

Some of the Elements and Effects of Dairy
Progress as Seen in Wisconsin.

Dairying in Wisconsin practically dates from 1870. In that year came the first attempt, in a humble county paper, The Jefferson County Union, to give the industry thought, discussion, public expression, a literature. An organization followed in the form of The Jefferson County Dairymen's Association, which was the ^{precursor} ~~predecessor~~ of the Wisconsin State Dairymen's Association organized in 1872. From that day to this, this Association, one of the most effective of its kind in the United States, has held steadily to the one purpose of promoting dairy knowledge and improved dairy cattle and methods among the farmers of the State. It has not been led off by the idea that the creamery or the cheese factory are at the bottom of success. These are only secondary.

Make the farmer an intelligent, reading, thinking dairyman and all these secondary effects in their best order will follow. Create in the farmer a desire for more and better dairy ideas and all ^{other} ~~these~~ material results will follow as supply follows demand. As a consequence of this wise policy there has been more cheese factories and creameries built in Wisconsin in the past 20 years than in any State in the Union. In no State has there been such an advance in the production of butter and cheese, and high grade dairy cattle. All this mind you, in a State where two thirds of its area is yet undeveloped in a farming sense.

At an early date in its history the Wisconsin Legislature recognized the importance of the State Association by a liberal annual appropriation which has been increased until now it receives two thousand dollars a year. This money is expended in the holding of its annual conventions and the employment of traveling teachers among creameries and cheese factories. Its conventions are held in different portions of the State and are crowded with farmers who come to them. One of the most powerful educational features of the convention work is the taking of a Cow Census in the neighborhood of the meeting. The work consists in sending a competent man to interview say 50 patrons of creameries or cheese factories, who have taken milk to those institutions for a year. The man investigates and determines by the closest estimate possible, the number of cows each patron has milked for the year; the character and cost of the feed; the breed of his cows; how well they are cared for; what are the conditions of his stables, his farm management, and finally how he feeds his own mind; what he reads in the form of dairy or agricultural papers. Then the expert goes to the creamery or cheese factory and finds the exact amount of ~~milk~~^{milk} each herd produced and the net cash it earned. A calculation is then made of just how much money each cow earned for every dollars worth of feed consumed. Each patron is designated by a number and no names are called. All of this is worked out by the census taker and made the subject of discussion for one of the sessions of the convention.

The taking of the census arouses an interest in the farmers for it is a new analysis to them. It means instruction ^{and comparison} and they are curious to see the figures which are tabulated

on a large chart and thoroughly discussed. This feature alone produces a large attendance of the local farmers. The Convention thus becomes a powerful stimulator of better ^{dairy} thought and knowledge. *in that section of the state*

The State Association has been the center of influence from which has proceeded all of the legislation which has been had. The building of the Dairy School, The Farm Institutes, The Short Course, the strongly equipped Dairy and Food Commission with its force of able inspectors, all these have been promoted by its influence on the various legislatures. By virtue of its standing for the farmers, it has been able to command their political influence and support in all parties for whatever it has asked of the State. From out the old parent Association has grown two younger bodies both strong and active in the furtherance of their special interests. These are the State Creamery Butter Makers Association and the Cheese Makers Association. All of these agencies that I have enumerated are educational and informing in their influence upon the farmers of the State. It is of but little use to build creameries or cheese factories in communities where there is no sound dairy judgment to guide and support them.

The natural tendency⁴ of farm communities is to drop back not go ahead. This can easily be seen and demonstrated by the situation today in many of the Eastern States. From 1865 to 1895 there was a constant decline in some of those States in the quality of farming, of farm thought, farm brain, farm methods and finally in farm values *and fertility*. What do you suppose it was that caused a loss of fifteen hundred millions of dollars in the value of farm lands in those thirty

years in New York alone. I was raised to manhood in one of the richest portions of that State. I have seen farms that once sold for \$100 to \$125 an acre, ^{and} ~~and~~ for \$30 to \$50. The men who guided the destiny of those farms gave no attention to their own farm education, or the developement of their minds in sound agricultural knowledge. They allowed their soil to run down, gave up growing clover, let the buildings decay. All these things are a sign of the growth of ignorance not intelligence. The same fate will come to Wisconsin or Iowa unless the great agricultural mind is kept constantly stimulated to better knowledge, better methods and greater pride in the farm and what it produces.

It is for the purpose of arresting this downward tendency and giving to the State a brighter, better informed set of farmers in the future, that I have striven with other men for years to secure the teaching of the elements of agriculture in the common school.

We have done something in this direction in Wisconsin. Every teacher must study elementary agriculture and in about a dozen counties, I think, we have established county training schools for teachers, the special purpose of which is to teach the teacher how to teach agriculture. In addition we have several County Agriculture Schools, established by the Counties and mainly supported by the State. In all this, ~~what~~ we have worked first, as we should, to the promotion of right ideas of dairying and a higher grade of farming. Our farming population is largely of foreign extraction, yet they have done nobly in supporting every measure that promised a larger, better understanding of the meaning of

of modern dairy farming.

The justification of all this basic effort is seen in the almost phenomenal growth of the dairy product of the State until now we have an annual cash revenue from our cows of over fifty millions of dollars, while the State has grown immensely in wealth through the great appreciation in value of her farming lands. The average selling value of farms in my county, Jefferson, in 30 years has increased over 500 per cent.

The farmers of Wisconsin are turning their attention to the breeding of registered cattle of the four standard dairy breeds, Jersey, Guernsey, Holstein and Ayrshire. Buyers from all over the Union as well as Canada, Mexico and South America are convinced of the superior character of Wisconsin bred cattle. Our farmers are learning some valuable lessons in the matter of building sanitary stables and the extermination of tuberculosis. I doubt if there has been more or better work done in any State in this important particular, than is being done in Wisconsin. All this tells in the reputation of our cattle abroad. There are more miles and more acres of alfalfa, I believe, in Wisconsin than in any other State in the middle west. All these things have come through the growth of intelligent conviction in the minds of our farmers. What caused it? Constant agitation, constant pushing of these better ideas on their attention. All there is to education is comprehended in the one word "Contact." Contact with ideas, with men, with things, with books. The less contact men have, the less educated they are.

For thirty-six years I have been steadfastly at work doing what I could by tongue and pen and example; by the aid of organization, of statute law, and by specific education, to create a class of intelligent, skillful, and highly successful dairy farmers in Wisconsin as well as everywhere. I cannot lay claim to any particular foresight. I did not have the gift of prophecy. I could not see the end from the beginning, for the end is not yet; but I felt a deep conviction at the beginning, that dairy husbandry meant redemption to American agriculture more than any other form of farming. It meant a square deal with the soil. It meant the introduction of science, of research, of experiment, of investigation, and more than in all other forms of farming, it meant organization. I could not see what all that had to disclose. I did not care to see it, for it was enough for me that the promise was there.

Have you ever thought what a wonderful energizing has come to dairy farming by virtue of the element of organization? Here we have State Associations, National Associations, International Associations, and more forming. We have Dairy Schools supported by public taxation, and coming down to bed rock, to the farmer and the cow, we have the creamery and the cheese factory.

Let me call your attention to a great political fact. It is by virtue of this great host of enrolled troops, that grasping capital has stolen less of the commercial liberty of the dairy farmer than of any other. The first great battle against the trust was fought by the dairy farmers

in their grapple with Congress for the present Oleomargarine law. More than anything that ever happened did it warn selfish capital to keep hands off the products of the cow. But approaches are being laid for a great surround of the farmer here as well as elsewhere, in the form of the American Dairy Products Company. Immense capital is behind it, and it means final slavery for the dairy farmer in the future. It proceeds on the theory that the American farmer will sell anything he has even his birthright to life, liberty and the pursuit of happiness. If they can buy the creameries and cheese factories, or so many of them as to constitute a powerful lever, they count that they will control the market, the railroads, and the farmer. There is just one path of safety for the dairy farmer, the path of co-operative creamery and cheese factory enterprise.

A few years ago I went before the Inter-State Commerce Commission to fight against a petition on the part of the great butter, egg and cheese shippers of the country, to give them a twenty percent differential freight rate from Chicago to the Atlantic seaboard as against the individual creamery and cheese factory. The granting of that prayer meant the enslavement of every dairy farmer in the west. Did they see their danger? Not where were they? Busy on their farms, many of them saying to themselves that they did not need to read, and keep informed on this dairy question.

Later, the same effort was renewed by a plea to the same effect before the Joint Traffic Association in New York city, and I had to go there, and make it clear to those trunk line managers that they must not choke the breath out of the

individual dairy farmer, for it would mean death to our entire dairy industry. The crowning triumph of organization came in the fight of the National Dairy Union for the present Oleomargarine Law. You farmers of Iowa know, or ought to know, the history of that fight. I will not recount it, but I want to say this: It was hard work to arouse the dairymen to put in a little money to save their own property from destruction. Think of it! We barely squeezed out \$30,000 with which to fight a big trust with a hundred and fifty millions of capital. The farmers of Iowa or Wisconsin, or New York or Ohio ought to have raised thirty thousand dollars alone. As it was, we barely squeezed through, by making it cost the men who were doing the fighting an immense amount of labor, three years of time, and with one man over fifteen hundred dollars.

Why did it cost so much effort and time and money to get even a small part of the dairy farmers of the country into a fighting line? I will tell you. Because so few among them are readers of the literature of their own business. Go into any creamery for the proof of this. One or two men may be, were readers of dairy papers where this matter was being constantly discussed. We did not need to arouse them. They saw the danger. They were ready with their money and their effort. Think of this. There are over fifteen thousand creameries and cheese factories in the United States, and we raised a total sum of about \$3.00 apiece to fight this great wrong. Do you think that would have been the case if the farmers who owned the cows, the men of all others most interested in stopping this flood of counterfeit butter, had been well read, well posted and keenly alive to the situation? No, you don't think so.

My friends, we as farmers must learn that it takes a good deal of knowledge to keep our property, our liberty, our character, after we earn it. We must learn the lesson that we cannot cope successfully with dairy farming anywhere without special knowledge. We must keep supplied with that knowledge. We have the ability, the brain power, why not use it?

WHAT DOES DAIRYING MEAN.

We have been looking at the cow and all that comes out of her in a wrong light. Think of what dairying means. You must look at it broadly. It means first the cow, a profitable cow at the pail, else there is loss. You can't make it up ^{in some} other way. It means a healthy, well drained, well ventilated, well kept stable, for your cows live there 30 hours out of the 24 for over 300 days in this climate. It must be warm enough to help the cow secrete milk, 50 to 55 degrees. It means a knowledge on your part of bacteria, what they do, and how you can and must fight them. It means good, abundant feed of the right kind. It means you should know something of what science teaches in constructing a ration for your cows.

~~What does dairying mean.~~ It means good sound knowledge on your part of managing a farm, raising crops that the cow can use, and harvesting them in such a way that they shall be welcome, palatable feed to her. It means that you shall know something about soils, how to till them properly, fertilize them and keep up their native fertility and every year add to that fertility. It means a knowledge on your part of dairy cattle breeding; the difference between the dairy and the beef temper-

ment; a knowledge of breeds and what they are good for; some idea of pedigree and the proper mating of male and female to produce dairy results. It means a knowledge of what milk and cream is, of its danger and tendencies, of the action of bacteria, and how to guard against them. Remember that you, the milk and cream producer, are responsible almost wholly for the quality and final price of the butter. The creamery can do but little to mend what you make. The farm end of this dairy business is the big end, and can it be adequately managed by men who don't care to understand what they are doing? It means, if you are a private dairyman, a knowledge of the skillful manufacture of butter and the commercial ability to sell it well. You will be badly punished if you fail here.

It means, if you are a patron of a creamery or cheese factory, that you shall know how to co-operate with your brother farmers in the up-building of that enterprise. You shall study as to what co-operation means. You shall not make the mistake hundreds and thousands of patrons do, that your lack of responsibility, your lack of honesty, your lack of skill, your lack of intelligent interest, is to be made good in the market by the creamery. You are to learn that as sure as the sun rises, you sell what you bring, that you are the man that is selling the butter. Don't let the notion get into your mind that you can be careless, dirty, or ignorant of your duty as a principal and the creamery will make it up. You either co-operate to make good butter, or you co-operate to make bad butter. That's what co-operation means. It means that every creamery will be governed in its conduct by the character of the farmers about it. If they are a well read, intelligent clean set of men, they are bound to have a first class

creamery. I never knew it to fail. On the contrary, if they are careless, indifferent, ignorant of their duty, then they will have that sort of a creamery. You must put cause and effect where they belong. It means a commercial knowledge and a constant posting on the markets. We must know the worth of the things we have to sell or we are easily cheated.

And lastly, it means a right estimate on our part of the value of dairy knowledge, of dairy observation, of dairy thinking and dairy reading. This constant strengthening of the mind to a broader vision and better judgment is needed at every step of the way. This you cannot get by comparing yourself with yourself. You must constantly compare your thought with other thought, your work with other work, your results with other results. You must constantly feed the mind with this knowledge. Don't think that this is an inferior education. It is not. It is a high order of education. The strongest farmers I have met in their outside judgment and knowledge, *as citizens* were the best educated men as farmers.

Now let me say that there is a vast amount of meaning that I have not touched, at every one of these steps. I have said nothing of your ability to manage hired help, to rear young stock, to construct sanitary stables, commodious farm buildings, silos, etc. At every step of the way there are details that call for the best wit and wisdom you can possess. Do you think a man can comprehend what all this means who spends no money or time on his own power of comprehension? Farming of all kinds is filled ^{too much} with cheap men whose only idea is cheapness; cheap thought, cheap ideas, cheap knowledge, with a premium thrown in, cheap work, cheap results and at last a cheap place in Heaven. We must change these men over to

a more intelligent, broader view of what dairy farming means to them, their families, their fellow farmers and the state and nation. No living man can become a first class successful dairyman who fills his mind with ideas of a low grade or order. I have been looking at dairy farmers, studying dairy farmers all these years in every state and all the provinces of Canada, from Manitoba eastward to Nova Scotia. Every where the verdict is the same. A successful dairyman is one who puts mind, thought, study into his work. Who welcomes the knowledge of other men; who has a hospitable mind. The unsuccessful dairyman, and they are just alike wherever you find them, is the man who rejects dairy thought, dairy study. Show me the reading, studious man and he is a success. There is the division line. Dairy farming calls for special thinking; special knowledge. That is the reason you see all this special effort in Dairy Schools. Special dairy laws, dairy cows, dairy commissioners, dairy inspectors, dairy associations. You cannot take a low view of the business or your own mental equipment, and reap the best rewards in it.

COW CENSUS INVESTIGATIONS.

I have been taking regular cow census investigations in ten states from Iowa to New England, (about 13000 cows, 1300 farmers and their herds have been studied. I have spent over \$3,000. in this head rack study.

In all these Cow Census investigations the central purpose has been to dig down to the bottom reason why so many farmers are carrying on the dairy business with such serious loss. Strange to say that we find a startling proportion of the farmers are totally unconscious that there is any loss. Who has put them to sleep? They have never looked into the matter. They never spent an hour in practical test work. They seem to have enough money, they say, to pay their debts. Their credit is good at the store. "How can it be" they say, "that one third of all our cows are dead beats?" And then they shake their heads dubiously and go on in the same old way with the same practices and the same kind of cows.

There is something strange in this peculiar unwillingness of the farmers to look into their own business or to accept the conclusions even of other more enterprising farmers who have investigated. The faith of the average farmer in a peer cow is something sublime. It is only equalled by his faith in himself. Hold on! May be that is just where lies the difficulty. Now let us put a question wedge into this tough log. Is it the Man or the Cow? Which must we change first? I think we must change the man. Running all through these hundreds of investigations with these hundreds of herds and their owners, runs this ray of light, this never varying conclusion. The man who reads, study, take an interest in their business, have the best cows. They make the most money. They have the best farms, the best buildings, produce the best

milk. In short, they are the best dairymen.

I have seen where a Short Course boy, spending three months in intelligent study, went home and in three years he had changed the whole course of events on the old home farm. He brought back with him the books and papers he had read and studied, and the old father was wise enough to say "I sent the boy there to learn by the new lights I am not going to quench it now. I guess these people wouldn't teach him to go wrong." The old father's judgment helped in many ways in making a good fit for the new ideas. In one instance I saw a herd of cows reduced from 30 rather low average animals to 20 of high average, and the net profits were more than doubled. The father said to me in a frank ingenuous way: "I don't see how Billy could find all this out in three months, and I living with cows all my life time and not see it." Billy didn't find it out in three months. That simply gave him the start. The father had never got started. In another case I saw the old father stubbornly refuse to accept the conclusions of his son and they parted. The son is a flourishing dairymen, and the father is struggling on in the same profitless way. The parting came over the purchase of a dairy bred sire. The son now has a fine herd of ^{grade} Holstein cows. The father still sticks to his "dual purpose" animals, and says he "can't see how Tom gets along as well as he does with them row headed critters that will eat more than they are worth." Further comment is not necessary. Instances like this might be multiplied by the thousands.

FROM A SHORT HORN STAND POINT.

The Minnesota Cow Census carried on by Hoard's Dairyman under the direction of Mr. Frank Vinsley inspired the editor of "Successful Farming" to classify those patrons who used Shorthorn cows with a view of ascertaining their exact percentage of profit or loss over cost of feed and also, what was the percent of profits of those who read dairy literature and the percentage of loss to those who did not read. The breed of cattle is the same in both cases.

There is a lot to be learned from studying this little table. Look it over please and note what it means to fertilize the mind with thought and knowledge that belongs to one's business. So many men there are who think it makes no difference whether the farmer reads ^{and studies} about his business or not.

What does this record say? *Turn to the slips I have distributed and follow me please* READERS.

No. of cows, in herd.	Per Cent Profit.
8 Shorthorns	10.
5 Shorthorn	16.
8 Shorthorns	32.
8 Shorthorns	23.
6 Shorthorns	31.
12 Shorthorns	73.
9 Shorthorns	82.
7 Shorthorns	78.
11 Shorthorns	22.
7 Shorthorns	80.
7 Shorthorns	53.
7 Shorthorns	80.
5 Shorthorns	14.
6 Shorthorns	6.
13 Shorthorns	23.
11 Shorthorns	52.
15 Shorthorns	17.
6 Shorthorns	15.
5 Shorthorns	38.
19 Shorthorns	69.
19 Shorthorns	43.
13 Shorthorns	25.
9 Shorthorns	49.

5 Shorthorns	72.
5 Shorthorns, loss	4.

Note the remarkable difference in the percentage of profits.
NON-READERS.

No. of Cows, in herd	Per cent Loss.
8 Shorthorns	4.
8 Shorthorns	20.
6 Shorthorns	12.
11 Shorthorns	21.
14 Shorthorns	42.
10 Shorthorns	3.
29 Shorthorns	16.
6 Shorthorns	3.
10 Shorthorns	6.
15 Shorthorns	13.
10 Shorthorns	42.
7 Shorthorns	3.
18 Shorthorns	34.
9 Shorthorns, gain	11.

There were twenty-five who read dairy papers, only one of these made a loss. There were fourteen who did not read dairy papers, only one of these who did not lose.

Here is a showing of thirty-nine herds. - That means thirty-nine farmers. Reduce the proposition to percentage. 64.2 percent read; 35.8 do not read. 64.2 percent made a profit; 35.8 percent lost money. Do you think the quality of a man's mind has anything to do with his prosperity in the dairy business? Again those who read averaged a profit of 39 percent on the cost of their feed; those who did not read averaged a loss of 14.6 percent. The average cost of feed per cow for the readers was \$25.78; for the non-readers \$23.46. It cost them less for feed, still they lost.

Now do you think these Minnesota farmers, all patrons of a creamery, are not as well posted as the Iowa farmers? Do you think Iowa has any advantage in soil, or climate or cows, or skill or brains? I do not.

Don't you think that an investigation of the real situation of the Iowa creamery patron⁶⁶ as it exists between him and his cows, would disclose just as serious losses because of a lack of dairy reading and study? I do. The very first of these cow census⁶⁶ in the West was taken in Iowa in 1900 by Mr. Frank Kinsley of McGregor. Here are some of the conclusions of that Census.

Total No. of cows in 100 herds was 982. Four herds averaged from \$2.11 to \$2.30 for each dollars worth of feed consumed.

61 herds returned from \$1.00 to \$1.91 for each dollars worth of feed consumed. Of these, 12 returned from \$1.50 to \$1.91; 23 herds returned from \$1.20 to \$1.50; 26 herds returned \$1.00 to \$1.20.

35 herds returned less than a dollar for each dollars worth of feed consumed; the loss ran from 2 cents to 66 cents.

The extreme contrasts are one man receiving \$2.30 profit another 44 cents loss. The four herds that gave from \$2.11 to \$2.30 for every dollars worth of feed were high grade dairy cows or high grade Jerseys.

Grade Jerseys	31.24	The only herds that returned \$30.00 or more above the cost of feed.
Dairy	32.76	
High grade dairy	33.88	
Full blood dairy	33.46	

I confess that it puzzles me beyond comprehension to account why so many farmers with large herds of cows, knowing that they are doing unsatisfactory work, that they will not see that the trouble lies in their lack of sound dairy knowledge. I

cannot see how they can help realizing this. If they realize it, why should they be so reluctant to give themselves this information? Of one thing I am certain. The way our creamery business is now conducted there is no chance for any patron to get a comparative knowledge of how the work of his cows stands with that of his neighbors.

Look over that list again. Now, suppose one of you owned that herd in the first column that stands down at 6 per cent profit and at the end of the year or every six months the creamery handed you a statement like that. Don't you think it would stir your brain and ambition a little to see that there were brother patrons right beside you who were making from 500 to 1000 per cent more than you? Don't you believe it would set you to thinking, reading, studying, as to the causes of your low standing? Our creameries are doing scarcely anything to promote the better knowledge that must be had. They hold just the information that every patron needs, - a knowledge of how he stands, in comparison with the men around him. If they think it is not safe to print the names of the patrons because of provoking jealousies or heart burnings, they can designate the patrons by number, anyway to get the patrons to see where they are losing. They will find out how very quick, if they can see where. Now such action on the part of the creamery would be putting the sharpest kind of dairy literature in the patrons hands.

Every creamery ought to consider it a part of its regular business to give each patron an annual census account of his herd, what the feed cost, what was the breed of the cows, and finally the amount of cash earned by the cows for every dollars worth of feed consumed. The dullest and most ignorant

of men could learn something from that. They would have a chance to study cow traits and comparison, the most useful study in the world. And every co-operative creamery and cheese factory should make it a part of the annual expense to take such a census of every patron and present him with a well tabulated copy of it. Nothing on earth would so stir the ambition of the patrons as that.

And now my Iowa friends, a word in conclusion. The future prosperity of Iowa dairying lies wholly with the Iowa farmer. Just in proportion as he expands in mental comprehension as to what dairying means will the industry expand in profit to him. You must not measure your relation to this industry in any other way. Just as you grow in dairy intelligence will the industry grow. Every farmer must be his own schoolmaster, his own teacher in the main. Stand steadfast by that proposition. Out of it will come the light that shall show you what you must do to "make your calling and election sure."