



dhia

Scott Williams
Training Coordinator

Call 1-800-DHI-TEST, fax (814) 865-3294
Web site <http://www.dhia.psu.edu>
Pennsylvania Dairy Herd Improvement Association
DHIA Service Center, Orchard Road, University Park, PA 16802

Question: At harvest time we had the opportunity to buy wheat at an unheard of low price. My vet and feed person both said wheat would be a good way to stretch my high moisture corn that usually runs out before next year's harvest. We made the transition over a two-week period and yet our cows dropped in production immediately and have yet to come back to where they were before the change. My milk drop resulted in almost \$4000.00 less milk sold over the wheat-feeding period. This cheap wheat doesn't seem so cheap to me now.

Wheat used in dairy cattle should be a very available source of energy mostly as a starch carbohydrate. What took place at this farm can lead to a lot of frustration to not only the dairyman who has lost the chance to make some cheaper milk due to smart purchasing of a very good feed, but also to his feed advisors that feel a little bit responsible for

the lack of success in attaining the goal of cutting cost without sacrificing production. Assigning or assuming blame in most cases accomplishes nothing but the chance to avoid such failures in the future can be of real benefit

Lucky for us, trying to solve this mystery of less than desirable performance, we have some very good tools to work with both on a chemical and physical level. Looking at some physical properties of the cow we can shed some light on what has probably happened here. At some point in problem solving we need to stand back and look at what is too easy, too simple, too absurd to even consider. Manure is the answer! You have to make light a little about a subject like manure. Seriously, the knowledge that we can gain by making a habit of studying the manure of our cows can go a long way in avoiding problems such as milk production losses when we make feeding changes. The first clue that something was going wrong when

the wheat was fed was bits and pieces of wheat grain coming through in the manure. This unused portion of the feed that the cow was supposed to perform on was only fertilizing the fields that is was spread on. Grains used for carbohydrates in a cow's diet must be made available to her. Accomplish this by processing all grains physically, chemically, or a combination of the two. Seed grains like wheat and corn have a protective shell around them that can inhibit microbial breakdown in the rumen and pass undigested out into manure. Grind these types of grains fine to get the most from them. In the high producing cow we must allow her every opportunity to digest her diet quickly because of the large amount of feed that moves in and out of her digestive system at a very rapid rate daily. Chemically altered grain like high moisture, steamed flaked, and soda treated has already made these grains one step or two closer to being digested and therefore need less physical preparation.

The next tool that this farm had at its disposal is a little more sophisticated than scoring manure and when used extensively can provide monthly feedback data about how we can best balance and deliver diets to our cows. Milk component analysis provides us with vital information concerning the nutrient needs of the dairy cow. MUN, which is used on about 33% of PA DHIA member's farms, is the one component that has the best potential in solving the type of problem in today's question

Research and data base studies have coupled MUN output with protein utilization in the diet of the dairy cow. The diet in this particular herd maintained the same %CP, %UIP, %DIP, %NSC, and %DM even though wheat was now being utilized in replacement of some high moisture corn. The herd remained reasonably constant at 137 MUN from the first of the year on with a slight climb in May to 15.1. Within three weeks of making the change to include wheat in the diet the herd MUN raised to 18.4. Protein totals and portions remained the same but the NSC portion available to the cow dropped. The diet was balanced for the same level of the cow could actually use was altered. With MUN analysis done on a monthly basis we can quickly make changes to the diet makeup, diet delivery, or a combination of the two. The cows tell us what is going on by component evaluation. We can then better predict the outcome of feeding management changes. What we can measure we can manage, and what we manage we hope to control.

This is a very typical way in which we can combine good tools

Average Farm Feed Costs for Handy Reference


To help farmers across the state to have handy reference of commodity input costs in their feeding operations for DHIA record sheets or to develop livestock feed cost data, here's last week's average costs of various ingredients as compiled from regional reports across the state of Pennsylvania.

Remember, these are averages, so you

Dairyman To Dairyman

GEORGE CUDOC

PA DHIA
Consulting
Dairyman



that we have at our disposal. The best tool is the good "cow sense" that many dairyman use on a day-to-day basis. Developing techniques such as manure scoring goes along with what is already known to encourage looking from a different perspective. MUN testing and analysis is a perfect fit to take that "cow sense" and knowledge to the next level. This is what today's dairying is all about regardless of size or scale.

The last thing I asked this dairyman, which also happens to be a friend of mine, was why they didn't ask someone about the big MUN change sooner. They didn't want to sound stupid. That's the only part of the whole situation that seems near stupid to me.

Looking forward to questions from you

will need to adjust your figures up or down according to your location and the quality of your crop.

- Corn, No.2y — 2.27 bu., 4.06 cwt.
- Wheat, No.2 — 2.15 bu., 3.59 cwt.
- Barley, No.3 — 1.40 bu., 2.99 cwt.
- Oats, No.2 — 1.42 bu., 4.44 cwt.
- Soybeans, No.1 — 4.32 bu., 7.22 cwt.
- Ear Corn — 71.39 ton, 3.57 cwt.
- Alfalfa Hay — 128.50 ton, 6.43 cwt.
- Mixed Hay — 103.75 ton, 5.19 cwt.
- Timothy Hay — 98.75 ton, 4.94 cwt.

HAY, STRAW, PEANUT HULLS
At farm or delivered in any quantity as you require.

Esbenshade Turkey Farm
(America's oldest Since 1858)

Paradise, Pa.
(717) 687-7631

WATERLESS TOILETS

"SUN-MAR" Composting Toilets

Several models available including non-electric

- NO Septic System
- NO Chemicals

Save the Environment!
Recycle Back to Nature!

FREE:
12 Page Color Catalog

We Perform Septic Inspections & Certifications

ECO-TECH Call Today 1-800-879-0973



Let Your Crops Dine On Alpine

The Company That Offers You High Quality Plant Food At Competitive Prices. Dealer Inquiries Welcome.

Talk To Us About Seed Banded Plant Food And Foliar Feeding. Place Phosphorus Where It Does Most Good (Seed Banded)

6-24-6 9-18-9 3-18-18 5-15-15
Check Early Order & Quantity Price

Zimmerman Lime & Fertilizer, Inc.
(717) 733-7674
235 W Burkholder Dr Litz PA 17543

Dealer of Raven Liquid Storage Tanks

Agricultural Generators
Spectrum Detroit Diesel




KATOLIGHT POWER SYSTEM SOLUTIONS

P.T.O. Generators
25 to 135 KW Units In Stock!

Automatic L.P. Gas, Diesel, Natural Gas Generators
5 to 2,000 KW

Service - Rental - New & Used Units In Stock

PENN POWER SYSTEMS
Power Generation Systems Specialists

330 Fonderwhite Road, Lebanon, PA 17042
Call Leonard Martin **717-273-4544**
Fax 717-273-5186

DURABED® COW MATTRESS

NEW 100 oz. Waterproof
The Ultimate in Cow Comfort



The only one of its kind!

- Heaviest
- Most Effective
- Driest
- Strongest
- The BEST!

Ask About...

- DURABRISKET
- HDPE POLYBOARD
- MUDGUARD
- PLASTIC PLYWOOD
- CALF HOUSING
- FOOTBATHS
- WATER TANKS
- TRUCK LINERS

Why Buy Anything Else?

NORTH BROOK FARMS
Call toll free. 877-624-2638

Martin's Farm Supply Greencastle 717-597-4283
Martin Construction Co. Kutztown 610-683-6120
Ammon Fisher Ronks 717-687-0349
Farmer Boy Ag Systems Myerstown 800-845-3374