

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

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## HORSES

### The Cost of Horse Power? SECOND PRIZE ESSAY.

It is rather difficult to answer the above question accurately, but I will endeavor to do so. I take it only the work-horses are meant, as a driving horse is usually more of a luxury than a necessity. The first thing to be considered is the highest market value of the horse, and at what age. The kind we keep weigh from twelve to fourteen hundred pounds, and are worth about \$220 each at five years of age, which is about the time they reach their highest value. We expect to get, on an average, about twenty years' work from them after they reach that age, so that the sinking fund for depreciation would need to be \$11.00 per year, and the interest, at 6 per cent., would be an average of about \$7.00, as, although it would be \$13.20 the first year, it gets 66 cents less every year. The keep of the horse is rather harder to get at, as the hay is not weighed, and the horse does not always get the same amount of grain, as he is often idle. The value of feed also varies greatly at times. When in full work, we feed the following ration per day, which is for about five months per year: 10 pounds oats (chopped), 3 pounds bran, 1 pound oil cake, and about 20 pounds of hay. Then, for four months in the year they get the following per day: About 20 pounds of hay, 6 pounds of oats, and 3 pounds of bran; and they are out to pasture for the other three months. As regards the prices, I think if we take present prices it should be somewhere near the mark, viz.: Bran, \$20 per ton; oil cake, \$37 per ton; oats, \$24 per ton, and hay, \$10.50 per ton. We usually feed mixed hay. I have added \$1.00 per ton each to bran and oil cake for drawing; \$1.50 per ton for drawing to mill and waiting for oats to be chopped, and \$1.00 for chopping, but have taken \$3.00 per ton as market value of hay. (We have only two mills to crush mill feed, but seven to deliver hay.) Thus we find that, during the five months of full work, the horse is on full work he consumes:

3,040 pounds hay, at \$10.50 per ton.....	\$31.96
1,520 pounds oats, at \$24.00 per ton.....	18.24
456 pounds bran, at \$20.00 per ton.....	4.56
152 pounds oil cake, at \$37.00 per ton.....	2.81
During four months in stable:	
2,440 pounds hay, at \$10.50 per ton.....	12.81
732 pounds oats, at \$24.00 per ton.....	8.78
366 pounds bran, at \$20.00 per ton.....	3.66
Three months on pasture—\$2 per month.....	6.00
Total .....	\$72.82

This sum per year for food gives an average of 20 cents per day.

The next item is stabling, and that is rather complicated, as we have to have a stable for the horses; we also have to have a barn for the hay, and the horses are under the hay barn, so the expense must be divided between the two. I propose to charge one half the expense to each as regards the insurance, depreciation, interest and roofing. The barn is 65 feet long, 28 feet wide, with stabling under 48 feet of it; the remainder is for the manure; it is also closed in at the end by another barn, and one side by two doors, to save manure as much as possible. There is room for seven horses in the stable, so that the expense must be divided among the seven, as we usually have that number, and never less than six. The barn, with stables, is probably worth \$1,000. Interest at 3 per cent. on the horses' half, and a depreciation, totalling \$40, against the horses; also, insurance, \$1.00 (the horses' half); a new roof about every twenty years, \$70, or \$35 against the horses, which is \$1.75 each year, so we have a total of \$41.75, or \$5.96 per year each horse; renewing the stall floors about every three years, \$3.00 each stall, which is \$1.00 per year each horse; and say \$1.00 per year each horse for other repairs, such as painting doors and windows, broken lights, new pails, brushes, combs, etc., and 25 cents each horse for oil and lantern chimneys. So we have a total of \$8.21 against each horse for stabling.

As regards straw for bedding, of course that is not weighed, but I suppose we use on an average about one ton a year each horse, worth about \$5.00 per ton. The following items can be placed together: Feeding, watering, cleaning out the stables, grooming and harnessing. It usually takes one man one hour and fifteen minutes in the morning, fifteen minutes at noon, and one hour at night, which is 2½ hours per day, at 15 cents per hour, is 37½c. per day, which is \$102.75 for the nine months they are in, for seven horses, or \$14.68 each.

The next thing to be considered is the harness. We keep two sets of team harness, two sets plow chains, one set heavy single harness, and one set cart harness, between five heavy horses. The team harness cost about \$50 per set, with collars. The heavy single harness cost \$30, with collar; the cart harness cost \$25, without collars or bridles, and the plow chains cost \$10 per set, without collars or bridles—a total of \$175. The team and heavy single harness usually lasts us about sixteen years, the remainder a little longer, but we will call it all sixteen years, as the collars do not last near that time, so we have the following expense for harness: Depreciation, \$11 per year; interest, 6 per cent., an average of \$5.58 for the sixteen years, or \$16.58 among five horses, which is \$3.31. Repairs would probably add another \$1 per year against each horse, and washing and oiling the harness, and oil for that purpose, another \$1 each horse. We wash and oil twice a year. So, we have \$5.31 against each horse for harness. The last item is the shoeing. Some of the horses are scarcely ever off the farm, and are very seldom shod. Our shoeing bills for the work horses would average about 12 new sets per year, at \$1.50 per set, \$18; removing the same one, each set, \$6; sharpening, about \$1.50. We must also charge for going to the shoeing smith and waiting for the work to be done. Sometimes we have to go on purpose, but very often we should have to go to town for something else; in that case it does not make so much difference, so, if we charge \$1.00 each time, it will not be far from the mark, which would be about \$16 per year. We usually get a team done at a time (but not always), so we have a total of \$41.50 for five horses, or \$8.30 for each horse. So we have the following cost against the horse:

Depreciation and interest .....	\$ 18.00
Cost of keep per year .....	72.82
Stabling, per year .....	8.21
Straw for bedding .....	5.00
Feeding and watering, cleaning stables, grooming and harnessing .....	14.68
Harness .....	5.31
Shoeing .....	8.30
Total .....	\$132.32

Of course, against this amount we have the manure, which would be worth \$14 or \$15, leaving \$118 a year, or 32 cents a day, against the horse—truly a very much larger amount than most farmers would give credit for, and one which should make one think if it were not possible, by using more up-to-date machinery, to do with one horse less.

C. J. BAILEY.

### Horse Lectures at the Winter Fair.

Synopsis of address on horse topics, given at the Ontario Winter Fair, December, 1910.

#### TRAINING HORSES.

Dr. F. C. Greenside, V. S., of Guelph, lecturing to a large and enthusiastic crowd, comprising many well-known horsemen, confined his remarks chiefly to the principles involved in the education of the horse. The old term "breaking" is objectionable, as such a term infers the using of harsh means. The guiding principle should be rather a leading of the colt into compliance with one's will by artifice, rather than by force. Some trainers are looking for trouble, and expect to use harsh measures, while others, who are the most successful, endeavor to accomplish their object by strategy, and only use force when absolutely necessary.

One must keep the animal out of any position to do wrong, for if he once acts in opposition, he is liable to repeat it. He should have sufficient exercise to keep the sharp edge off his spirits. This exercise should be given in a quiet place, and the colt should be hitched alongside a quiet animal to give him confidence. He should be hitched on either side alternately, so as to teach him to go straight and get accustomed to the pole on either side of him.

No colt, said Dr. Greenside, should be hitched single without the kicking strap, until he has had a few weeks' experience in harness. Do not tie the colt where he can pull back, because he may become a "halter puller." A colt's nervousness can be overcome by putting on a twitch for ten minutes while saddling, and putting a man on its back and leading it around.

Dr. Greenside now touched on what he considered one of the most important points in the education of the colt, viz., that of "bitting the horse," or the cultivation of the mouth. This organ exercises the most important influence in contributing to the control of a horse. The over-draw balances, steadies and promotes a graceful carriage, and regulates speed. Thus, the mouth must be responsive, and by this we mean that it yields readily to the pressure of the bit through the reins. The mouth responds, whether the pressure is intended to restrain, guide, steady, correct or alter the carriage of the head and neck.

In this instance the trainer is cultivating muscles and nerves to respond to pressure, and the mistake is that many trainers have no systematic plans. The bit is forced in the mouth without any knowledge of its effect. Many bad habits will result, particularly in sensitive, nervous horses, which readily show discomfort.

Dr. Greenside then gave much valuable advice regarding the breaking of the colt, particularly in the act of biting. He emphasized the delicacy of touch of the driver, and the abomination of loose-rein driving, as they teach the horse nothing by the mouth. Kicking, forging and bad carriage are due largely to loose-rein driving. The position of the bit in the mouth is important, and should be studied and regulated according to temperament. Much harm is done to colts by bad biting, causing them to show poor form in judging-rings and elsewhere, due to irritation. The trainer of the horse needs education, as well as does the horse.

#### TYPE OF HORSES AND MARKET VALUES.

Herbert Smith, Manager Horse Exchange, Union Stock yards, Toronto, followed Dr. Greenside, and spoke very fluently on "Different Types of Horses, and Their Market Values." Mr. Smith began in a very jocular mood, which brought forth considerable applause from a well-filled lecture room. He stated that he was not a breeder, but was a handler of the horse as a finished product, ready for the market. He referred to Mr. Edison's statement of some years ago, that we were working toward a horseless age, and that horses would only be found in museums. To contradict this belief, he read an extract from an American paper which showed that nothing could fill the place of the horse, and that horses were increasing rapidly in numbers in the United States. He followed with some statistics on the number of horses, and stated that the United States had 21,040,000, and Russia over 30,000,000. The number of horses increased, from 1900 to 1905, 3,025,000; from 1905 to 1910, 3,982,000. This shows that there are more horses now, and Mr. Smith stated that, in spite of this, prices were higher than ever.

Mr. Smith complimented Ontario farmers, believing that they were the best and most critical judges of horses to be found anywhere. This, he thought, was proven by the honors which they carry off in all show rings.

The value of horses, to day was greater than that of any other kind of live stock. Ontario horses being worth, on an average, \$150 each. He also stated that Ontario was slowly losing ground in the horse industry. The Blue book