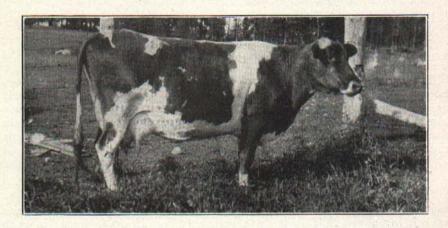
Bulletin No. 33, Extension Series

M. S. C. BULLETIN ROOM FILE COPT FOR LOAN ONLY In No. 33, Extension Series Bigger Dairy Profits Through Dairy Herd Improvement Associations

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This grade cow was offered for sale in 1922 for \$50.00. There were no buyers. The cow tester encouraged the owner to give her a chance. Since then, this cow has made 60,259 pounds milk and 3,293.5 pounds butterfat in seven years. She has been under test in a dairy herd improvement association. She has returned her owner, Ellis Gruesbeck, Eaton Rapids, \$1,005.84 above the cost of feed. She is still for sale-but not for \$50.00.

Spot has a daughter named Spot 2d. Spot 2d, as a three year old, also has made a production record of 10.854 pounds of milk and 445.8 pounds fat, with \$160.81 returns over feed cost.

Michigan State College

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The dairy farmers in Michigan are face to face with many serious problems. A majority of the 800,000 cows on Michigan farms are not profitable. Hence, the problem of getting greater profits from the

dairy herd is common to most of the herds in the State.

Many solutions are offered and some have merit. One solution that has been used and proved by experience is that of record keeping through dairy herd improvement associations. Better sires offer another solution, improved feeding, and more efficient management of the dairy herd are other ways of solving the problem of profitable cows. The dairy herd improvement association makes it possible to employ nearly all of these methods. It is a simple method, very practicable, and surely effective as shown by the experiences of dairymen in many sections of Michigan. It answers these questions.

Do all the cows in the herd pay a profit? What does it cost to feed a cow a month, or a year? Which is the best producing cow in your herd? What is the butterfat test of the cows?

These questions have been asked many times but have too seldom been answered. Dairymen who belong to a dairy herd improvement association know the answer. They keep their cattle not for beauty alone but for profits too. Dairy herd improvement associations help the dairyman to get bigger dairy profits and, in addition, better type animals result. Every man who milks cows wants—PROFITS.

What Is the Purpose

It is the purpose of the dairy herd improvement association to obtain for the dairyman records of milk, butterfat and feed cost once each month for a year. This is done regularly for 25 or 26 herds in each association. The cow tester or bookkeeper of the association spends one day each month with each herd. The records which he obtains help demonstrate to each dairyman how to improve the business of dairy farming. The improvement is obtained by culling out the poorest producers and feeding the worthy cows better for greater immediate profits. Then, too, better selection and more careful management of the entire dairy herd increases future profits. Hence, the net profits from the dairy herd are increased.

What Does It Cost to Belong to a D. H. I. A.

Michigan dairymen who have had years of testing experience in a dairy herd improvement association explain that it costs nothing. They mean that the actual cost is nothing when compared with the benefits of testing. This will also be your experience if your herd has never been tested. If your herd was tested, you know that the cost is little

compared with the benefits obtained.

The actual cost to you as a member of the association is the cost of hiring a tester and of buying equipment. This is done cooperatively by the 26 members of the association through a board of directors. Experience with many Michigan dairy herd improvement associations shows that the following schedule of monthly payments will cover the operating costs of an association.

The charge for herds of different sizes is as follows:

Size of Herd P	ayment Each Month	Size of Herd	Payment Each Month
1- 6 cows	Control of Francis Cold Schools See	16-17-18 cows	
7- 8- 9 cows		19-20-21-22 cows	
10-11-12 cows		23-24-25-26 cows	
13-14-15 cows		27-28-29-30 cows	

Suppose there were 20 herds each with 10, 11, or 12 cows and six herds each with seven, eight, or nine cows that were organized into a D. H. I. A. At \$3.50 per herd for 20 herds, \$70.00 would be raised and, at \$3.25 for six herds, there would be \$19.50. The total income would be \$89.50 each month. The cow tester is hired with the understanding he is to receive 95 to 97 per cent of the income each month. This amount is paid to the tester by the secretary, one of the officers of the association. The other three to five per cent of the monthly income is held in reserve by the association to pay incidental expenses.

A membership fee of \$2.00 is paid by each member when the association organizes. This is used to buy the equipment. This membership fee is paid only once by the member. From the above figures you

can estimate the cost of testing your herd for a year.

What Are the Benefits

Benefits derived by Michigan dairymen from a D. H. I. A. have been so numerous that space will not permit mention of every instance. Some instances where increased dairy profits were realized by dairymen are given to show the many ways the tester can assist the dairyman.

The herd of nine purebred and grade Jerseys owned by the Schipper Brothers of Newaygo County averaged only 260 pounds fat in 1923 under test in the D. H. I. A. In 1924, 307 pounds fat; in 1925, 362 pounds fat, and in 1926, 435 pounds butterfat. This also includes an average increase of 3,141 pounds milk per cow. Increased production means nothing unless the returns above the cost of feed increase also. In 1923, the returns above cost of feed were \$71.60 per cow, increasing to \$102.80 in 1925, and to \$110.70 in 1926. This increase in returns was due to culling out three cows—feed cost per cow per year costs about \$70.00. Then, too, properly balanced rations were fed.

The Schipper Brothers say that for 15 years they milked cows and during the fifteenth year they milked no more than the first year. Now, after belonging to the association, their herd has made much progress, as these figures show, and they have been repaid many times the cost

of the testing.

Ulric Mayer belongs to the Chippewa County D. H. I. A. The first year under test, his nine grade Guernsey cows averaged 224 pounds butterfat and returned \$564.06 over cost of feed. During the second year, five cows were sold and two were bought so that he averaged 7.3 cows under test for the year. These averaged 373 pounds fat with \$1,026.73 returns over feed cost. Illness in the family then necessitated selling the herd. The neighbors bought the cows readily because they had records. The sale returns showed the cows averaged \$50.00 more per cow than Mr. Mayer had originally paid for them.

A dairyman in Ingham County was feeding a grain mixture costing

\$50.00 per ton. The cow tester figured a new mixture of grain costing \$33.00 a ton. This new mixture had the same amount of food value in protein and total digestible nutrients as the first ration. The dairyman had been feeding 15 tons of grain a year. At a saving of \$17.00 a ton this dairyman saved \$225.00 in his feed bill alone as a result of

being a member in a dairy herd improvement association.

Nelson Omans of Newaygo County, fed grain to his cows while on pasture in 1925. In 1926, no grain was fed to the same cows while on pasture. His records showed a decrease of 95 pounds butterfat per cow in 1926. There were 15 cows in the herd and a loss of 1,425 pounds butterfat occurred. The market value of the butterfat at 40 cents per pound was \$570.00. The grain cost to feed the herd for three months during 1925 was \$90.00. Thus, by saving \$90.00, a loss of \$570.00 resulted due to failure to feed the cows grain while on pasture. These facts were made available through the D. H. I. A. records.

Ernest Bailey, Prescott, member of the Ogemaw D. H. I. A., was the owner of nine cows averaging 281 pounds of butterfat in 1923. In 1928, his herd of 11 cows averaged 415 pounds butterfat. During this period, only two cows were purchased. The daughters of his herd sire, Sanilac DeKol King 218506 made the difference of 134 pounds of butterfat production per cow. As the average price of butterfat was 45 cents, there was a difference in returns of \$60.30 per cow and \$663.00 per year for 11 cows. Three-fourths of the herd are still immature compared with the original mature cows. The herd improvement association records by proving the value of the sire paid good dividends on the investment.

Separator or skim milk is also tested by the cow tester for dairy herd improvement association members. Recently, a test of separator milk for a patron in the Calhoun D. H. I. A. by the tester resulted in finding 1.5 per cent butterfat in the skimmilk. The milk produced by the herd was 7,111 pounds in the month. At this rate of production, with a test of 1.5 per cent, there were 106.6 pounds of butterfat going into the skimmilk. Butterfat was valued at 52 cents per pound.

Fifty-five dollars and forty-three cents worth of cream each month was fed to the hogs and poultry. The dairyman decided that 52 cent butterfat was an expensive hog feed and immediately had his separator

properly adjusted.

You Can Get These Benefits

You will be glad to know that over 3,000 herd owners in 90 Michigan D. H. I. A's. are now making use of this opportunity to increase dairy profits. Back in 1905, the first association of its kind was formed in Newaygo County and this organization is still testing because the task of getting the greatest dairy profits needs constant attention.

This is your opportunity to get bigger dairy profits. Talk to your neighbor about forming a testing association. Ask your county agricultural agent to aid you to get 25 or 26 dairymen to form a testing association. Also, write to the Dairy Department, M. S. C., for further details.