

# HOME COURSE IN SCIENTIFIC AGRICULTURE

## SEVENTH ARTICLE—THE DAIRY HERD.

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THE pursuit of dairy farming depends for its success upon certain fundamental conditions. First, the owner of the business himself, or otherwise the agent or manager who has the immediate control and personal direction of the work, must have a natural fondness for animals, prompting to generous and kind treatment, as well as good judgment in selection, breeding and care. It is not sufficient that he should be a horse-man or fond of cattle in general. For best results he should have a special liking for the dairy cow over and above all other animals. Second, the cattle must be good of their kind and of a variety suited to the work. Third, the farm should be specially adapted to the branch of husbandry in view. A good dairy farm is pretty certain to be good for general farming, but many good farms in general are not suited to dairying. The dairy farm should be carefully selected, all the requirements of the business being well considered. Yet many disadvantages so far as the farm is concerned may be successfully overcome by the skillful dairyman, and dairying in some form is profitably conducted without any farm, so that this condition, important as it is, cannot be regarded as essential. Fourth, it is well to study the character of the accessible markets and the means of communication. Location and the line



Photo by Tennessee experiment station.  
JERSEY CALVES.

of dairying to be followed may be largely controlled by the markets. In some cases the markets form an essential condition, but modern facilities for transportation make the location of the dairy farm with relation to its markets comparatively unimportant.

Like almost all other occupations at the present day, dairying has become divided into several distinct and special lines. These differ mainly as to the form of product and the manner of disposing of it. Milk or cream may be produced for delivery to consumers, and this delivery may be direct or indirect. The same products may be delivered to a factory for manufacture into butter or cheese, or the milk product of the herd may be worked up at home and there converted into butter or cheese. The prudent dairyman should first consider which line of business he will pursue. In so doing he must have regard for all his circumstances—the location, markets, farm, buildings, water and ice supply, the labor at his command—and his own preference and prospects for profit.

Some dairymen prefer a "general purpose cow," which is a member of a specially developed milk producing family from one of the beef grades or grades of such stock. An animal is thus secured which has a large frame, is easily kept in good flesh and fattens soon when not milking heavily. Such a one also has large calves, profitable for veal or for growing as steers. Even if such animals are not so productive while in the dairy their meat making possibilities may make up for

it. There are two or three of the established breeds of cattle which claim to possess combined qualities for meat and milk. On the other hand, many dairymen (including the writer) prefer cattle of the distinct class or type especially adapted to dairy purposes alone. This class includes various families and breeds, all having the marked characteristics which distinguish the milk producer. Owners of such cows expect them to be so profitable as milkers that their beef producing quality and the final disposition of their carcasses may be entirely ignored, and the calves, except so far as wanted to raise for the dairy, are given little consideration. Which of these lines of policy should be pursued every dairyman must determine for himself.

Some dairy cattle are noted for the quantity of milk they produce, others for the high quality or richness of their milk, which means they are good butter producers. Some combine quantity and quality.

There are cows of active habits which forage well on a wide range of scanty pasture and will profitably work up the coarser kinds of food in winter. There are others which have proved their capacity for making good returns when more closely confined and subjected to high feeding. Some cows give a great flow of milk for a comparatively short season, and others are noted for an even, steady yield of milk the year through. As a rule, the different dairy characteristics named pertain to different breeds, so that every dairyman is likely to find some one breed of dairy cattle better suited to his wants than any other. There is no special cheesemaking cow. The best butter cow is also the best for cheese. This fact has been demonstrated beyond dispute.

There are two very different ways of forming a dairy herd and of maintaining its size and quality. It may be done by buying or by breeding, and these two methods may be combined.

The purchasing plan is practiced to a considerable extent by those who produce milk for town and city supply. In a few cases it has been known to be successful where the work of the herd was to make butter. Applied in its extreme form, cows are bought when matured and at their prime, judged almost exclusively by their milk yield, are highly fed, so as to keep steadily gaining in flesh, and are sold, usually to the butcher, as soon as they cease to be profitable as milkers. The bull may be of any kind so long as he gets the cows in calf, as the calves are of value only as causing "fresh" cows and are disposed of as soon as possible. The first modification of this system is to keep extra good cows for several seasons and the next to raise heifers from some of the best milkers to replenish the herd. This way of making up a herd and keeping good its numbers requires abundant capital and rare judgment in buying and in selling. It cannot be recommended to one lacking experience, and even the shrewd buyer runs great risk of introducing disease.

The other extreme is to begin with a few well selected animals as a foundation and gradually build up the herd to the size desired by judicious breeding and natural increase. This method takes time, and time which may be money, but it is by far the safer and more satisfactory in its results.

A desirable combination in starting is to buy the number of cows desired and good animals of the sort determined in advance. If one's means will permit include a few superior cows and a first class bull at any rate. Let the cows selected be such as have had two calves and perhaps three, so that they may be judged by their own development and yet be young enough to improve and be in full profit for some years. With a herd thus formed begin at once the work of improvement by breeding and selection. Sell promptly any cow which proves unsatisfactory and replace her by the best increase of the herd, or purchase occasionally an animal which will raise the average quality.

A dairyman can hardly be advised to buy at once a full stock of pure bred cattle of any breed if his sole object and dependence for profit is to be the dairy product of the herd. Such a venture will necessitate large investment and should include the breeding of registered animals, for sale at remunerative prices, as a part of the business. Well bred and well selected grade cows of the line of blood desired seem to be the most profitable animals for the practical dairyman or at least the best to begin with. If enterprising and progressive the owner will hardly be content with grades only. He may begin with only his bull pure bred. Presently he will want a registered cow to match, then one or two more.

The bull is constantly referred to as "the head" of the herd, and that trite saying, "The bull is half the herd," should never be forgotten. The grade dam may be selected and largely relied upon to give size, form, constitution and capacity of production to her heifer calf. Its dairy quality, the inherited power to increase the richness of milk, is derived from the pure bred sire. One cow may prove a poor dam or fail to breed and still give profit in milk. Such a loss is comparatively trivial

and the fault easily corrected. But if the bull fails or proves a poor sire the entire increase of a year may be lost. In getting a bull get the best, or at least approach that standard as nearly as possible. A common error among dairymen is to use immature bulls and to dispose of good ones before their merit as sires has been fairly proved. Bull calves are cheap, and young bulls are considered much easier to handle. But it is good advice to the buyer to purchase a bull of some age, whose progeny proves his value as a breeder, rather than a calf of exceptional pedigree, and to the owner, having a sire of proved excellence, to keep him and use him for years or as long as he shows himself potent and prepotent. Of course the question of too close inbreeding is not forgotten and must not be overlooked by the breeder. The writer is a thorough believer in the use of mature bulls of known value as sires.

The chief objection made to bulls of some age is that they are likely to be vicious and dangerous. But the great majority of bulls of all the dairy breeds can be handled without serious trouble if properly reared and managed.

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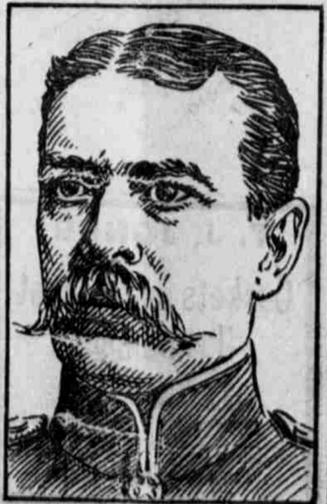
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