## Elaborate Dairy Herd Pointers.

A beginner in the dairy business, who has been a diligent student of "The Farmer's Advocate," and who has been interested in the success of Ontario's dairy-cattle king, writes Geo. Rice for particulars regarding herd management, with a view to maximum milk flow. Among the pertinent questions asked are the following:

1. How do you prefer watering, and how often?

2. How do you prefer salting, and how often?3. Do you believe in scalding meal for warm

3. Do you believe in scalding meal for warm mashes, and what do you prefer for a mash? Do you like to induce the cows to eat salt, and drink, by feeding salt in the mash twice daily? Do you think it pays to feed meal on the grass?

4. How do you feed your heifers, for at least a month before calving?

5. Do you believe in letting cows out during winter or cold weather?

6. How often do you believe in feeding in winter, or while the cows are in the stable?
7. How would one part of goose wheat, and

7. How would one part of goose wheat, and one part barley and three parts oats, with a little oil cake, be for a meal ration in stable feeding?

8. Do you believe in growing green feed of

any sort to feed in early summer?

9. What do you think of pumpkins, and what

are your favorite roots?

10. How do you believe in feeding your heifer

10. How do you believe in leeding your neiter calves?

11. At what age do you believe in breeding

them to make the best cow?

12. What do you do for lice on cows?

13. What sort of a bull do you prefer to breed to one of an extreme milk type, and what color do you prefer for a Holstein bull? Do you like more white than black?

14. Do you believe in burning the horns off heifer calves?

Mr. Rice's reply is as follows: When it is considered that this is only one of many such letters received by me, it will readily be understood that it is no small task to answer the same individually; and, where the importance of the matter seems to require it, I try to kill several birds with one stone by using the columns of the correspondents' favorite paper.

These questions, in fact, cover the whole subject and practice of dairy management, and, to answer them fully, I would need to write a book, and even then there would be much not told, because there is much that cannot be told, but must be learned from experience. Give two men the same feed, and they may get vastly different results from it. Stock must be fed regularly every day, 7 days a week, and 365 days a year, and every four years one day more. given at one time of the year influences the pro-Good care, like bread duction at other times. cast upon the water, will return after many days. The good dairy cow is necessarily a great worker. Heavy production must be a great tax upon her, and even a dairy cow cannot produce something out of nothing, although sometimes she does come very near performing miracles.

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up is! and The idea, then, of giving a cow or heifer the best of care, is to build up a strong and healthy animal. Bred with the milk-giving instinct, she must have the power and constitution, also. "Full many a flower is born to blush unseen, and waste its sweetness on the desert air," etc. And the reason we have so many poor cows is that they get too much straw stack, too much cold air, too much impure air. Just think of it! Could the usual management of the heifers and cows be worse? Now for the questions:

1. Cows giving milk, 60 to 80 pounds a day, are known to drink 150 to 200 pounds water daily. Dry stock do not require near as much. Cows giving milk should have water before them nearly if not all the time. It is natural for them to drink after feeding. Dry cows and heifers could do very well watered twice a day.

2. Cows should be given salt once or twice a day. I usually put the salt on the feed, but it needs to be fed with judgment. Then, a cow should not be forced to eat more salt than her system requires. An inexperienced feeder had better feed the salt separate, or feed a little on the feed, and have it where the animal can help dself. Salt in large quantities is a poison, and too much is harmful. No animal will take too

3. Wheat bran is about the only thing that is more appetizing when scalded with very hot water, and a good mash is good imedicine for ony animal, especially when the stomach is weak it times of parturition or sickness. If it is desired to move the bowels more freely, then put small handful of salt in the mash; otherwise, wo tablespoonfuls is enough. Try your portuge without any salt, and see how "flat" it astes. Salt must be added to anything scalded or cooked to give it a flavor. When no roots or flage are fed, then bran mashes will be found ery beneficial fed twice a day; but when roots, thage or grass is available, mashes are not of so

much benefit. The same given dry will be quite as good. The succulence of a ration for a neat animal is as important as its nutritive constituents. A cow requires a more succulent ration than a horse.

4. Heifers require to be fed enough good feed three or four months before calving, and, indeed, from birth, to keep them growing, and in what is described as a thrifty condition. I want heifers, a month before calving, fat enough to make what is commonly called "butcher's beef." And the heifer—or, for that matter, cow—should be fed the same feed, but in smaller quantities, as it is intended to feed her when she is milking, in order that she may acquire a liking for those feeds, as well as getting her in good condition. To put an animal on feed that she has never tasted before in any large quantity, is very injudicious, and she will likely soon tire of it.

5. Cows milking heavily require so much water, and the pores of the skin are then so open, they cannot stand much cold. It is quite different with dry cows, and they can be let out often. Many of my cows are not out for three or four months. When cows are within two or three weeks of calving, I let them out every fine day, and if they do not move around themselves, I make them move. They generally move "like a steer in a cornfield," they feel so good. They should be put in again before they get cold from standing.

6. Cows are usually fed the main feed, silage, with the meal on it, at 6 a.m., after milking; roots whole at 7 a.m., and mangers filled with straw or hay. Hay is given at 1 p.m., and the same feed as in the morning at 5 p.m., milking at night after feeding, in order to bring the milk hours more nearly equal. When cows are milked three times a day, they are fed three times—after each milking.

7. I don't think much of goose wheat as a cow feed. It is too hard and flinty, and hard to digest. One part barley, two parts oats (chopped fine), two parts wheat bran, and a little oil cake (up to two pounds a day for a cow), is a good ration. This should be fed on silage or cut feed, else it passes on to the back stomach, and is not remasticated, and not as well digested as it should be.

8. There is nothing better than good pasture, but, as it is so hard to keep pasture good all summer, it is wise to have some green feed to cut

9. We fed a lot of pumpkins last fall, with satisfactory results. They are easy to grow, and very easy to harvest and feed in the fall and early winter. I like mangels, Long Red or Yellow Tankard, for early winter, and sugar mangels at all times during the winter. The sugar mangels are harder, and keep better in the spring, but, because they are so hard, I like the softer mangels to start the cows on in the fall. I do not pulp roots; it adds nothing to their value, and means much labor, and dairymen can find enough to do without doing useless labor.

10. Heifer calves (and bulls, also) are fed about 10 pounds new milk a day for two or three weeks. As we have been selling our milk to the condensor, we had to feed whole milk all last winter. In that case, as the calf gets older, a little water is added, and a little ground oil cake is put in the calf bucket when the calf has taken

all the drink but about a cupful. At first, only a tablespoonful is given, and the quantity is increased gradually to a handful. This keeps the calves busy for a while, and they do not learn to suck one another. They are also taught to eat some wheat bran, and, later, out chop with it, and hay is kept in a rack.

11. Any time after two years is a good time to have a Holstein heifer drop her first calf. It depends on how fast they are growing. If they are not fed well, they should not be bred so early. Ayrshires should not drop their first calf, with few exceptions, before 28 or 30 months old, as they do not attain size before then.

12. Well-fed animals are not bothered with lice much, but if they are present, the animal should be washed with some of the lice killers, as directed on these preparations. To be effective, three or four applications must be given, a week or two apart, to kill the new hatch.

13. For a dairy bull, I want to know the records of his ancestors. Of course, we want a bull that is thrifty and decent-looking, but I have known many bulls that have been far from what is known as show animals, that have proven to be getters of great dairy cows. Color cuts very little figure, but if it is intended to breed a Holstein bull to grade cows more red than white, then a white-colored bull will get calves, as a rule, with more white on them. If the cows are more white than red, then the color of the bull makes no difference.

14. I have never burnt the horns off calves, as I have always bred pure-breds, and some like the horns on. For a working herd, they are better with the horns off, and the best thing I have read of is to take a little Gillett's lye. Wet what will lie on a 5-cent piece, and make a paste of it; rub on the horn at two to three weeks old. Keep the calf so it cannot rub others.

## Figure the Profit.

The cow-testing associations are not increasing in favor. Why, we cannot understand, as there is no system equal to this for knowing the value of the individual cow or the herd. In a progressive district, such as ours is recognized to be, we should have a co-operative cow-testing association at every creamery and cheesery. We note that the Department of Agriculture are aiming to calculate the amount of feed consumed, as well as amount of milk and fat produced. We believe this is a step in the right direction, as it is not the amount of milk and fat produced which gives a dairy cow her value, but how much milk and fat relative to food consumed.

t relative to food consumed. Huntingdon Co., Que. W. F. S.

Failing pastures, and the best of them will fail during the month of August, must be supplemented by some sort of soiling crops, such as oats and peas sown together, oats and vetches, or, what suits me best, oats, vetches and buckwheat, sown on rich ground, and cut green, and fed in the barn, night and morning, followed by fodder corn, pumokins, roots and silage. In fact, we must have some sort of succulent feed before our cows all the time, from early fall, until green grass comes again.—[F. W. Foster, in the Nova Scotia Annual Agricultural Report, 1908.



Ayrshire Milkmaids