



FARM AND DAIRY



Welcomes Practical Progressive Ideas

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land — Lord Chatham

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The Development of the Dairy Heifer

Poor Development May Account For Low Production From Well Bred Stock

WE Canadian stockmen have not made the most of our opportunities. This is emphasized by the low production of much of our really good stock. We are not thorough enough as compared with the Old Countryman. I like to look upon ourselves as past the point where we need be told that the pure-bred sire is the one economical road to progress. I like to believe that even pure-bred is not now good enough. We are reaching the point where we must have more live stock, and it must be better live stock. Our margin is smaller. The old cow will eat her head, or quicker than ever before. The right kind of stock involves development as well as breeding and it is on development that I will dwell.

I want to start developing before the calf arrives. Ten months of work, two months' rest, with the cow calving in good vital condition, gets us a good, vigorous calf. When the calf arrives we should be ready for it. Many a stunted calf and three-quartered cow can be traced to carelessness at this time. Every stable should have disinfectant handy for use at this period.

Fall Calves Advised.

Where a man can raise fall calves I advise him to do so. I have seen many cases where fall calves have overtaken calves dropped the previous spring and passed them. Flies, heat and oftentimes neglect, retard the growth of the spring calf. In feeding the calves, whether fall or spring, they must first have their mother's milk. There is a great tendency to try and feed the calves more milk than is good for them, when great development is desired. The calf is a very willing victim to this over-feeding, especially if he has been starved a while. I should say that the maximum amount of whole milk to be fed to a big calf should be 10 lbs. a day. When selling whole milk, there is a tendency to skimp the calf's allowance. Two weeks should be the minimum length of feeding on straight whole milk. Then we would change to skim milk if we have it, and again I would advise—don't over-feed. The maximum amount here is 20 lbs. of skim milk a day, or to an unusually large calf, 24 lbs. Where there is no skim milk we must feed some whole milk. Five months is the minimum period of milk feeding and, in-

duced many stock men to go into roots, and they now realize their value.

Clover and alfalfa are ideal for dry roughage, but sometimes we haven't got it. We are in that position at Ste. Anne's. Growing peas and oats, however, let us out. We haven't fed a pound of clover hay to a calf, bull or cow this past winter. Our sowing mixture is two bushels of oats to one of peas. We cut in the milk stage and cure. Care must be taken to get it cured well. Some of ours got too far along, but in feeding we soaked it with molasses solution and got on fine. This is the force of feed molasses.

I would not advise going to the extreme in housing and forcing. Even a spring calf should get a run on fall pasture. I don't like the round, tidy appearance of exclusively stall-fed calves.

Winter Development.

When it comes to wintering a heifer, many come out in the spring, poorer than they went in in the fall. The winter ought to afford us our best chance for development. At least at Ste. Anne's we look for greater winter development than summer development. For this purpose the cheap feeds are the best. Silage comes first and has no equal as a general stock food. Turnips and ensilage make an ideal combination. I have

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Age of Breeding.

Many give all of these attentions to the development of their heifer calves, but the cows don't turn out as well as they should. Why? I believe in many cases it is due to the owner being in too great a hurry to get the heifers in milk. I wouldn't have a heifer bred to drop a calf before she was 30 months of age, and most of them come a little late. There is a little risk at the other extreme in deferring freshening to three years.

I was speaking on this subject at a meeting in a dairying district in Quebec. After the meeting I accepted the invitation of one of the audience to go home with him for the night. As is usual we first went out to the stable to look over the stock. First we looked over Laura. She was a big fine cow. Beside her was another, small and pinched. I was surprised to hear that she was Laura's daughter. Laura first freshened at 35 months, her daughter a little over two years.

I want to see the heifer freshening for the first time, get a good chance. She should come in in good condition. Heavy feeds must be avoided, and she should have lots of exercise. Preferably she should freshen in a box stall. For feeding previous to calving I would advocate a little bran and oats, and perhaps brewers' grains and a little oil cake. A dose of Epsom salts, one and one-half pounds at least.

—Synopsis of an address.

Cow Testing as a Road to Herd Improvement

BY C. F. WHITLEY, OTTAWA

Some Sample Increases in Three Years' Cow Testing, Both in Number of Cows and Yields of Milk.

Herd.	Last Year.		Three Years Ago.		Increase per Cow		Percentage Increase	
	No. of Cows.	Lb. Milk.	No. of Cows.	Lb. Milk.	Lb. Milk.	Lb. Milk.	Cows.	Cows.
A	9	7,225	5	6,287	938	14%	287	8%
B	14	7,574	8	5,894	1,680	28%	78%	78%
C	9	8,404	5	4,704	1,700	36%	60%	37%
D	11	7,285	6	5,266	1,989	38%	37%	37%
E	7	4,844	2	2,811	2,033	72%	35%	35%
F	16	7,268	12	4,572	2,697	58%	33%	33%
G	8	10,935	5	7,489	3,246	42%	60%	60%
Average	73	7,392	45	5,405	1,987	36%	60%	60%

TOTAL YIELDS, 296,459 lbs. MILK MORE, 122% INCREASE.

Your attention is particularly invited to the fact that cow testing makes for better and bigger things, as evidenced by these seven Ontario herds, samples of very many others.

After three years of application of this simple tally system, cow testing, we see these herds increasing in the yield of milk per cow from 2,890 lbs. to 4,800 lbs., from 4,500 to 7,200, from 7,600 to 10,900 lbs. Here are gains of from 14 to 72%. The man with 5 cows three years ago now keeps 9, each one better; the owner of 8 now has 14.

As these figures show, the general average increase is 1,987 lbs. of milk per cow, or 36%; while in place of 45 cows these men now own 73, or 62% more. So much better is the general average of the cows kept that the total milk yield is increased by 296,459 pounds, 122%.

May I submit that better proof, not simply of possibilities, but the actualities of cow testing could not reasonably be demanded.