



# W-S Feeds Chronicle

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## BUDGETING FOR MANURE NUTRIENTS

One of the major challenges facing the growing number of organic farmers is the ability to efficiently meet the fertility needs of crops without the use of conventional fertilizers. Typically, in addition to green manures and approved amendments, organic operators utilize animal manure to fulfill a crop's nutritional requirements. Numerous variables, including animal and manure type and environmental conditions, interact in often unpredictable ways to influence the final product's unique ability to supply nitrogen and phosphorus. Over a nine year period Jim Miller, a research scientist with Agriculture and Agri-Food Canada, and fellow researchers in Lethbridge, Alberta have monitored soil nitrogen and phosphorus levels in a barley field annually amended with several combinations of manure and bedding at three increasing application rates of 13, 39, and 77 Mg per ha. In terms of nitrogen release, "straw (bedding) is definitely better than wood (chips)" when present in either fresh or composted manure at all three application rates.

Soils with straw bedded fresh manure exhibited the largest soil nitrate concentrations. Although the nitrate form of nitrogen is vital for plant growth, there is always the potential for its accumulation of levels that exceed what is recommended. Nitrate levels in the soils amended at the highest application rate with the fresh manure, straw bedding combination were more than 15 times greater than the limits set out by the Alberta provincial government. The consequences of excessive nitrate levels include nitrate leaching to groundwater sources. In addition, soil nitrates also have the potential to convert to nitrous oxide, a known greenhouse gas.

Like nitrogen, phosphorus will continue to accumulate in the soil with increasing application rates. The concern is the potential runoff of phosphorus to surface waters. Phosphorus runoff has been linked to the eutrophication of oceans, lakes and streams. There is an increased need for soil budgeting rather than simple soil tests says Miller. A nutrient management plan indicates the nutrient requirements of each crop. In the study, manure application rates were the same, year after year, with no accounting for nutrient requirements. The result was excessive nutrient levels in relatively short periods of time. Miller and his fellow researchers will continue to study the effects of long term manure use on agricultural soils and more importantly, on the environment. The results will affect both organic farmers and Canadians as a whole. (Organic Agriculture Centre of Canada)

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CROSSOVER DISEASES

## CLOSED APRIL 29, 2011

We will be closed on Friday April 29th for inventory purposes.

*Please order your feed accordingly.*

## LAMB AND KID GOATS SPECIALS

The following specials will run from April 1 - 30, 2011.

### CAPRIVAL - Goat Milk Replacer

For the month of April there will be \$5.00 off per bag of Caprival purchased.

### LAMB SPECIALS

Lamb products will be on sale at buy 10 bags and get \$1.00 off per bag.

## FINANCIAL LOSSES ASSOCIATED WITH MASTITIS

### EARLY DETECTION IS CRITICAL

Prevention through the use of best management practices is by far the best way to control mastitis, but effective treatment is also part of the strategy.

### THE MASTITIS 3 TEST

The Mastitis 3 test identifies the presence of the three mastitis pathogens commonly referred to as the "contagious" pathogens, specifically *Staph. aureus*, *Strep. agalactiae* and *Mycoplasma bovis*. These contagious pathogens are often the cause of chronic infections leading to ongoing elevated SCC.

### IT'S RELIABLE

The test is based on polymerase chain reaction (PCR) which detects the presence of the bacterium's DNA in the milk sample. You no longer have to rely on the ability of the bacteria to grow under culture conditions.

### IT'S CONVENIENT

## CROSSOVER DISEASES

Diseases affecting both humans and animals are a unique challenge for farmers. According to experts, zoonotic diseases in livestock can be broadly categorized into two categories: those that can spread to people but show no clinical signs in animals and those that will cause illness both in people and livestock. E.coli 0157LH7, campylobacter and salmonella are three well-known pathogens that originate from animals. Producers are very aware of these as being issues and they're doing what they can to minimize on-farm risk of pathogens like E.coli and campylobacter. Researchers say that farmers have a good understanding of zoonotic diseases relating to their animals, but not as much understanding about human health impacts. An outbreak of Q-Fever in the Netherlands made headlines when thousands became sick and six people died of the disease in 2009. Q-Fever causes abortions and stillbirths in goats and sheep, as well as high levels of lamb and kid mortality in the first weeks of life. In humans, it causes flu-like symptoms with severe cases leading to atypical pneumonia or liver disease. Pregnant women who contract the disease are at risk of losing their pregnancy. While it's difficult to discern what level of awareness is present, it's likely that many producers are more aware of the potential impacts of Q-Fever on their livestock, adding that the potential for illness in producers and farm workers likely goes under-acknowledged. Regardless of how aware producers are of zoonotic diseases, however, it's what the public knows or doesn't know as the case may be - that may impact farmers down the road. Misconceptions about zoonotic diseases are likely to grow as the distances between agriculture and the public increase.

## NEW NON-FARM SOURCE MATERIAL RULES RESEMBLE NMPS

New rules and guidelines for applying non-agricultural source materials (NASM) took effect on January 1, 2011 and farmers need to be sure they understand the changes and compliance requirements. NASM covers things that are not generated on farm, but can be land-applied for nutrient value. NASM provide a cost-effective option for improving soil quality and fertilizing crops by adding valuable organic material to help maintain soil productivity and reduce soil erosion and have been safely applied to Ontario farmland for more than three decades. Amendments focus on the quality of the material being land applied, ensuring it meets strict criteria and is beneficial to the soil. New among the regulations is the establishment of three NASM material categories:

- category 1** includes unprocessed plant material, such as vegetable culls;
- category 2** includes processed plant material, such as organic residue materials from a bakery;
- category 3** includes animal-based NASM, such as organic residual material from a meat processing plant, and pulp, paper and municipal sewage biosolids.

In order to get biosolids now you will need to have either a signed approval granted in the last three or four years or get a NASM plan. NASM plans must be prepared by a certified plan developer and are similar to a nutrient management plan, although a NASM plan deals only with the fields where NASM is applied, not the whole farm unit. A farmer will not be able to operate with two separate approvals on the same piece of land at the same time. The new regulations will add "a bit more work" for farmers. "If you think the per acre value of biosolids is valuable, then the extra 15 to 20 minutes spent with your consultant is time well spent."

The regular DHI sample can be used! No more messing around with time consuming sample collection, storage and shipment.

### IT'S FAST

Once samples are in the lab, results are usually available within a day.

### IT'S FLEXIBLE

You have the ability to test the entire herd, selected cows or cows that exceed SCC level, where those samples will be redirected from the SCC analyzer to the Mastitis 3 test.

### IT'S INTEGRATED

Positive test results, reported as +, ++, or +++ for each of the three pathogens, are displayed on an easy-to-read report and are integrated with other important SCC and DHI information for improved decision making.

## FUTURES MARKET

### PORK (US \$ per cwt.)

April	\$90.20
May	\$99.05
June	\$101.45

### BEEF

April	\$118.37
June	\$117.90
August	\$119.20
October	\$122.12

## SAFETY - IT STARTS WITH YOU

No matter where you work, safety is a concern. At W-S Feeds, we have an established safety program and are part of an industry Safety Committee that helps to direct and determine industry standards and policies. We provide regular safety training to our employees and want to partner with our farmers to help provide them with safety training that is practical to their business (ie. WHMIS, Confined Space, etc.). Should you require safety training or would like more information, please contact your sales representative or our Safety Coordinator, Karen.

## TRADE SHOWS

We hope to see you at the Drayton Farm Show on April 6 & 7.

The Poultry Show is in London on April 19 & 20.