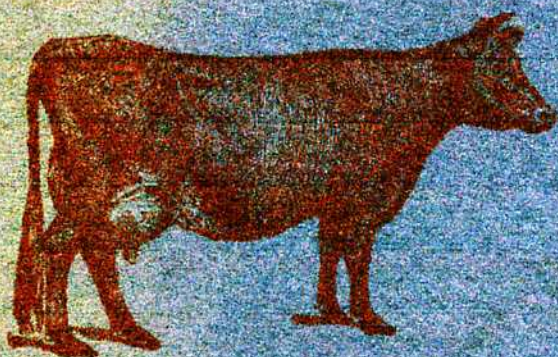


BULLETIN NO. 22

JANUARY, 1912

EXPERIMENT STATION
TUSKEGEE NORMAL AND INDUSTRIAL INSTITUTE
TUSKEGEE INSTITUTE, ALABAMA

Dairying
in connection with
Farming



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Dairying in Connection with Farming

By A. A. Turner

The Meaning of Dairying

Dairying is the keeping and properly caring for one or more healthy cows for their milk, and the buying and selling of milk and cream for profit. Those who keep cows for their milk are called dairy-farmers or milk producers, while those who carry on a business of buying and selling milk and cream are called creamery and factory operators.

Classes of Dairy Farmers

Dairy farmers are made up largely of two classes—the scientific dairymen, who make a specialty of their work and look upon it as an important phase of agriculture, giving it their undivided time and attention, which enables them to secure choice markets and fancy prices for their produce; and dairymen who carry on dairying in connection with other phases of agriculture, looking upon the work as an adjunct or side issue to the farm work, and giving it such time and attention as the rest of their work will allow. The former class, or the scientific dairymen, are, as a rule, located conveniently to market, and dairying, on account of the favorable conditions surrounding them, appeals to them as a progressive enterprise. Those who carry on dairying in connection with the other farm work are generally very poorly located to market and are in most cases surrounded by various unfavorable conditions. Hence, dairying to them will often fail as a prosperous and profitable enterprise; they become dissatisfied and give it up. It is the development among this class of dairymen that is so much needed at the present time, by stimulating a dairy interest among them and at the same time showing them how to get a more remunerative outlet for their produce.

Time Required in a Farm Dairy

Most farmers feel that their time is pretty well used up, and when asked why they do not operate a small dairy in connection with their farm, will give the following answer: "It takes too much time from the field." They do not stop to consider the fact that,

during the months of the year when the field-work is most important, only the earliest and latest parts of the day need be given to the dairy, in order to avoid the flies and heat as much as possible, and it is not necessary to take any of the time in which field operations are carried on. Besides, there are times in the year when the field-work stops, and much of the farm expense could be kept up by the dairy. In such instances the farmer becomes anxious for some kind of employment in which to use his working force, in order that his cash income might be equal to his outgo in running the farm. There is no better and more profitable kind of employment at this particular time than that of dairying in connection with the other necessary work. When the farm harvest has passed, the dairy is just getting to be the most profitable, on account of advance in the prices of dairy products. This is especially true of the farmers who breed their cows so as to have them come fresh in the fall and winter months, so that the greatest yield of milk may be had when it will bring the most money.

Cows Contribute to the Soil

The way in which cows contribute to the soil makes them an important factor in bringing up a run-down farm, and at the same time they enable the farmer to utilize much of the surplus feed-stuffs that are often hauled off and sold at a loss or wasted, thus depriving the soil in such instances. Cows will consume this roughage in a more profitable way than any other kind of livestock.

Type of Cows for Farmers

The type of cows most profitable is a great puzzle to many farmers. It is rather difficult, however, to say definitely which of the various breeds of dairy cattle will be found profitable without knowing something of what will be expected of them, for cows possess various characteristics by which they fill certain places in the dairy industry. Hence, it is better to select the cow adapted to the special phase of work desired of her; to do otherwise would be unprofitable very likely in the long run. The grades or mixed breeds are the types kept by the average farmer, their price being more within his reach; and it is better for beginners to start on this type of cow. Then, by keeping a pure-bred bull, the herd can be brought up to the desired standard.

The object in selecting is to pick cows possessing the following characteristics: First, a tendency to utilize their feed in the production of milk rather than in the production of flesh. Second, plenty of space in which to store large amounts of feed; in other words, a large barrel (or paunch), which is the cow's storehouse for feed. Third, a well-developed udder, with four sound teats of medium size—no great amount of pressure of the hand should be re-

quired to draw milk from them—an udder that becomes greatly reduced in size after milking and not of the kind called "meaty udders." Fourth, a gentle and quiet disposition, rather with a tendency to make friends when approached than to take to her heels.

Such cows should give on an average of two gallons of milk per day for nine months on simple farm rations. They can be bought at prices ranging from \$35.00 to \$45.00, and by careful selecting and judicious buying, a very creditable and profitable herd can be had. Thorough-bred bulls can be gotten from stock-farm proprietors at prices from \$100.00 up, but in purchasing thorough-bred stock, it is well to get the animal's pedigree and seal of registration.

Dairy Farm Markets

The various distinct and special lines of dairying differ from each other principally in the form of products handled and in the methods of disposing of them. Therefore, the dairyman should enter into the business in a way that will suit his particular conditions. More mistakes are made with reference to this than in any other way, because men aim to carry out certain ideas of their own, giving scarcely no consideration to the conditions under which they labor.

Location to Market

FARMERS FARTHEST FROM MARKET.—Farmers farthest from market are usually located 10, 12 and 15 miles in the country, and get to town about once a week. With them it is necessary to choose the line of dairying in which the milk is converted into butter on the farm, this being the most compact and staple dairy product. Butter made under proper conditions will retain its desirable qualities in summer when kept in reasonably cool places, and can be readily marketed; having very few objections to its age; but it will have to be good butter, and not of the cheesy class that is frequently delivered to grocery stores. Engagements can be had with private families, restaurants, hotels, etc., and when it is of good quality and handled with care, the producer is unable to supply the demand even at an advanced price. An average of 80 cents the year round is usually the price received for such butter.

FARMERS NEAREST TO MARKET.—As has been stated, convenience to market regulates to a certain extent the kind of dairying best suited to the farmer. Those so situated usually market their products daily, and on account of convenience, can put it up in almost any form, though more work is required and more time consumed than when butter only is made; but the gross returns from the dairy are greater, owing to the fact that the entire product is marketed. For instance, if they live near a town the milk is, as

a rule, retailed over the town in the form of whole milk. In this way the dairyman aims to sell about all of his product, making the delivery once or twice a day and selling at prices ranging from 7 to 10 cents a quart. The milk is put up in quart and pint bottles at the dairy, which makes it more convenient for delivery and allows each patron to get milk with an equal proportion of cream, free from dust and foreign matter that will collect in it when delivered from the can.

Farmers Located on Milk and Cream-Gathering Routes and Railroads

It does not always happen that farmers are nearest to market when they live near cities and towns; very often the farm is located on milk and cream-gathering routes, railroads, or interurban car-lines, and their products are sold direct to the factory, creamery-men, or to city milk institutions, afterwards manufactured into butter, cheese, or retailed over the city.

The present development of farming throughout the Southern States, is rapidly increasing the demand for new railroads and other means by which farm produce is disposed of, and this affords excellent opportunities and many advantages to those thus situated and who desire to embark in the dairy business.

Skim Milk More Valuable When Fed

It must be borne in mind, however, that in the long run, the dairy farmer realizes the most profit from his dairy when his skim milk is fed to growing stock. There are two main reasons for this: First, skim milk is the only feed that can be substituted to take the place of mother's milk for calves, pigs and colts, and there is hardly a time when some of these animals could not be put on this to great advantage. Second, it has been found that skim milk contains a high percentage of nitrogen—the constituent that is so much needed for the soil and that is so often purchased at a high price in the form of commercial fertilizer. Hence, in all cases where skim milk is sold, the soil loses an abundance of nourishment; but when fed on the farm, the soil gets it back in the manure from the animals.

Butter fat contains such a small amount of nitrogen that its use for fertilizing purposes (when fed, in the form of whole milk) would hardly be noticed; and since the commercial value of milk is based principally upon the amount of butter fat it contains, it is greatly to the advantage of the dairy farmer to sell the fat in the form of butter or cream. The coming of the farm separator has revolutionized the dairy industry in this respect, as the milk can be strained, separated, and skim milk fed to calves, pigs, etc., before it gets cold. The cream obtained can either be made into butter or sold direct.

Keeping Records

In dairy farming, as well as in other kinds of business, profit should be the main object in view and the whole farm looked upon as a business proposition. The first step towards arriving at this point is the preparation of a complete system for keeping records of transactions made from time to time. Some do not like to keep records, not because of the extra-time involved, but because they dislike to face the true facts of their work in business. Others realize that there is an advantage in keeping them, but usually wait until the end of the year before they begin securing data. Then others set out at the beginning of the year to collect such data as they think will be needed at the end, but owing to their-regularity with which it has been kept and the poor system used, they are unable to find out what they want to know about business. There are also others who will go to the expense of providing for a proper system of keeping records, but who will neglect to use it in the business, thus allowing their work to go on by a rule-of-thumb method, the same as those who keep no records at all.

Does It Pay to Keep Records?

Investigations made on progressive and non-progressive farmers will show that, when an accurate account is kept of their business, a wider margin of profit is to be had in dairy farming than in any other form of agricultural pursuit, and at the present time there is little hope for any farmer who does not keep a record of his farm operations. A mere day-book, in which the daily transactions could be recorded for future reference, would be a good step in the right direction. The difference between the farmer who succeeds and the one who fails is, that the farmer who succeeds is able to determine the sources of profit and loss on the various operations while the farmer who fails knows comparatively nothing about those operations which bring in profit or create a loss. There is perhaps no operation on the farm that requires more data than that of dairy-ing, and none will be found more interesting and beneficial to the farmer if he is properly prepared for it. The farmer should understand the working capacity of his herd, so that a close estimate could be made on how he is going to come out at the end of the year.

Important Records

The most important records are those which deal with the yields of individual cows, as no doubt this will do more towards the increasing or decreasing the returns from the dairy than anything else. To be able to know what cows are not paying, enables the farmer to keep his business on a paying basis. The cost of keeping cows that earn the small sum of \$5.00 a year over and

above the cost of keep, is nearly equal to the cost of keeping cows earning a profit of \$40.00 a year. Therefore, it should be the main object of every dairy farmer to find out what cows are non-paying and weed them out of the herd.

The simplest method recommended for determining the non-paying cows is to weigh each cow's milk morning and evening on the last three days of each month, having it tested at the same time for the amount of butter fat it contains. By keeping a record of each cow in this way, a fair estimate of the income from their milk can be had.

Various ways of estimating the cost of feed can be worked out, the most convenient being the weighing or measuring what the cows eat at different times and in different seasons of the year, and making a record of the same. The total amount of feed consumed by the herd should in all cases be charged to the dairy, whether it be purchased from the outside or is raised on the farm. The dairy should be credited with the total amount received for milk and other dairy products.

The next set of records that are important to dairymen are those relating to when the different cows were bred, etc. There should be a special book for this purpose.

Then it should be remembered that the keeping up with the various products sold has no small signification in the transactions. Every pint of milk and pound of butter is equivalent to so many cents, and unless these small items are followed up closely, a large portion of the profit will leak away. If the milk is sent to the creamery, factory, or is taken up by a milk wagon, the receipts for same should be put away for future reference. If it is retailed over the city or town in quantities from a pint up, the system of keeping up with it cannot be too good. It is in this form of disposing of the milk and its products that so many leaks occur, and every part of this phase of the work should be studied carefully and every detail followed up closely in order to prevent loss.

A Prosperous Enterprise

The man who is in possession of a farm well located, upon which there is an abundance of grass, running water, shade, and who has a good herd of milch cows, is in possession of an enterprise worthy of his entire support and appreciation, and if properly managed and carefully studied from commercial as well as educational points of view, very satisfactory results can be had.

Best Opportunities

In determining the places affording the best opportunities for certain occupations, we select the localities where they are most in

DAILY REPORT OF RETAIL MILK ROUTE No. _____

DRIVER _____

CHECKED BY _____

DATE _____ 191__

| ARTICLE | OUT | BACK | SOLD | PRICE | SALES | DRIVER'S CREDITS | | REMARKS |
|---------------------------------|--------------|------|-------|-------|-------|------------------|---------------|---------|
| | | | | | | ITEMS | AMOUNT | |
| Whole Milk | Gallons..... | | | | | Cash..... | | |
| | Quarts..... | | | | | Coupons..... | | |
| | Pints..... | | | | | Tickets..... | | |
| | Halves..... | | | | | Charges..... | | |
| Cream Sk. Milk | Quarts..... | | | | | | | |
| | Gallons..... | | | | | | | |
| B. Milk | Gallons..... | | | | | | | |
| | Pounds..... | | Short | Over | | | | |
| Butter | Bottles..... | | | | | | | |
| Amount of Sales..... | | | | | | | Am'nt credits | |
| Amount received on account..... | | | | | | | | |
| Amount of shortage..... | | | | | | | | |
| Grand Total..... | | | | | | | | |

The above record is recommended by the Author in keeping tab on dairy products retailed over the city or town.

demand. There is no place where dairying in connection with farming is more needed at the present time than in the Southern States. Hence, that locality will no doubt afford a better opportunity along this phase of agriculture than any other section of the country.

