

or six, this seems to be a large price, and it is little wonder that the producers demand high prices for their milk, and desire cows that will sell to the butcher at a fair price.

AMOUNT OF MILK GIVEN.

The amount of milk given by the cows per day varies greatly with the time of year and with the different individuals and herds, and the feeding. Because each of the men called upon was producing milk for city trade or a factory, it was possible to get the amount of milk that the cows were giving each day, but out of the twenty-one, only three are keeping yearly records. On one of these farms, forty-two head made an average of 8,300 pounds each last year, and sixteen averaged over 10,000 pounds each. The other two herds, of about twenty cows each, averaged between 8,000 and 9,000 pounds each. These three men who are keeping yearly records are strong advocates of the system, and would not think of running a dairy farm without weighing the milk night and morning from each cow separately. They claim that it more than pays them for the small amount of trouble, and at the end of a lactation period they know just which cow has made a profit, and how much that profit is; and if any have not paid their way, they can be discarded. It is the only sure way of knowing what the cows are doing.

The other eighteen owners were only able to give the amount of milk which the cows were giving per day at the time of the investigation, and this was only the total amount given by the herd, no record being kept of the individual cows. The quantities given then, which was about the middle of July, ranged from an average of fifty pounds per day for two herds, down to twenty pounds per day for the lowest-producing herd. This variation, no doubt, depended largely on the length of time the cows had been milking, but the lowest-producing herds were those receiving the least amount of summer feed. Most of the herds were averaging about twenty-three to twenty-five pounds per cow per day, while the average for the entire number was twenty-six pounds per cow per day.

BREEDING AND FRESHENING PERIODS.

The time that the cows freshen depends largely on how the milk is disposed of. Of these twenty-one herds, one was producing cream, and the owner is a strong believer in the value of pasture for the dairy cow. The most active market for cream being in the summer, and the fact that he has the skim milk for his hogs, which are fed at greatest profit in warm weather, are two factors which strongly favor the selling of cream. By selling cream, this man makes three cents per quart on his milk, wholesale, and has all the skim milk for feeding purposes; and, by grazing the cows during summer, he claims to be able to produce milk at sixty cents per hundred for the year. The cows drop their calves in spring, and are thus in a condition to produce a large summer flow.

Four other herds are producing milk for the powdered-milk factory at Brownsville. The cows in these herds also drop their calves in the spring. The owners like them to freshen in March, because they find that they do far better at the pail to come in before they go on grass than they do when calving just as they are turned to pasture or shortly afterwards. The remainder of the farms were equally divided, one-half producing milk which was sold retail, the others selling it wholesale. Where possible, the retail men endeavor to keep their cows freshening during every month of the year, in order to keep up the supply. The wholesalers were about equally divided, some preferring that the cows freshen in the fall, others in the spring, and some throughout the year, each having a special reason for it. They receive a little higher price in winter, so some prefer winter production, when the farm work is not so pressing as in summer, and when more time can be taken for insuring the comfort of the cows and the proper caring for the milk. Milk can be produced cheaper in summer, so many prefer this season for the heaviest production, while others, like the retailers, endeavor to keep up a supply the year around. Many report that they have trouble to get the cows in season at the time they would like, and for this reason are obliged to take the calves whenever they can get them.

CROPS FOR THE DAIRY FARM.

Corn seems to be the one indispensable crop on the dairy farm, and with corn goes the silo. Only one farm was without a silo, and several of them had two of these buildings. Every dairyman called upon that had experience with them was very strong in his commendation of silage for the dairy cow. Upwards of three hundred and fifty acres of fodder corn is growing this year on these farms, the highest acreage on one farm being thirty acres on a two-hundred-acre farm keeping fifty cows, and the smallest ten acres, on a farm of one hundred acres, keeping twenty cows. Corn is the main fodder crop, and can be relied upon more than some of the other crops, such as roots. A few roots are grown on most of the farms, but they are not extremely fed. Alfalfa,

the crop that makes such a good complement to the corn ration, is gradually gaining ground, nine of the farms having acreages ranging from thirty acres to two acres, and making a total of eighty-two acres. It is interesting to know that all those who have tried this crop are increasing their acreages each year, and that they find it the best hay for winter feeding.

Only one man was growing any soiling crops. These consisted of a mixture of oats and peas in one plot, and alfalfa in another plot. All those interviewed believed that it would pay them to grow more such crops for summer feed, but complained that the scarcity of labor prevented them from doing so. Doubtless, if they had once tried this system, they would find that it did not require any great amount of labor, if done properly, and that the returns would be much larger during the drouth of summer.

[Note.—The various methods of summer and winter feeding, watering, stabling, etc., are yet to be discussed.—Editor.]

A Patron's Picnic.

By Laura Rose.

From far and near they came, in single buggies and double rigs, bringing with them baskets filled with such good things as only a picnic in the woods suggests. Tables and benches and a milk-can of lemonade were provided to make the feast complete.

For several seasons, Mr. Adams and his son, G. J., of Adamsville, Que., fifty miles east of Montreal, have invited the patrons of their creamery to spend a day in the delightful bit of woods bordering on the river which runs close to the creamery. A harp-and-violin orchestra from Montreal discoursed sweet music during the feasting, and enlivened the programme which followed.

Chas. F. Whitley, of Ottawa, spoke of the need of weeding out the poor cows and keeping a record of what the herd is doing, and gave some strikingly true illustrations of the difference in the production of cows of the same herd. I believe, he said, it would take several thousands (it may have been hundreds) of the poor cows to equal the profit from just one of the best cows. The difference struck me as a convincing argument in favor of knowing what each cow on every farm is doing.

Mr. Adams wished me, in my address, to emphasize the part that the women of that district might and should do to raise still higher the quality of the butter from the creamery. I urged the women to visit the stables, at least occasionally (I had been previously told that the men around there did the milking—nice, kind men, aren't they?). A woman can see conditions, especially if they are dirty ones, more quickly and plainly than the average man, and if she would interest herself more with regard to having the milk clean, the man would do his work better.

There is often a lack of co-operation between the house and the barn—an indifference on the part of the women which reacts on the men and leads to neglect and carelessness. Clean stables, clean air, clean cows, clean hands, clean pails, are things that the women should interest themselves in, and so encourage the men to clean up and be clean.

The creamery at Adamsville is a cream-gathering one, and, in launching forth as such, has had to sail against a rather stiff breeze of opposition. The promoters of the organization wish to demonstrate that good butter can be made under this system, and that all that is needed is the educating of the people along the proper lines. To promote this education was the primary motive of the bringing together of the patrons, and so I laid special stress on the care of the separator, telling the ladies that their part of the separating was the thorough washing of the separator bowl after each time the machine was used, and seeing that the cream was quickly and thoroughly cooled. There is where most of the mischief is done—badly washed separator and neglected cream. Cream parts with its heat slowly, and should be set immediately in cold water, and the water changed or ice put in it. Stir the cream occasionally to hasten cooling. If we could but get farmers to realize the importance of getting and keeping the cream cold, the opposing factors to gathered-cream creameries would have no good fighting-ground left them. At the close of the afternoon, G. J. Adams said he was never going to be satisfied with the quality of cream sent in; that when one rung of the ladder of progress was reached, there was always going to be another to step up to. In other words, their aim was perfection, and that was something ever beyond our reach. He invited both the ladies and gentlemen to inspect the creamery that afternoon, or at any found things not right. Their motto is: "Keep on improving and growing." They had more than doubled their output in the past year, and the letters read from the firms handling their butter in Montreal gave proof of its excellent quality.

I could not but admire the business energy and

progressive spirit of the gathering, and thought if more such meetings were held where the social and practical elements blended so harmoniously together, the creamery business of our country would decidedly improve. Too many managers only see the expense in connection with such an event, and are blind to the impetus for better conditions that such a meeting creates.

POULTRY.

Dry Feeding.

Editor "The Farmer's Advocate":

With dry feeding, no mashes, hot or cold, are fed. This does not rule out dry combinations which have been called mashes by some, but which should be called mixtures, for the term mashes is understood by the poultryman to be a mixture of several kinds of grain, green stuff and animal food which has been subject to moisture, and in many cases to heat. Nor does it rule out chopped or shredded green stuff, such as mangels, beets, etc., fed separately. In a broad sense, it is the feeding of uncooked food, and more especially food that has not been moistened. This method has many advantages over the other: First, no mashes to mix or cook; second, less cholera or bowel looseness that makes the dropping boards hard to clean; third, more fowls kept, with same amount of work; fourth, less mortality with chicks. The advantages are apparent to all who feed their flock four or five times a day, and constantly fuss with them. During the growing period, from the incubator to the pullet which is being got ready to lay, feed all grain and beef scrap from feed boxes, which should be filled about twice a week. Bear in mind that when you follow this plan it is necessary to leave all young stock on free range.

Do not change suddenly any method of feeding, as it will seriously affect the egg output for a time; but after a while they will lay as before. The best way is to begin with the chicks right from the incubator. Looking at the subject from the beginner's viewpoint, I am certainly convinced that fewer mistakes will be made and a larger number of chicks raised to a healthy maturity by feeding dry grains and beef scrap from feed boxes constantly filled, provided the chicks can run on grass. There will be seen no rushing, trampling crowds of chicks, but a contented and lively set of youngsters that are plump and happy, although on free range, where some people think they are likely to run the flesh off their bones; they will find time to dig holes in the dirt, lie under the shade of the trees and enjoy life. He will be surprised at the rapid growth of his stock if it has any "grow" in it. More of this when we speak of results. Do not get the idea that an experienced poultryman cannot produce good results with his mashes, for he certainly can. However, let the beginner start with mashes, and they will often become "messes," and more chicks will drop out of the race than if he adopts this dry-mash plan.

Have plenty of grit where the chicks can pick it up for their first meal. Get your miller to mix together one part of wheat to two parts corn, and crack them so they will be a little finer than cracked corn. Place a heap of this in front of the brooder, and beside it a heap of dried beef scraps, with the coarser portions sifted out, until the chicks are big enough to eat the scraps as they come to you. If you have skimmed milk, keep the youngsters on that for about two weeks, then let them have their choice of milk or water. If there is no green grass, give them onions or lettuce chopped up fine, twice a day. You can now let them have this mixture of grain and the beef scraps from the two compartments of a feed box, until the young pullets are ready to go into winter quarters, provided they are upon grass all the time.

It is now time to change your manner of feeding somewhat. When freezing weather begins, oats, corn and wheat are fed alternately in the litter at 4 p.m., and after the fowls are on the roosts for the night. They find this latter feed when they come off the roosts in the early morning, and you will find a big cloud of dust and a lot of active, cackling hens when you open the doors in the morning. At noon give them green food—sugar beets split in halves, and a head or two of cabbage to each pen. Feed in this manner until the warm weather comes and the fowls get out of doors to exercise again, when you can fill up the feed boxes as before. Always keep the beef scrap before them at all times. You will be surprised to see how little meat they eat when it is fed in this way, yet it appears to be all they need. Just as soon as the insects become scarce, the meat box will show it, for they balance their rations so far as this is concerned. R. A. Y. Chateaugay, Que.