 Remarkable Difference in Dairy Cows

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A Short Story of Striking Comparisons Within Illinois Herds Revealing Thousands of Worthless Cows and the Way to Get Rid of Them

The actual relation of the cow and the herd to the real profits derived from dairy farming is little realized by the people depending upon this occupation for a living. There is no line of farming where well-directed effort will pay so large a profit. Notice I say well-directed effort, for the profits derived from dairy farming depend almost entirely upon the good judgment and common sense used. The profits on the average dairy farm in Illinois today can easily be doubled.
WHAT ROSE HATH WROUGHT

Rose was an Illinois Experiment Station cow with a record

ROSE. — Born, February 17, 1890.
Died, December 27, 1906.
Produced an average of 7,258 lb. milk containing
360 lb. butter fat per year for 12 consecutive years.
Returned more than $1,200 in 14 years.

that made her famous. Her total production for 12 years, 87,102.3 pounds of
milk—43½ tons—10,248 gallons—1,281 cans of 8 gallons each—106 wagon loads
of 12 cans each; allowing three rods for a team this would make a procession one
mile long—6 car loads, making a good milk train.

Butter for 12 years, 4,318.36 pounds, worth at present prices
(25 cents per pound), $1,079.59.

Skim-milk for 12 years, 72,585 pounds, worth at 15 cents per
100 pounds, $108.88.

Total receipts for 12 years (not reckoning calves nor manure),
$1,188. 47, or $99.04 per year.

Just think what the receipts of a dairyman would be whose
herd consisted of 25 cows of this kind—$2500 per year, not count-
ing calves and manure.

Rose was bought for $50 when 4 years of age. She has had
only ordinary treatment, no better than she would receive on a
good dairy farm. She has not been pampered or fed to produce
the utmost amount of milk.
Rose is Representative

Remarkable as is the performance of this grade cow, she is not heralded as standing apart in unapproachable splendor, but as a great leader of the thousands of money-making cows in Illinois.

A Very Different Record

In the same herd, Queen has become conspicuous for a very different reason. She has six years' record of 152 pounds per year and in exact comparison for one year Rose made more than three times as much butter fat as Queen from exactly the same feed both in kinds and amount, and with the same care.

Discovered Only by Scales and Test

Quite unsuspected these Queens have everywhere honeycombed dairy society. All of them are "dead beats"; they will never pay for their board. The more of them a dairyman keeps, the poorer he is. The way to find out—the only sure way—is to weigh and test the milk of each cow.

QUEEN.—Six years' record averages 152 lb. butter fat
COW PATHS THAT LEAD FAR APART.

Here at the Experiment Station are two other cows the story of the work of which is worth telling wherever cows are kept. They were brought up alike on the farm and obtained their early education in the same herd of one hundred cows in the Elgin region. Here at the University, with the same identical surroundings and equal opportunities, they have drifted far apart in character.

THREE YEARS’ RECORD OF MILK, FAT AND FEED

The record is complete for three years and includes every pound of feed each cow ate, both summer and winter, as well as the weight and test of the milk.

405 Lb. Fat vs 138 Lb. Fat

Cow No. 1—Three years, 34,171 pounds milk, 1,214 pounds butter fat; one year 11,390 pounds milk, 405 pounds fat.
Cow No. 3—Three years, 11,491 pounds milk, 414 pounds fat; one year, 3,830 pounds milk, 138 pounds fat.

No. 1 PRODUCES TWICE AS MUCH FROM SAME FEED

These cows were both cared for in the same way and given the same kinds of feed and encouraged to eat all they could make good use of. Equal amounts of feed made in the one case 188 pounds of butter fat, and in the other 100 pounds of fat. The one cow produced nearly twice as much as the other from exactly the same feed in kinds and amount.

PROFIT OF $34.51 vs LOSS OF $5.62

Counting butter fat at 23 cents per pound, and taking out the exact cost of feed, the one cow returns a clear profit of $34.51—and the other lacks $5.62 of paying for her feed.

40 COWS, $1,380 PROFIT OR $500 LOSS

Forty such cows as No. 1 would return a clear profit of $1380.40 per year; and a herd of eighty, $2760.80. But 80 No. 3’s would lose a dairymen $500.
Cow No. 1.—Average record for three years, 11,390 lb. of milk; 405 lb. butter fat.

From the same feed, this cow produced 1.88 times as much butter fat as cow No. 3.

Returns a clear profit of $42.60 per year.

Cow No. 3.—Average record for three years, 3,830 lb. milk; 138 lb. butter fat.

Lacked $5.62 per year of earning her board.
WHEN THE COWS COME HOME.

Twenty-five cows, each producing 301 lb. butter fat per year, return a profit of $788.

This is the average production of 139 cows comprising the best fourth of 554 cows in 36 Illinois dairy herds.

The lowest fourth (139 cows) of the same 36 herds averaged 133½ lb. butter fat per year.

The picture below shows exactly how many cows of the poor kind, (1,021) it takes to return identically the same profit, ($788) as the above 25 good cows.
WHAT IT MEANS TO THE MILLION COWS IN ILLINOIS.

Illinois has a million dairy cows. Like men, they do not all travel the same path nor reach the same destination. Whither are they going, and how far, in their service for the dairyman? Who has stopped to ask, much less to answer the question? What difference is there in their efficiency? In the profits they leave in the owner's pocket at the end of the year. The dairyman has been in the dark as to the paths his cows take. But under the arc light of the scales and the Babcock test the parting of the ways is made plain. Half of all the cows in Illinois take the one or the other of the above paths.

Extensive investigations by the Illinois Experiment Station indicate that a fourth of all the cows in this state follow the left-hand path. That is, they produce no more than the average of $133\frac{1}{2}$ pounds butter fat per year. That is the average of the lowest fourth of $554$ cows in $36$ Illinois herds tested a full year by this Station. This path is not the "milky way"; it lacks the upward arch, the starry brightness and—the milk.

PROFIT OF 77 CENTS PER COW PER YEAR.

At $23$ cents a pound for butter fat these $139$ cows make a return of $30.77$ to the dairyman. At $30$ per year for feed—and who would figure it less—their profit is $77$ cents per cow per year! It takes one of these cows $4\frac{1}{2}$ days to earn one cent profit, or the fun of milking her $45$ times to earn the enormous sum of $5$ cents.

AVERAGE PROFIT OF $31.32.

But the highest fourth of the $554$ cows produce $301$ pounds butter fat, which means an income of $69.32$ and a clear profit of $31.32$ per cow (after taking out $38$ for feed). These are the cows taking the right-hand path above. These are certainly the right cows, and the path they take leads right on to the right things for the dairyman—profit, progress, plenty, an attractive home, wider usefulness, higher education for his children, and real enjoyment of country life for all the family. And the right dairyman will take great pains to add this kind of cows to his herd.

ONE COW EQUALS 41 COWS.

The average cow in that right-hand path is worth as much in actual profit to the dairyman as $41$ cows in the left-hand path; and $25$ cows of this better sort return as much profit as $1021$ cows that turn to the left.

As seen above, the poor cows naturally find their way to a poor barn, a poor home, a poorly kept farm and poor dairyman—and in the end, the dairyman will do well, after slaving hard for
years, if he does not find his way "over the hills to the poorhouse." If all these things are not met with on that cow path, it will be no fault of the great bovine procession traveling that way.

**Whole Herds Go Wrong**

Not only individual cows but large portions of herds, and even whole herds, take the wrong path at the parting of the ways. Of these 36 herds, all the cows of the poorest herd averaged a profit of but $1.74 per cow per year. The average cow of the best herd is worth more than 24 cows of the kind that forms the poorest three herds. The writer knows three other dairy herds the milk returns of which show a profit of but 62 cents per cow for the year. While in the same neighborhood are three herds the milk of which averaged a profit of $60.94 per cow. One cow of this kind equals 96 cows of the other three herds. And in another locality the same kind of a contrast came to the writer's attention.

A little pondering of these divergent cow paths may help the dairyman to make a good turn for himself—turn on the light of the scales and test—turn off the poor cows to the butcher—and turn all his attention to the high-producing cows that make a specialty of turning feed into milk and money. It all depends on which path the cows take—and which cows the dairyman take.

The profitless cow is a real and living issue and a large one in dairying for bread and butter. One of the greatest and easiest steps of improvement in the dairy business today is to discover and weed out these poor cows. Isn't it time to stop guessing at these vital elements in the profit of the dairy business and to find out for sure—by weighing and testing the milk—what each individual cow is earning for the owner?

**Difference Not Realized**

We all know there is a difference in dairy herds as well as in individual cows. But do we clearly understand that some Illinois herds do not pay for the feed given them? That other herds pay too small a margin of profit to justify the investment in money and labor? And that still other herds are making their owners big money? When we realize this it is easy to see how profit can be doubled. Do dairymen in general know that these differences rest on plain causes that may be readily understood, and that a change from the poor herd to the highly profitable herd is a comparatively easy matter, within the reach of any farmer who is able to keep cows at all? Both these classes of cows are common in every community. As a rule there are some of each in every herd.
19 of these cows equals 1 of the other herd.
190 of this kind equals 10 of the other herd.
380 of this kind equals 20 of the other herd.
760 of this kind equals 40 of the other herd.
1520 of this kind equals 80 of the other herd.
12

No Accounts Kept

It is equally surprising that these poor cows are not known to the owner; their demand on his charity is not suspected. It is very hard to find a dairyman who employs any means whatever of knowing the exact returns from each cow in his herd. The ordinary dairyman has no idea of how much milk, butter fat or butter each animal produces in a year, or how much it costs to feed her. The natural result with the majority of our dairy farmers is large investment of money and labor for too small returns.

Both Kinds in All Herds

Few, if any, herds we have tested contained no cows of the lowest fourth that produce only 133 pounds fat. Nearly every herd also has some good cows producing over 300 pounds fat. Have a profitable standard and raise this each year, selling all cows that fall below this standard. This is easily done and it requires much less energy to weed out the poor cows than it does to continue to milk them.

In Same General Class With Rose

Such records as we have discussed indicate that one-fourth of all the dairy cows in the state may be placed with Rose in the same general class of high-producers. This is made still more emphatic by the contrast of the poorest one-fourth of the same 554 cows, yielding an average of only 133 \( \frac{1}{2} \) pounds of butter fat.

The Mission of Rose

The 12-year-record of Rose and her pioneer identification with these discoveries (all made by weighing and testing the milk of individual cows throughout the year) have given Rose a distinct mission to dairyman everywhere—a mission of far more value than the tons of milk she gave and the dollars she returned her owner. And this is her message: "In almost every dairy herd are several very good and several very poor cows, but the dairyman doesn't know how good or how poor they are. The difference is surprising and vital to the dairy business. It is the difference between success and failure, between poverty and plenty. Find out what each cow is doing—or isn't doing—(by weighing and testing her milk). Keep the good cows and keep no others."

Let the memory and record of Rose ever stand, first, for a definite knowledge of this difference in production, and second, for a settled policy of improvement of the herd. Standing for this, Rose will yet save the dairymen who are milking the million cows of Illinois 4,000 times $1200 every year instead of returning one owner $1200 in twelve years.
TIED TO THE WRONG COW

Americans don't take to the idea of chains and slavery, but many an Illinois dairyman has unconsciously drifted into the condition of the man in the picture. He is not chained to a fellow prisoner or to a post, but to a common (altogether too common) brute—to a worthless willful cow.

He doesn't know where he is going; he simply follows the cow. That's how he got tied up to this creature; he didn't know what he was doing, nor what the cow was doing—or rather what she wasn't doing. In fact, there's been altogether too little looking and doing in this man's business. **The dairyman has blindly followed without figuring;** he has worked hard with his hands but little with his lead pencil, and the dollars have come his way very reluctantly. And as for the cow the only thing she has done right well is—the dairyman; she is "doing" him beautifully. If the dairyman ever gets hold of that big key they'll be "something doing" in that dairy! He will soon hand over his end of the chain to the butcher.

**The cow is not worried.** She is not disposed to look on the dark side of life as long as she can go where she pleases and get a living without earning it. **Thus far she has found no trouble in pulling her owner along without his asking any questions,** and she now feels sure that her milk record will never be inquired into. She doesn't know about the key within his reach.

That chain has never galled her shoulder, but she has plenty of "gall" for all that. She has been satisfied to make 133 pounds of butter fat in a year and to return to her owner a clear profit of 77 cents in 365 days. If the dairyman had 474 cows of this kind he could make from them just one dollar a day! With that he could keep soul and body together.

**But do not mistake this cow for a rare specimen** of an almost extinct family. On the contrary she is very common and popular on all our prairies. She is a cow of consequence and not to be sneezed at and dismissed from mind. She is, in fact, a leader; she leads that dairyman (and a great many others) where she will, while she grazes contentedly. **She also has a following of one-fourth the million cows in Illinois**—250,000 of them have learned bold assurance in using the dairyman's feed and barn and time and capital for a cent and a half a week per head. This cow is right now doing a great stroke of business in Illinois dairying. The only stroke that can ever get ahead of her is the stroke of the butcher's mallet on her head.
It may be said to the credit of this cow that she is not a vicious animal. The dairyman has nothing to fear from her horns or her feet. She is a well-behaved creature, familiar to every farmer, and usually there is nothing suspicious about her manner. But when it comes to remorseless stealing of the bread from the mouths of the dairyman’s family, her tribe may well be classed with the great business sharks that prey upon the people. She has kept the dairymen of this state out of fully five millions of dollars the past year without the slightest shame or nervousness. And yet the dairyman follows this cow as though he had never known freedom from such an encumbrance.

The dairyman who says that dairying doesn’t pay is ten to one boarding several cows of that kind in this herd.

The dairyman is not exactly easy in his mind. That chain is heavy and tight, but he has carried it so long he thinks that burdens belong with dairying, or he lays the blame to ill luck or a poor price for milk; or perchance he says he cannot afford to keep good cows, forgetting that he could less afford to keep poor or worthless ones.

But see, the hands of science and the most successful dairy experience have provided him a key to the situation. As soon as ever he sees it—O, that he might see!—he will make use of the scales and Babcock test and find out what every cow on the place is doing for him—or against him. Armed with that knowledge, he will never follow that pious old fraud of a spendthrift cow again.

The cow for this dairyman stands behind him. She has learned the knack of turning feed into milk and butter fat. She represents the average production of the best fourth of the dairy cows in Illinois, (800 pounds of butter fat per year), and the dairyman should get better acquainted with her. She is better cow than he thought. In fact, he has not thought enough about this cow or known how many such are in his herd. He cannot know without using the key—weighing and testing the milk of each cow for the year. He would have a vastly easier time of it if he were tied to this cow, and to this cow alone. And as sure as he uses the scales and test and comes to know each cow’s production, he, like all other dairymen who have tried it, will gradually change his herd to this kind of high-producers. And that will inevitably lead to more profit in his business—to better education for his family, to a more comfortable home, and to the conveniences and privileges that go with real prosperity.
TIED TO THE WRONG COW

HE'S TIED TO THE PROFITLESS COW

133 LB. BUTTER FAT PER YEAR

KEY TO THE SITUATION WITHIN HIS REACH

THE USE OF THE SCALE AND TEST INEVITABLY LEAD TO THE SELECTION OF HIGH PRODUCING COWS — BETTER HOMES, EDUCATION, MORE COMFORTS.

300 LB. BUTTER FAT PER YEAR

DEPT. DAILY HERDING
UNIVERSITY OF ILLINOIS
The faults and failings of the worthless cow have cancelled or concealed the profits of the good cow, just as human idlers are a tax upon their fellows. The good cow has to do the work for both. Not knowing the production of either, the dairyman has overestimated the poor and underestimated the good. One cow of the good kind, producing 300 pounds of butter fat per year, is actually worth to the dairyman more than forty cows of the other kind. When the dairyman knows the good cows in his herd—knows how good they are—he will be just as anxious to tie to them as they are willing and faithful to serve him.

When will the dairyman start the rebellion (and the test), throw off his fetters, and fill his barn with the kind of cows that are glad to earn him good money and make possible a better way of living for his whole family?