

To Tell the Age of Horses.

To tell the age of any horse,
Inspect the lower jaw, of course;
The six front teeth the tale will tell,
And every doubt and fear dispel.

Two middle "nippers" you behold
Before the colt is two weeks old;
Before eight weeks two more will come;
Eight months the "corners" cut the gum.

The outside grooves will disappear
From middle two in just one year;
In two years from the second pair,
In three the corners, too, are bare.

At two the middle "nippers" drop;
At three the second pair can't stop;
When four years old the third pair goes;
At five a full new set he shows.

The deep black spots will pass from view
At six years from the middle two;
The second pair at seven years,
At eight the spot each "corner" clears.

From middle "nippers" upper jaw
At nine the black spots will withdraw;
The second pair at ten are white;
Eleven finds the "corners" light.

As time goes on, the horsemen know,
The oval teeth three sided grow;
They longer get, project before
Till twenty, when we know no more.
—(Maryland Farmer.)

PRIZE ESSAY.**Is Sheep Raising Profitable in Canada, and What are the Future Prospects?**

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The first part of our question may be considered from two distinct standpoints. First, from the actual profit or loss mathematically shown as the reasonable result of raising sheep, and again as compared with other stock. Considering that Canada is a broad field, extending from the Atlantic to the Pacific, including every variety of soil and climate; from the Rockies of the West, that vast fertile, treeless plain, the prairie, the rich land of Ontario, down to the fertile marshes, great timber lands, and half unbroken pastures of our own provinces by the sea. It will, therefore, appear useless to mathematically place the result in dollars and cents, for what would be applicable to Nova Scotia would not apply to Ontario, and what would apply to Ontario would not to Manitoba, owing to the great diversity of prices and conditions. But let us consider the question from the latter standpoint, drawing a comparison between the raising of sheep and the raising of beef.

Sheep will, by careful and proper management, give as much meat as cattle on a given amount of food. This, I think, is believed by the best and most experienced stock men. Very many of our farmers do not properly guard against the waste of food. The first waste is in a want of properly proportioned rations whereby the full amount of food would be utilized. A second waste is in the manner of feeding. Usually the hay, straw, or such feed as may be most convenient, is tossed out in the barnyard for the sheep to gather up as best they may; during the meal the food is trampled under foot, usually among snow or mud, and too large a part is left uneaten. This being repeated day after day and month after month, comes to be by no means trivial. The third waste is in a want of proper shelter. Though a close, warm barn is not desirable for sheep, yet shelter from the winter's snow and rain is much needed. Snow falling on the sheep will be melted by the heat of the animal, and the water soaking through the wool causes a cold dampness. Thus the sheep in many cases catches cold; at all events she is

made cold, and an additional amount of food is required to keep up the animal heat. Here, then, is a waste of food. Now I think it is only owing to these wastes that sheep are sometimes thought to yield less meat than cattle in proportion to the amount of food consumed. Their meat is said by analysts to be more nutritious. Be that as it may, it will sell in our markets at equally as high a price. Therefore I regard sheep equal to cattle, as regards the production of meat.

Now let us consider the manure question. The sheep undoubtedly in this particular stand decidedly ahead. I quote from Harris on Manures: According to Prof. Wolf's table of analysis "Sheep manure, both solid and liquid, contains less water than the manure from horses, cows or swine, and the solid dung is also the richest in nitrogen, while the urine from sheep is pre-eminently rich in nitrogen and potash." For farm manure the sheep is surpassed only by the hen, and rivaled only by the hog. It is much easier to save the manure from the sheep—less of the liquid being lost—owing to the dryness of the solid most of the liquid is soaked up and saved, while that from cattle is lost, or saved only in expensive tanks or cemented cellars. Sheep, while on grass, scatter their manure much more evenly, which is therefore of much greater value. Thus it is that wherever sheep are kept the land is found to continually increase in fertility. The amount of labor bestowed on sheep is much less than that bestowed on cattle. The labor of watering, which takes so much time with a large stock of cattle, is with sheep entirely done away by simply free access to a running stream. The labor of fencing is largely curtailed. The work of cleaning stables is, by a daily addition of straw, confined to some damp days, and altogether there is a great deal less expensive labor in the raising of sheep than of cattle.

Now, another matter which should not slip our attention is the quick returns from the sheep. The money invested in feed during the winter is returned in wool in the spring, and the return for summering comes early in the autumn in the shape of lambs, thus making a semi-annual return.

Now, in addition to all this, we have the wool, which is of the greatest importance. Very little food is used in the production of wool, whereas the wool by preserving the animal heat saves vastly more feed than is used in its production; therefore the wool is actually produced at no cost whatever.

Now what is the result of our comparison? We find that in the production of meat they stand equal. In the production of manure the sheep are perceptibly ahead. That there is less labor by the use of sheep, and that the returns are more quickly realized. Now, I would ask, what is left to the steer to counterbalance the wool of the sheep? I think that the above remarks tend to show that sheep-raising can at least be made quite as profitable as the raising of beef. But it may be argued that in connection with the production of beef, butter may also be made at little cost, or in other words, that sheep would not compare so favorably with a system of mixed husbandry. This may be very true, but in this also the remarks on manure, labor, etc., equally apply. Whatever comparisons are made, it is well to bear in mind that the wool of the sheep, so valuable and so indispensable to many, is produced at a cost actually less than nothing,

owing to the fact that it saves food by the preservation of animal heat. Though many do not believe that sheep may profitably supplant the fat steer or dairy cow, yet all, I think, must admit that they have a great value for utilizing our rough, unbroken pastures, to which they seem particularly adapted. In Canada, perhaps, more especially in the Maritime Provinces, there is a great deal of land which, though continually taxed, yields not a particle of income. This land might as well be pasturing large flocks of sheep, raising both food and raiment for the use of man.

Then, again, sheep kept on a farm in connection with other stock will utilize much food—otherwise wasted—and will accomplish a double purpose by transforming obnoxious weeds to mutton and wool.

Now, what are the future prospects? If our calculations are correct; if sheep will produce as much meat as cattle, and as valuable; if their manure is more valuable; if they require less labor; if the returns be quicker; if in the production of wool more food is saved than is used; if they utilize food which other stock pass over; if thousands of acres of Canada's soil, to-day idle, can be profitably stocked with sheep, and if Canada's sons are sane men, then the "future prospect" must be evident.

It is true that neither beef nor mutton command the price to-day that they did a few years ago. Indeed, both have been quite dull for about three years. But the prospect to-day is brightening. Lambs sell higher than this time last year. It is well to remember that "after the drought comes the heaviest rain," and already the clouds are gathering. The English market at present is dull, but we look forward to better days to come. The great essential is a better class of sheep. The exporters have always found it difficult to secure a suitable class for the English market. Though our sheep have greatly improved of late, yet there is still much room for improvement. No one need fear lest there be too many good sheep raised. What is most needed is a large quantity of excellent mutton which will make for Canada a name.

In the event of reciprocal trade with the United States, so much discussed of late, sheep-raising would receive a new impetus. Boston would prove a good and convenient market. Notwithstanding the present prices it is probable that early lambs could be shipped from the Maritime Provinces at a fair profit. Lambs dropped in January can be made to sell in Boston at from \$6 to \$8 in the early spring months. I do not present the above as argument in favor of reciprocity, but simply to show the future prospects of sheep-raising in the event of such relations. Dr. Twitchell, in his lecture on "The Breeding and Feeding of Animals," delivered in Amherst a few weeks ago, said that having carefully considered the relative cost of raising lambs in Nova and in his State, i. e., Maine, he finds "that, including freight and duty, those raised in Nova Scotia can be placed on the Boston market at less cost than those raised in the State of Maine." If such be the case our sheep raisers may well take courage and not be afraid of the "future prospects."

"Debt is a good deal like the old-fashioned wire mouse-trap—the hole to get in is four times as big as the one to get out at."

It is estimated that 25 per cent of all the cows in America do not pay for their keeping. Test your herd and keep only the good ones.