

FOCUS

A NEWSLETTER FOR MEMBERS & CUSTOMERS



Lancaster Farming

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December 19 Issue Vol. 13 No. 2

PA DHIA's Futures Planning

DAVE SLUSSER
 General Manager

STATE COLLEGE (Centre Co.) — For several years you have been hearing about the PA DHIA Strategic Long-Range Plan. This plan developed by the Board and being implemented by employees and the Board is moving along and in a positive direction. Several visible accomplishments are MUN, Member Consultant Services, marketing, Heifer 98, educational meetings, Innovative Program, Nitrogen Management Report, partnering, etc. Other areas such as the International Market development and herd management software development are moving rapidly.

A year ago the management staff began meeting every six months to evaluate progress toward the plan and possible changes in direction. Six months ago, the management team decided to enlarge the futures groups to include a broad section of our employees. After each session, a progress report is given to the Board and their guidance is sought. The reason for this approach is that somewhere in the minds of our employees are ideas that will help us.

Several weeks ago our Employee Futures Committee met. We evaluated several of the long-range plan's topics. The meeting was positive and a report was given to the Board. A brief summary of the report follows.

Marketing:

Positive results are occurring in the member marketing program. The Owner Sampler Program is growing, and cold calls on potential new members seem to work best. Technicians working with Dave Bigelow have been having great success in getting new herds on test. Our goal is to increase cows on test.

International Marketing is also going well with a pilot project planned for this winter in partnership with the PA Department of Agriculture and Penn State University. Our goal is to get international busi-

ness in milk recording processing of management information, and in farm management consultant services.

Education:

Education on how to use PA DHIA management reports, including MUN information, is being done in several ways. Weekly news articles, written by George Cudoc, are being

published in the farm press. Other methods used include on-farm visits, local meetings, and seminars for farm consultants. Interest is running high among members and technicians. Our goal is to increase the value of DHIA to our current members and new members.

Software Development:

The development of our new software designed for Windows 95-98 is moving forward at the greatest possible speed. The herd management software will be distributed to cooperating herds and technicians for field trial by February 1, 1999. Heifer 98 is the first Windows 95-98 program farm management software we

know of. Our goal is to have the best software in Dairy Herd Management.

Conclusion:

PA DHIA is improving the world one cow at a time. The efforts of each employee are greatly appreciated.

DIXIE BURRIS
 Laboratory Manager And
 Membership Development

STATE COLLEGE (Centre Co.) — As PA DHIA moves closer to the year 2000 we continue to help dairy farmers meet the challenges with their cows and herds. The many challenges and questions that members and nonmembers progress with challenges of new technology. The price of milk, social issues and family pressures along with day to day dairying many times dictate where we need to meet these day to day pressures and challenges.

PA DHIA has developed the means to receive real time electronic laboratory analysis by offering the results in many ways. We can deliver the component analysis result through email, the Internet, diskette, or dial-up bulletin board for bulk tank and individual cow tests. We provide updates for herd testing on many dhia programs including the Sample Analysis. We can deliver electronically the analysis in a variety of formats including Dairy Plan, De Laval, Boumatic and Dairy Comp 305.

The lab offers six different component analysis through a variety of different ways electronically and in written reports. By being a member of Pennsylvania DHIA and testing your individual cows milk at least monthly has proven to improve the profitability on the farm. The written reports can not only give dairy farmers the management information to make the necessary changes to adjust or take action on each herd or cow but data can pro-

vide veterinarians, nutritionists and consultants the information they need.

The following is an report written by Dr. Larry J. Hutchenson, DVM, Extension Veterinarian and Carol M. Burns, Veterinary Science Extension Assistant, on how using DHIA's SCC reports can help with mastitis control.

Using DHIA's SCC Reports with Mastitis Control — The most common and most costly disease in the dairy industry is mastitis. Many dairy producers do not realize how much mastitis is actually in their herd and what this disease is costing them. The loss to the dairy industry in Pennsylvania is estimated at more than \$100 million. Most of this loss is attributed to subclinical mastitis.

Mastitis is an inflammation of the mammary gland (udder) usually caused by a bacterial infection. There are at least 80 different species of bacteria that can cause mastitis. Recognition of clinical mastitis is relatively easy. Infected quarters become hard and swollen, and are often warm and sensitive when touched. Frequently, the milk looks abnormal. It can be watery and contain flakes or clots. Unfortunately clinical mastitis makes up only 2-3 percent of the cases of mastitis in the herd at any one time.

The remaining cases of mastitis often go undetected because the udder and the milk are visibly normal. For every case of clinical mastitis seen, there can be many more subclinical cases in the herd at the same time. These hidden infections can be the source of new infections. Subclinical mastitis

destroys milk secreting cells thus reducing milk production. Therefore, it is imperative to find some means of locating cows with subclinical mastitis.

Somatic cell counts (SCC) can be used to monitor udder

linear score (LS) based on a scale of 0-9. For each increase, the number of somatic cells double. To give a more accurate representation of the somatic cell count, the LS readings are given in tenths.

Conversion of SCC to Linear Score

Somatic Cell Count Linear Score	Cell Count Mid-Point	(Thousands) Range
0	12.5	0-17
1	25	18-34
2	50	35-70
3	100	71-140
4	200	141-282
5	400	283-565
6	800	566-1130
7	1600	1131-2262
8	3200	2263-4525
9	6400	4526-

health, The term somatic cells is derived from the Greek word meaning body (soma). Somatic cells come from the cow's body. They are comprised of white blood cells, mostly polymorphonuclear leukocytes which respond to infections.

Bacteria invading the udder produce toxins. The toxins cause irritating reactions to the milk producing tissues. An increased number of somatic cells are released in response to the irritation. These cells are a natural means for the cow to fight infection. As the degree of infection increases, the number of somatic cells that are released also increases.

The Dairy Herd Improvement laboratory has the means to accurately determine numbers of somatic cells that are present in a sample of milk. The automatic electronic cell counter reports the somatic cell as the log. To simplify reporting, scale was modified to the

(Using DHI Somatic Cell Counts to Increase Production and Profits C.W. Heald, et al) — The linear scores are grouped in a manner depicting the severity of mastitis. Scores of 0-2 are the most desirable. Scores greater than 4 indicates a high probability of a bacterial infection. Cows with LS of 4-6 should be considered as candidates for subclinical mastitis. Some cow may even show signs of subclinical mastitis with a LS of 4. Although there is no set cutoff which denotes subclinical and clinical mastitis, LS of 7-9 are considered to be the most serious.

Numerous research studies have been completed which determine that relationship of milk production, mastitis and SCC. As the SCC increases, the infection rate increases and milk yield decreases. With each increase in linear score,