

# Feet Condition Reveals Cattle Health

(Continued from Page A1)

the underlying cause of much of the lameness affecting dairy heifers and cows. Foot problems are being more frequently reported in first calving dairy heifers today than they were perhaps 10 years ago."

Greenough has done extensive investigations into the causes of foot problems, especially working with beef cattle, which also have been experiencing foot problems.

According to Greenough, one of the major causes of laminitis is pushing animals to gain weight, and changing their diets too quickly.

He said that especially during the interval before and after calving, the change in diet stresses the ability of the rumen microbes to digest the amount of energy being fed.

He said that what happens is the microbial populations need time to adjust to the new feeds and if they don't get their opportunity to adjust properly, the lining of the rumen is irritated. Furthermore, there is the production of toxins, specifically lactic acid, in the rumen and with

the wall of the rumen irritated, the lactic acid gets into the blood stream.

He explained that in the foot of the cattle the arterial blood flow is such that it travels down toward the toe and passes through a group of muscles which inflate under pressure and deflate to cushion the weight of the animal.

There is also a sort of emergency blood-flow bypass system, a shunt, through which the blood will flow if there is a problem with the flow through the cushioning muscles.

What happens with laminitis is that lactic acid in the blood paralyzes the muscles, not allowing for the cushioning effect. If it continues, permanent damage can occur.

"Most research workers agree that nutritional factors are the most important cause of laminitis," Greenough wrote. "This observation is by no means cut and dried. Animals fed exactly similar rations under apparently similar circumstances are not always affected in a similar manner.

"It has been suggested that

many factors are involved in causing laminitis."

Greenough went over a number of different causes for laminitis, but generally he warned against pushing young cattle, especially heifers, to grow too fast by feeding concentrate.

Further, he said that energy, the carbohydrate portion of the ration, is the main cause of foot problems, not protein. Protein only becomes a factor when it is overfed and the young growing animal's body converts the protein for uses as energy.

Greenough's talk followed his handout fairly closely and copies of the handout are available through either extension office.

It is a specific and information packed 26-page document which covers in detail some of the symptoms and causes of a range of foot problems.

Also giving a presentation was Dan McFarland, multi-county agricultural engineering agent, who talked about some of the specifics with tunnel ventilation. Tunnel ventilation has been increasing in popularity because it provides a healthier and more comfortable

environment for the cow.

As its name implies, tunnel ventilation creates a one-directional flow of air to achieve greater air exchange which has several beneficial aspects on the health and comfort of the cow, and it can also provide a more efficient energy use than having more than one air inlet and outlet.

The Lebanon meeting was different from the Lancaster meeting in

that four couples who have family dairy farms offered to sit on a panel and discuss how they keep from being burned out in the profession.

While the panel members were familiar to most of the audience, they shared a number of anecdotes and opinions about how they live. The common thread throughout, however, was that each couple prioritized their family first, and respected each other's needs.



Dr. Paul Greenough talks about cattle foot problems and how to identify them.

## Cumberland Valley Toy Show

Cumberland Valley Middle School West Gym

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Saturday, Mar. 6...9:00 A.M.-3:00 P.M.

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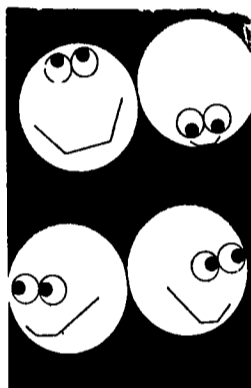
The following items have already been consigned to the auction:

IH 544 (NIB), AC D-15CE, Ertl-Truscale Elevator (NIB), AC Wing Disc, IH 1486 Custom, IH 4B Metal Plow (NIB), Case Steam Engine-SM, Case Water Wagon, McCormick-Deering Grain Binder-Vintage, JD Wooden Oil Can Box, Sales literature-McCormick-Deering 10-20 and 15-30 Steiger Panther CP 1400 (NIB), Farmall Cub-PM, 3 pc set 1/43 Toy Farmers 84-86, IH Historical Set, Truscale 4 B Plows (NIB), AC D-19 CE, Jubilee CE, Toy Farmer D-19, Toy Farmer Case 800, Toy Farmer JD 630, CS/IH 3<sup>rd</sup> 94 CE, 1/64th-AC 7045, Agri-King Ford 9700, JD Row Crop, IH 1066; Pre 1900 JD Literature & early plow, planter and cultivator literature, 91 Farm Show Ford 961, 92 Farm Show Oliver 770, 93 Farm Show Sheppard Diesel, Farm Show Winross- 91 Ford, 92 CS/IH, 93 Regular Edition; 92 & 93 Farm Show Bank, IH Loader Stock Hauler (NIB), Custom John Deere Tractors - 4620, 4520, 4430, 4440, 630; Many over the road Winross trucks are expected as well as many collectible banks and Hess Trucks. GM Promotional pieces, 92 Corvettes, Corvette Conv, 92 Camaro, 92 Z-28, 92 Sportside, Geo Storm, Dime Banks; BP Trucks, Blank Ertl Banks, Blank Ertl Trucks, Eastwood Museum Set, 350+ pieces are expected. Cash or Good Check. ID for Bidders No.

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