

# Prairie News

## BOVAMINE: Microbial Supplement



Bovamine is a patented direct fed microbial (DFM) product. DFMs have been on the market place for many years, but you may ask why we have a need to supplement DFMs.

Before birth, developing animals are sterile in the womb of their mothers. Upon birth, the digestive tracts of all animals are naturally colonized by a variety of microorganisms. Under healthy and non-stressful conditions, "beneficial" microflora colonize the rumen and lower gut.

Beneficial rumen and gut microorganisms supply nutrients to the animal, aid in digestion of dietary nutrients, and compete with potential pathogens. In contrast, when young animals are removed and raised under stressful conditions, harmful microorganisms from the environment can form in their digestive tracts.

Stressed animals often have increased nutritional needs, abnormal immune responses, and are more susceptible to bacterial infections.

What do DFMs' do in the rumen?

Bacteria in the rumen convert energy from feed into energy that cattle can use. Research has shown some bacterial species are more efficient than others.

Maintaining a population of the most efficient bacteria in the rumen allows for efficient conversion of feed into milk production, improved health of the rumen for greater absorptive capacity, and enhanced efficiency of nutrient use.

In addition, maintaining an ideal population of bacteria in the rumen reduces the threat of acidosis, which can result from byproducts of the digestive process.

Scientists suggest that DFMs improve gastrointestinal health in a number of ways:

- They compete against deleterious bacteria and other undesirable organisms in the digestive tract.
- They produce anti-bacterial compounds such as acids and bacteriocins.

- They stimulate production of enzymes, natural bacteria, and nutrients needed by the animal.

### Why Bovamine?

Bovamine contains a patented combination of bacteria – The two specific strains in Bovamine were selected based on their ability to thrive in the right conditions and produce superior results. Bovamine's bacteria compete with deleterious bacteria for preferred attachment sites, limiting the ability of harmful bacteria to thrive in the animal. In the rumen, Bovamine's bacteria convert lactic acid and glucose to propionic acid, improving energy utilization and feed conversion.

Bovamine is the only DFM product that contains both lactic acid-producing and a lactic acid-utilizing bacteria. It is also the industry's most extensively researched DFM product available for ruminants today.

If you are currently feeding a DFM or are interest in feeding Bovamine, feel free to contact your Prairie Ag Supply feed consultant.

Neal Winger, Nutrition Consultant

### Upcoming Events

- > PDPW Conference; March 15-16, 2011
- > Young Producer Leadership Conference March 26-27
- > Hoof Care Sessions, Marshfield, WI April 20

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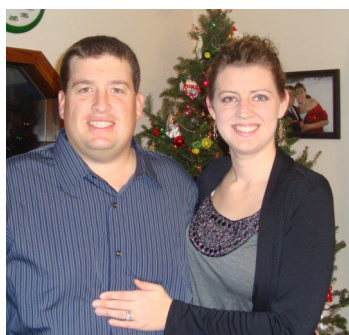
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**Randy and his wife Roxy enjoy fishing for Muskie**



**Kyle initially worked for Prairie Ag Supply as an intern in 2006. Upon graduation we hired him as a Nutrition Consultant.**



**Alicia and Tom were married in 2007**

## Employee Profile—Randy Harmon

If you have had questions about ingredients or pricing, You probably have talked to Randy at some point or another. Randy Harmon has been the Production Coordinator at Prairie Ag Supply since April of 2002. As part of his role he is responsible for coordinating incoming ingredients and feed deliveries. He also takes care of merchandising and direct shipments of ingredients to the farm.

When Randy started at Prairie Ag he brought a wealth of experience and organizational skills with him. Prior to starting at

Prairie Ag he had worked as a Purchasing and Production Coordinator for 17 years at a regional feed manufacturer.

When Randy isn't working he is spending time with his wife, Roxy on their 37 acre farm near Ellsworth. They purchased the property in 1997 and added a log home and pole shed in 1999. Randy and Roxy have done most of the finishing work in the house themselves.

Roxy operates a taxidermy business out of their home that keeps her very busy.

In his spare time Randy likes to

work on projects around the farm and also enjoys the outdoors. He likes to hunt on their farm and they both enjoy Muskie fishing during the summer. You just might catch them on an area lake or on the Chippewa Flowage where they have a camper set-up for their frequent summer visits.

Randy adds a lot of knowledge and organization to the team at Prairie Ag Supply. We are grateful for all the hard work and dedication that he shows everyday at Prairie Ag Supply.

## A Time of Change

It is with regret that we will be losing Kyle Taysom as an employee. Kyle has taken a position with Dairyland Labs.

Kyle initially worked for us as a student intern while at UW-River Falls. Upon graduation, we hired him as a Nutrition Consultant.

Besides consulting, he performed a number of job functions that have been valuable to our company. These included editing our newsletter, organizing bag truck orders and relief bag truck driving. He also assisted greatly with IT support in the office.

He will be missed by all of us at Prairie Ag.

Tom Kenyon & Bob Kistler

## Introducing Alicia

We would like to introduce Alicia Pfeilsticker as a new Office Assistant at Prairie Ag Supply. As part of her duties Alicia will be answering phone calls, managing the grain bank, and assisting with various clerical tasks.

Alicia is originally from Ripon

Wisconsin and graduated from UW-River Falls in 2005 with a degree in Ag Studies with a minor in Animal Science.

She met her husband Tom at a dairy nutrition conference in 2006 when she worked for another feed company. Today they live in Downsville with

their 2 boys, Jackson and Mason.

Like her husband, Alicia has an outgoing personality and will be a great fit on the team at Prairie Ag Supply.

## Technical or Functional Hoof Trimming (the Dutch Method)

Lameness is one of the biggest costs to the dairy industry. Prevalence in 30 Wisconsin herds was 73 cases per 100 cows per year (Cook, 2001). More and more cows in the dairy industry are housed in freestall systems with concrete flooring.

Research has indicated that exposure to concrete flooring can increase the proportion of cows with claw disorders compared with other systems (Somers *et al.*, 2003). Results of a study involving Minnesota farms with freestalls showed that the average clinical lameness prevalence was 24.6%. The spread in the data was huge; the top 10% of farms showed a lameness rate of 5.4%, while the 10% of the farms with the highest lameness rate had a lameness prevalence of 46.2%. This data shows that a goal of less than 15% clinically lame cows in a freestall herd should be achievable (Espejo *et al.*, 2006).

Lame cows produced 3.3 lb less milk per day after 2 weeks compared to the other cows (Warnick *et al.*, 2001). Lameness also causes reproduction problems. Cows with a locomotion score >2 are 2.8 times more likely to have increased days to service, 15.6 times more likely to have more days open, 9 times more likely to have increased services per conception and 8.4 times more

likely to be culled for reproduction. There are many costs associated with lameness. Based on \$13.00 milk per cwt, lameness costs are estimated to be \$404.00 per case (C.Guard, 2006).

With today's feeding regimes for optimal performance, hoof growth is accelerated. To control the size of the feet regular scheduled maintenance trimming needs to be performed.

### Areas of Concern

When talking about maintenance trimming most of the work will pertain to the hind feet. The front end of a cow carries 60% of the weight, but since it is not attached to the skeletal frame it has more shock absorbing ability. The rear end has more joints so feet and legs are directly connected to the skeletal system.

Due to this disconnection between the foot and skeletal system in the front of the cow only 12% of the foot problems appear to be in the front claws. 88% of the lameness problems occur in the hind feet. Looking at the hind feet roughly 15% of the problems occur in the medial or inside claw and 85% of the problems in the outside or lateral claw. Horn in the wall and toe of the foot grows faster than the heel (3/16 of an inch/month on average).

When trimming feet it is im-

portant to spare the heel on the inside or medial claw of the hind foot (or lateral claw on the front foot). You should never thin the wall of the hoof out, as this is where the animal carries the majority of its weight. The wall horn is 3x stronger than the sole horn.

### Have a System

A systematic method for trimming feet should be used and have repeatable results. When feet are viewed from above they should be well balanced while standing on the floor. The entire foot rests squarely on the floor (side to side and front to rear). Toes should be about three inches long. They should not limp after trimming except for blocked cows (even most of these will walk better).

Be aware that mistakes during trimming will not solve lameness, but probably increase the degree of lameness.

Cows that have healthy well trimmed feet get up from resting more frequently, will walk around more, and therefore will mostly likely eat more meals in a day to increase their dry matter intake, milk production, reproduction and truly be happy cows.

*Roger Olson and Tim Thompson,  
Akey Dairy Specialists*

### Goals for Common Types of Lameness

- |  |     |
|--|-----|
| 1. Digital Dermatitis (foot warts)           | <5% |
| 2. Sole Ulcers                               | <2% |
| 3. White Line Lesions                        | <2% |
| 4. Toe Ulcers (thin soles)                   | <1% |
| 5. Sole Fractures                            | <1% |
| 6. Interdigital Dermatitis (hoof rot)        | <5% |
| 7. Acute Foot Rot<br>(interdigital Phlegmon) | <1% |

### Recommended Trimming Schedule

1. Start trimming cattle 3-6 weeks prior to calving (including springing heifers). Prevalence of lameness can be reduced if problems are corrected in an early stage.
2. Second trim between 80-130 days in milk.
3. Cows that are considered high maintenance (unbalanced claws, corkscrewed claws, ect) need to be trimmed every 60-90 days.
4. Cows with extended lactations need to be trimmed every 120-150 days.
5. Lame cows need to be treated immediately

Prairie Ag Supply LLC

66565 629th Avenue  
Menomonie, WI 54751

Phone: 1-800-535-4485  
Fax: 1-715-235-4921



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