

LIVE STOCK.

The Cow of the Future: What Shall She Be?

In estimating the profits of beef-raising, as compared with other lines of farming, there is a tendency on the part of many to slur over one very important fact, viz., the cost of maintaining the cow that drops the calf. We believe in the dual-purpose cow for certain sections, because it is quite feasible to have a cow of a type that will raise a good beef calf, and at the same time give nearly as good an average yield of milk and butter, taking one year with another, as the special-purpose dairy cow; but the udder end must be looked to first.

There has been a great deal of twaddle talked and written about the alleged incompatibility of beef and dairy functions. While we believe the cow bred for the express purpose of milk production is likely to excel somewhat in that regard, and is to be recommended for the man anxious to make the most possible out of his cows, her superiority over the genuine dual-purpose type—now unfortunately fast becoming extinct—is not so great as many would have us believe. Indeed, we go so far as to say that the extreme type of dairy cow is not the most profitable, even for purely dairy work. She lacks the necessary foundation of constitution, and, while individual representatives of her race may make phenomenal records, the average is often disappointing. There are many weeds in all the breeds—many cows with defective udders and teats, weakness of vital organs, lack of staying qualities, and other deficiencies. Now, we would not seek to discourage the dairyman from breeding for increased production, but in doing so, we caution him against the emaciated bag-of-bones type, and abjure him to look for constitution and a degree of substance as a foundation, if he would produce the largest possible number of profitable milkers. The number of superior dairy herds that have been built up by using a bull of some dairy breed on grade Shorthorn females, attests the soundness of this doctrine. In fact, the ideal type of dairy cow is, in our mind, not such a great way from the dual-purpose type, and the latter need only selection, with the use of scales and the Babcock test, to develop into very profitable dairy strains. The reason there are not more good milkers, of this type is because very few breeders of pure-breeds have had such an ideal in view. Most of those who were breeding for milk have been misled by extreme teaching, and those who have not been breeding for milk have let their herds run to beef. Hence, good pure-bred dual-purpose sires have become scarce, and dairymen have been unable to build up or even maintain real dual-purpose herds,

so that we find, where a dairy-bred bull has not been introduced, the milking function has gradually diminished. This is deplorable, for the Shorthorn breed has exhibited a marvellously persistent milking habit, considering how little attention has been given by breeders to the cultivation of that propensity, and only requires judicious handling to restore this function.

We believe the remedy lies in more attention to substance on the part of those handling dairy breeds, and more attention to milk on the part of those breeding Shorthorn sires. In fact, without this, the Shorthorn men in this country will find their field rapidly narrowing, and will have only themselves to blame. The Advanced-registry appendix cannot be too soon introduced into the Shorthorn herdbook, for some such systematic action is necessary to stem the beefward drift. That any breed of cattle can be profitable under ordinary Ontario farm conditions, whose cows merely nurse their calves, we gravely doubt, unless fancy prices are obtained on the basis of fashionable pedigree. There may be limited areas of cheap lands where such a practice might be permissible, but even in most of these cases are there not more profitable ways of utilizing the pasture and feed produced? And if this is true to-day, far more emphatically true will it be when our land rises considerably in value, as it is bound to do in the next few decades. Everything points to the unwisdom of adhering to purely beef breeds. The two kinds of cows that will be demanded in our future agriculture are the special dairy cow (bred as indicated above) and the dual-purpose cow which acquires herself well at the pail and raises a good calf as a side line. Both types are entirely feasible, and both will have their place, but the breeders of the latter must take care not to sacrifice a dollar's worth of milk for a quarter's worth of beef.

We have all heard a good deal of talk about the cow which will raise a steer calf that will sell for \$60 or \$70 at two and a half or three years of age. As if it took no feed to raise that steer! How much profit was there in raising that calf, allowing nothing for its value at birth? To put it in another way, how much could the farmer have paid for that calf at a week old, and made any profit in raising it? We must get down from the clouds and go into a final analysis of this problem; and when we do this, it will be found that, allowing all the incidental advantages which may reasonably be claimed in favor of the dual-purpose cow, her owner cannot afford to content himself with five dollars' worth less of milk than the dairy cow gives, if he would make as good a showing from his farm at the end of the year as his special dairy neighbor does. Is a good beef-bred calf worth five dollars at birth? We have asked many beef champions this question, but their answer is ever evasive.

COST OF GROWING A CALF ON \$100 LAND.

Prof. H. W. Mumford, of the University of Illinois, who is doing particularly valuable work in solving problems of beef production, makes an estimate of the cost of growing calves up to six months old, giving them the full use of the cows, on land worth \$100 an acre.

He estimates that calves having a high percentage of beef blood should weigh, at six months, from 400 to 450 pounds; that the calf crop each year should be 85 per cent. of the number of cows; that such cows are worth about \$40, and that a suitable bull would cost approximately \$150 to serve twenty-five cows. On this basis he gives the following itemized statement:

Five per cent. interest on investment in two acres of \$100 land and accompanying equipment	\$10.00
Seven per cent. interest on investment in 1.18 cows, at \$40	3.90
Seven per cent. interest on investment of 1-25th of a \$150 bull	.42
Cost of production of winter feed and pasture, exclusive of above charges	4.00
Taxes and insurance on land and cattle, including necessary fencing repairs	3.00
Annual depreciation on 1.18 cows, at \$2.00	2.36
Pro rata depreciation on herd bull	.80
Four per cent. mortality on valuation of the stock and herd bull	2.13
Total cost	\$26.61

While Prof. Mumford's calculations might be bettered somewhat by a thrifty husbandman, the average man hardly equals them, and average results are what we have to reckon with. Plainly, the raising of beef cattle with special-purpose beef cows kept on \$100 land does not prove very remunerative in Illinois. It would take a better feeder than we have ever known to make a profit feeding those \$26.61 six-months-old calves into export steers at ruling market prices for feed and beef, unless, indeed, the feeder purchased them for less than they cost to raise, as is almost invariably the case. If the calves were reared on cheaper land, the showing would be more favorable. We commend these figures to the consideration of our readers, and will present something further on this subject at a later date. Meanwhile, lest we be misunderstood, let us reiterate our conviction that the special-purpose beef cow has small place in modern Ontario agriculture, and will have less place in the future than she has to-day. We believe some beef-raising can be carried on to excellent advantage, but the calves must be dropped by cows that acquit themselves with a good average performance at the pail. We need more of such cows.

The Maritime Winter Fair a Decided Success.

The Maritime Winter Fair, held at Amherst, Nova Scotia, December 3rd to 6th, was a decided success in every particular, except attendance. On Monday there was a very fair crowd for the opening day, but toward night a heavy drifting snowstorm came on, which interfered with the evening audience, and by Tuesday the roads in every direction were blocked, and the storm continued until noon; Wednesday the attendance was about half that of last year, and by Thursday the roads had been fairly well broken, and the attendance was good.

The exhibit of beef cattle, though not quite up to last year in numbers, was, as a whole, superior in quality to any previous show. Perhaps the best steers were hardly so good as the best of some former shows, but there were fewer poor ones, and only two or three animals in the show that would not be a credit to any farmer's stable, or feed lot.

The dairy stables were better filled than ever before, there being thirty-one cows of all breeds and grades, including six Hólsteins, eight Ayrshires, seven Jerseys, three Shorthorns and seven grades.

The sheep exhibit was of very superior quality, and though not quite up to last year in numbers, was the best that has ever been put up in quality.

Hogs were probably not quite up to last year, either in numbers or in quality, viewed from the bacon standpoint. Though there were some Yorkshires and Tamworths of very good bacon type, most of the hogs were rather thick and fat to suit the English bacon trade. It should be borne in mind, however, that the Maritime Provinces are not yet a pork-exporting country. In fact, they do not nearly supply their own towns and cities with pork and lard, so that the necessity of producing the Wiltshire side has not appealed to farmers here as it has to those of Ontario.

The poultry show was the largest ever put up in the Maritime Provinces, there being over twelve hundred birds in the building. The utility classes were especially creditable, the White Plymouth Rocks and the Barred Rocks being even better than those shown at the Provincial and other shows of Ontario.

The apiary exhibit was smaller than last year. B. W. Baker, of Amherst, had a pretty display of honey in jars and comb sections.

Apples were a good show, and demonstrated the fact that apples can be successfully grown in almost any county in the Maritime Provinces. A prize is given for the best collection of ten varieties from each county, and then a sweepstake for the best collection in the show.

Dressed poultry was of fairly good quality, but there were very few entries.

One of the most useful departments of the fair is the seed show. There were some splendid samples of wheat, barley and oats, and also of potatoes, and a few good samples of peas. Special mention should be made of the exhibit of Donald Innes, of Tobique River, N.B., both of threshed grain and grain in sheaf, hand-selected heads. Mr. Innes won the silver medal for the best showing made by a member of the Canadian Seed-growers' Association.

The addresses in the show-ring and in the auditorium were of a very high order, and were on several occasions listened to by large audiences, though sometimes one could not help but feel that such excellent addresses as were given by D. Drummond, on "Cow testing in its relation to herd improvement," and Prof. J. H. Grisdale, on "Breeding, feeding and marketing of sheep," were largely wasted on an audience, more than half of which was composed of Amherst ladies, who knew little and cared less about farm stock.

The fair was formally opened on Monday evening, Mayor Silliker, of Amherst, and Hon. W. T. Pipes, for the County of Cumberland, extending a welcome to the visitors, which was eloquently replied to by A. B. Copp, M.P.P., of Sackville, N.B. Hon. D. C. Frazer, Lieutenant-Governor of Nova Scotia, formally opened the sixth Maritime Winter Fair, in an earnest, eloquent and patriotic address, in which he urged the young men of the Maritime Provinces, in view of what these provinces can produce, as shown by the exhibits in the building, to remain in these provinces and help to develop their wonderful agricultural and other resources.

Hon. L. P. Ferris, Commissioner of Agriculture for New Brunswick, spoke of the development of agriculture in his Province, and of the benefit accruing from the Farmers' Institute system.

Hon. G. H. Murray, Premier of Nova Scotia, spoke of the advantages of co-operation of the Maritimes

Provinces in the work of agricultural education, by means of the Winter Fair and the Agricultural College.

Hon. Justice Longley eloquently pointed out that the Provincial exhibitions are largely entertaining, while the Winter Fair is an educational institution of a very high order, and of special value. He pointed out the necessity of developing the productiveness of the farm, and by so doing encourage the young men to stay on the farm, instead of drifting into the towns or over the border into the United States.

On Tuesday evening Staff-Captain McGilvray, of the Immigration Agency of the Salvation Army, said that the Salvation Army last year brought out between twelve and thirteen thousand immigrants, and expect next year to bring out more than thirty thousand. He said great care is being exercised in selecting these immigrants. Last year more than a hundred thousand had applied to the Army for passage to Canada, while only twelve or thirteen thousand had been accepted. He advised those in the Maritime Provinces requiring help either on the farm or as domestics to write to Staff-Captain Jennings, Halifax, N.S.

Prof. J. A. Ruddle, Dominion Dairy Commissioner, said that the Maritime Provinces are especially adapted to the dairy industry, and urged the encouragement and general use of the butter factory, especially so as the increased amount of butter made from a given amount of milk at the factory, as compared with the average home dairy, will more than pay the expense of making the butter at the factory. He also spoke of cold storage for fruit and butter, and of the market ready for us in the West Indies, which, perhaps, was hardly necessary for him to mention, as the Maritime Province farmers do not need to go hunting for a market, as they do not nearly supply their own markets.

Duncan Anderson spoke of the possibilities of the Maritimes Provinces in sheep-raising. He was sorry to notice that there are 92,000 fewer sheep in Nova Scotia than there were twenty years ago, and said that it would be a loss of well on to half a million dollars a year to the treasury of the Province. In seeking a remedy for this decrease he found that some objected that the sheep destroyed the sheep, and he wanted to ask if the sheep in the Province are worth half a million dollars. He believed that capital invested in cheap