



Dairy Now

HELPING YOUR DAIRY OPERATION REACH ITS FULL POTENTIAL



Welcome to the first issue of Dairy Now!

Zinpro Performance Minerals is pleased to offer you this first edition of *Dairy Now*. This newsletter focuses on dairy herd health and nutrition, and provides you with information and educational tools that support your daily work. Feel free to send this newsletter to your customers.

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Locomotion scoring is a method of determining the extent of a lameness problem in a dairy herd in an objective way, without the need for herd records of lameness treatments. By implementing the tips devised by the Zinpro First Step team, you will know what to score, where to score and how to score.

Try to score all of the lactating cows in the herd, including those that are in the sick pen. Lameness prevalence varies widely between different groups. It is usually quite low in heifer groups in North America, higher in early lactation, mature cow groups and highest in late lactation or problem cow groups. In large herds, score one pen at a time and accumulate whole herd prevalence over time. Lameness prevalence doesn't change very much over a short periods.

Score the cows on a solid, level, non-slip surface in an area that is well-lit. Cows will shorten their stride (and appear 0.5 to 1 point more lame) if they are walking on a slippery surface, or over slats. If you have to score in these areas, make allowances for this. Cows will also appear more lame after milking, when they have been forced to stand for a period of time, than before milking. Be consistent when scoring herds.



Try to score with the farmer present for at least part of the time. It is important that farmers spend the time to watch their cows walk and for us to bring to their attention the different levels of lameness.

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The Cost of Lameness on Your Operation

Not only is lameness the most significant disease impacting the well-being of the dairy cow, it also causes an economic loss to the farm. In simple terms, the average case of lameness reduces milk production by around 360 kg per lactation (1.1 kg per day), adds 14-40 days to the interval from calving to conception and triples the risk of culling. Estimates of the cost of each case range from around \$125 to over \$600. Clearly the type of lesion, the severity of the condition, the effectiveness of treatment, whether the event is a new case or a chronic case, and the stage of lactation that it occurs will all impact the cost for an individual case.

The biggest problem we have in calculating the cost of lameness on a herd basis is knowing the incidence of lameness. Current

record systems do a poor job of identifying this important number. The system outlined in the recording section aims to improve our ability to calculate a true lameness incidence. By separating LAME events from TRIM events and removing CHRONIC cows from the LAME group so that a new case rate can be obtained, we will have a much better idea of the cost of lameness in the future. Cost calculations which are herd specific carry more weight with the farmer as they are more transparent and the numbers used are more realistic. Observing the net present value (relative value, cow value or even predicted ME305) of a group of lame cows compared with the rest of the herd can be a strong argument for improving lameness rates in a herd.



In the short-term, costs of lameness can be predicted from determinations of prevalence, using reported effects on milk production.

[Estimate the cost of lameness >](#)

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Signs of Lameness in Your Herd

- Nodding movement of the head as the lame foot hits the ground
- Arching of the spine associated with pain in the rear feet
- Shortening of the stride length and sinking of the dew claws of the opposite side, sound limb as it bears weight – suggesting transfer of weight off the affected side
- A reduction in walking speed and frequent stops to rest the affected limb
- Some severely affected cows are in such pain that they grind their teeth and salivate profusely as they walk
- Some cows will struggle to make sharp turns, or rise in the stall

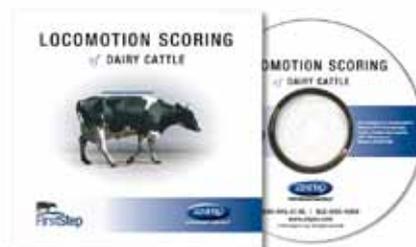
Locomotion Scoring Tools Available from Zinpro

The Zinpro First Step team offers a number of educational reference tools designed to assist farmers worldwide with locomotion scoring.

The First Step Locomotion Scoring Poster features photos and descriptions of the five degrees of lameness in dairy herds. This field-ready reference tool is available in English, French, Spanish, Dutch, German, Japanese, Italian, and other languages.

The First Step Locomotion Scoring Video offers an overview of using locomotion scoring to identify lame cows and assess the prevalence and severity of lameness within a herd.

To request any of these materials, please call your local Zinpro representative.



Research Trial Shows Lameness Widely Underestimated on UK Farms

Locomotion scoring is a valuable tool in assessing the amount of lameness on a farm. A study conducted in the UK shows that when scoring is not completed, farmers tend to significantly underestimate the amount of lameness present in a herd.

Dr. Helen Why and colleagues visited 53 farms in the UK to assess lameness incidence. The average herd size was 120 head

(range 34 to 358), with 49 of the 53 herds housed in stall barns and four in loose housing facilities. A four point scoring system was used: 0 = sound, 1 = abnormal locomotion / tender footed, 2 = lame, 3 = severe lameness. All scoring was conducted by Dr. Why.

The results of this study showed that Dr. Why's team identified a mean lameness prevalence of "clinical" lameness (score 2 & 3) of 22.11% (SD 9.61) with a range between 0% and 50%. The farmers on these 53 dairies were also asked to estimate lameness. They estimated a mean lameness prevalence of 5.73% (SD 7.07), with the estimates ranging

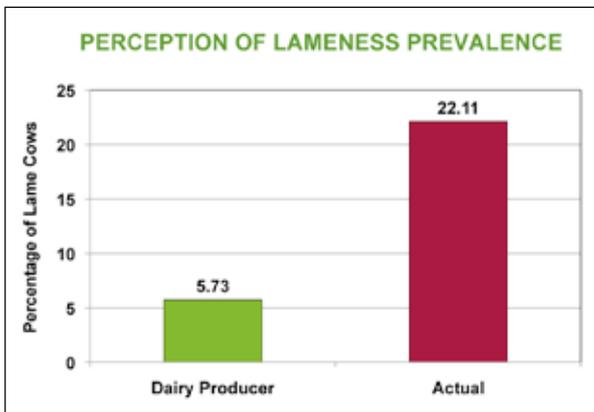


Lameness negatively affects:

- Dry matter intake
- Milk production
- Body condition
- Culling rate
- Reproductive performance
- Veterinary costs
- Profitability

from 0% to 35%. Only one farmer correctly estimated lameness prevalence.

Thus, farmer estimates of lameness seriously and significantly underestimated the trained observer score by 16.38 percentage points (SD 7.93, $P < 0.001$).



Introducing First Step[®]

Lameness continues to be a significant issue affecting the overall productivity and profitability of today's commercial dairy operations. Until now, there has not been an objective, methodical system to assess the many factors that contribute to lameness. With First Step, it all changes.

Sponsored by Zinpro, the First Step team is a select group of international researchers, veterinarians and nutritionists committed to the prevention, diagnosis and treatment of lameness in commercial dairy herds. The team's Lameness Assessment and Prevention program, developed by Zinpro

Corporation and the University of Wisconsin's noted lameness expert Dr. Nigel Cook, provides the industry's first-ever comprehensive assessment of overall lameness risk factors on a dairy.

Using data gathered from up to 20 different assessment models, the program helps identify factors that increase the risk of cows becoming lame.

In addition to offering powerful software, First Step provides a comprehensive resource library for dairy operations. It includes a vast array of information – from assessment videos to other visual reference tools – designed to educate dairy personnel about lameness, its causes and effects, and possible treatment options.



Zinpro Sponsors International Lameness Conference

Zinpro Corporation is proud to be the sole **PLATINUM SPONSOR** of the 16th Symposium and 8th Conference on Lameness in Ruminants to be held February 28 – March 3, 2011, in Rotorua, New Zealand.

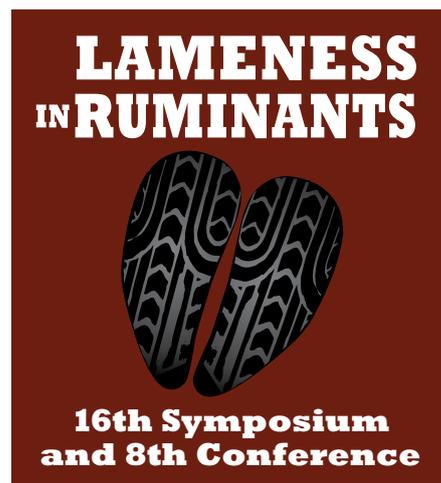
Dr. Richard Laven, official chairperson for the prestigious international conference, announced, “Zinpro has been a major sponsor of this biennial event for many years. Lameness in ruminants is one of the most challenging problems experienced worldwide, and Zinpro’s consistent support has helped to build increasing awareness and knowledge for animal health professionals and research scientists across the globe.”

Topics scheduled to be covered at the event include:

- Behavior and lameness.

- Lameness in pasture-based systems: What are the problems? Are they really the same?
- Getting cows to milking: tracks, collecting yards, parlor flow, milking once a day.
- Extension programs: What levels are acceptable? How do we get there? How do ‘low-lameness’ farmers manage?
- Breeding the ideal cow: Are our current cows designed for our system?
- Lameness in sheep: Do we know enough to have an impact?
- Footrot: new technology and new solutions.
- Ruminant lameness: general topics.

The goal of the 16th Symposium and 8th Conference on Lameness in Ruminants is to bring researchers and veterinarians



together to fuse the practical and the scientific into workable solutions for lameness, particularly for dairy cows. The 2011 conference will embrace lameness in all farmed species and cover all aspects of lameness, from molecular genetics to the development and monitoring of intervention programs – all with a unique New Zealand perspective.

For more information, visit www.lamenessinruminants.org or contact your local Zinpro representative.

Next Issue

Lesions



In the next issue of Dairy Now, we'll provide an introduction into assessing, diagnosing and preventing hoof lesions - a significant contributor to lameness in dairy cows.

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AVAILA-4 BENEFITS DAIRY OPERATIONS

Availa-4 from Zinpro Performance Minerals delivers enhanced performance and improved profitability to today's dairy producers. From improved lactation performance, udder health, reproduction and overall hoof condition, Availa-4 is backed by multiple research studies showing proven responses and a strong return on investment.



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