption. Let's look at some example diets to see the impact. I can tell you these numbers are likely conservative in regard to the financial impact in the real world.

1350 lb. cow producing 75 lbs. of 3.7% fat, 3.0% protein milk. DMI = 49.5 lbs.
 Assumed net milk price \$20.00/cwt. Assumed grain price \$385/ton

Diet # 1

C.S. -----	(40% NDF)	16.9 lbs. DM
Haylage -----	(40% NDF)	16.9 lbs. DM
Grain Mix -----		15.7 lbs. DM (17.64 lbs. as fed)
Milk Value -----		\$15.00
Grain Cost -----		\$3.40
Net Income -----		\$11.60

Diet #2

C.S. -----	(42% NDF) 15.5 lbs. DM
Haylage -----	(45% NDF) 15.5 lbs. DM
Grain Mix -----	18.5 lbs. DM (20.79 lbs. as fed)
Milk Value -----	\$15.00
Grain Cost -----	\$4.00
Net Income -----	\$11.00

Diet # 3

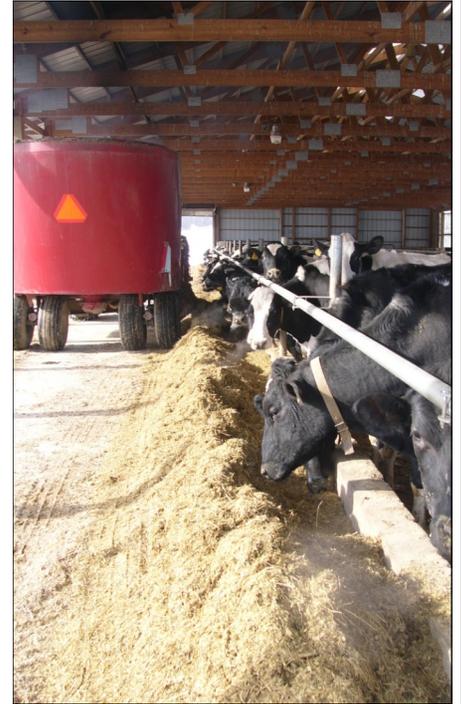
C.S. -----	(42% NDF) 13.9 lbs. DM
Haylage -----	(55% NDF) 13.9 lbs. DM
Grain Mix -----	21.7 lbs. DM (24.38 lbs. as fed)
Milk Value -----	\$15.00
Grain Cost -----	\$4.69
Net Income -----	\$10.31

Diet # 4

C.S. -----	(42% NDF) 12.6 lbs. DM
Haylage -----	(65% NDF) 12.6 lbs. DM
Grain Mix -----	24.3 lbs. DM (27.3 lbs. as fed)
Milk Value -----	\$15.00
Grain Cost -----	\$5.26
Net Income -----	\$9.74

Diet # 5

Haylage -----	(65% NDF) 20.8 lbs. DM
Grain Mix -----	28.7 lbs. DM (32.25 lbs. as fed)
Milk Value -----	\$15.00
Grain Cost -----	\$6.21
Net Income -----	\$8.79



As we move from excellent quality forage (Diet #1) to the poorest quality forage (Diet #5) the spread in net milk income/cow /day after grain purchases is \$2.81 cow/day. For every 100 milking cows that's \$281/day. For a year (365 days) that comes out to \$102,565! This is the kind of ranges we see in net income levels between farms. This is the reason you need to be working hard to produce high quality forages. It pays big time!

The net milk income after grain cost is shown above because that is one of the best correlations to profitability we know of. Of course when annual financial reviews are done they include calf and heifer feed, milk replacer, dry cow feed, minerals, and a few other miscellaneous items that get included in that purchased grain category. Although purchased feed as a percent of milk sales has been (and continues to be used) as an assessment of economics and dairy herd feeding, it's correlation to profitability is quite poor. If you think about, it there is a real easy way to reduce purchased grain as a percent of milk sales. Simply do not purchase any grain. However, we all know that approach results in lower production and much poorer economic returns.

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Volume 4 Issue 1
May 2011

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