

The Horse in Literature.

In sacred writ it was deemed worthy of record that Solomon imported horses from Egypt, while the description of the war steed in Job is accounted one of the finest parts of that finest piece of literature. In Greek myth and English satire the qualities ascribed to Centaur and Houyhnhnm testify sufficiently to the high regard in which the horse has ever been held. The name of Bucephalus is inseparably coupled with that of Alexander. At least one Roman emperor had divine honors paid his charger. Who can picture Don Quixote sleeping on his armor without seeing the princely Rozinante tethered under the dewy night? And the stirring incidents of John Gilpin's ride conclusively proved that the racing blood of far-removed equine ancestors was not entirely wanting in the degenerate descendant.—[Horse World.

LIVE STOCK.

Profit in Early-finished Steers from Dual-purpose Dams.

Editor "The Farmer's Advocate":

Replying to your request and observations, I suppose in some quarters the opinion is current that those who buy cattle to fatten usually find their end of the business profitable, and the question is often asked as to whether steers can be profitably raised to the stage of feeders, and if so, how?

At the outset, I desire to combat this first impression, which, upon many, many farms, has not been realized in the system of feeding operations. On the contrary, the experience has been all too prevalent with many of our farmers, that there is no money in the feeding business, and, as a result, men who were engaged in it years ago have turned to something else; but this experience is simply a repetition of the old, old story, that where one man sinks, another will swim; where one man loses his money, another will find it. Although largely engaged in the feeding of cattle, a business in which I intend to continue, I am confident that it pays to raise cattle and sell them for feeding purposes. The one fact, however, which cannot be too strongly emphasized, is that the breeder should also be the finisher of his own animals. Farmers who breed feeding animals should feed them well as long as they can, but when they do sell them it should be as beef animals and not as feeders. To my mind, this is a fact beyond question. Let me repeat—if it pays to raise animals and sell them for feeders, it will pay better to feed these same animals more liberally, and sell them at the same age, finished, and ready for the block. The first office of food is to support life. The wants of the animal system must first be satisfied before any of its food becomes the food of production; and it is only that portion of food which can be properly digested and assimilated, over and above what is required for the support of the animal system that will give a profit. This fact teaches that to get the best results animals should be fed full and appropriate rations continually. When it is known that the digestive functions are most active in early life, and that the percentage of waste in the animal system is much less during this period than when it comes more nearly to maturity, it becomes doubly evident that a full-feeding method is the only sure system of profitable beef production.

No one can follow and study the beef markets of the world without realizing that nice, light and medium-weight baby beef, the cuts of which will almost dissolve in the mouth, is constantly and increasingly commanding the highest price. It should, therefore, be the aim of every beef-grower to endeavor to supply this demand.

In view of the fact, however, that so many of our farmers still persist in selling their young stock for feeding purposes, and no doubt find some margin in it, let us enquire as to the difference in profit in so doing, with the alternative system of finishing these animals.

Although I consider well-developed yearlings more profitable for feeding purposes than animals which are older, yet as the great majority of farmers who sell stockers do so at from two to two and one half years of age, we will consider the two methods of raising these to sell as feeders, and of finishing them at about the same age. For over twenty years I have followed the practice of finishing my two-year-olds; therefore, I will first consider the cost of so doing, and then compare with it what I understand is the general methods of those who raise good animals and sell them as feeders.

The following outline of cost is given from the standpoint of the commercial farmer, who will see to it that the dam is a dual-purpose cow, which will pay her own way well at the pail, and saddle upon the calf no cost for depreciation in her value. All the burden the calf should be called upon to bear is the cost of service fee, which also puts the dam in a money-making condition. My

experience is continually teaching me more than ever, that the best breeding cows are also the best milkers, if the owners will only see to it that the milking quality is fully developed. This is a fact which must come to the surface sooner or later, and should never be lost sight of.

In your letter of request you also suggest that I should outline the cost of a calf, from a special-purpose beef-bred animal—that is from a female—which is not kept for the return she would give, apart from the calf; but in writing for the information and direction of the general farmer and beef-grower, I consider it a serious mistake, upon good agricultural land, to handle any but good dual-purpose females of the beef breeds, and, therefore, deem such an enquiry unnecessary.

This calculation of quantities of food and cost of same is only an approximation, and along the line of my usual practice in calf-raising.

When the calf is dropped, it is a great mistake to give too much milk. By so doing, the digestive system is often so deranged that the thriving capacity of the young animal is ruined. Neither is it wise to make any rapid change in the ration given; for instance, in changing from a new milk ration to one of skim milk, the change should be made gradual, by substituting but a small quantity of skim milk and gradually increasing the quantity till the change is made.

Following are the values placed upon the foods given, which may be changed or adjusted as any enquirer may deem fit, and as his situation and locality demand:

New milk, per cwt.....	\$ 1.00
Skim milk, per cwt.....	.15
Clover hay, per ton.....	7.00
Straw, per ton.....	2.00
Corn silage, per ton.....	1.50
Flaxseed meal, per cwt.....	3.00
Oil cake, per ton.....	30.00
Rent of grass land, per acre.....	2.50
Oats and mixed grain and bran and shorts, per ton.....	20.00

which (for bran and shorts) may seem a little cheap, but makes the calculation simpler; and I may say I have bought my bran and shorts at from \$18.00 to \$22.00 per ton for a number of years, and oats could be bought recently for one cent per pound.

COST OF RAISING A STEER—DROPPED, SAY, FEBRUARY 10th.

Service fee.....	\$ 2.00
New milk, 20 days, 350 lbs.....	3.50
Skim milk, 40 days, 800 lbs.....	1.20
Linseed meal during 3 months, 20 lbs.....	.60
Oats and bran during 3 months, 25 lbs.....	.25
Silage and roots during 3 months, 125 lbs.....	.10
Clover hay during 3 months, 60 lbs.....	.21

Cost at 3 months.....\$ 7.86

Grass during first summer, 6 months.....	\$ 1.50
Oats and bran, 300 lbs., first summer, 6 months.....	3.00

Following winter, 6 months:	
Silage and roots, 3,600 lbs.....	2.70
Straw, 500 lbs.....	.50
Clover hay, 400 lbs.....	1.40
Oats and bran, 500 lbs.....	5.00

Cost, 1 year and 3 months.....\$21.96

Grass, 2nd summer, 6 months.....	\$ 5.00
Second winter, for 200 days:	
Silage, 20 lbs. per day, 4,000 lbs.....	3.00
Cut straw, 500 lbs.....	.50
Clover hay, 1,000 lbs.....	3.50
Mixed grain and bran and shorts, 800 lbs.....	8.00
Oil cake, 400 lbs.....	6.00

Total cost at 2 years 3 1/2 months.....\$47.96

On the first day of June that animal would be barely 2 years 3 1/2 months of age. It would cost to raise \$47.96, and should weigh from 1,200 to 1,400 lbs., and return the owner any place from \$65.00 to \$85.00, according to the prices prevailing at that season of the year. With a variation in the value of foods, an approximate estimate of the cost of maturing a beef animal at this age may be set down in the neighborhood of \$50.00, where silage is used as the base of a cattle-food ration. As I have repeatedly said through the medium of these columns, the cattle-feeder, who is in the business, who does not provide a silage ration, is simply not in the game, when compared with the corn-growing farmer.

In comparing with this the cost of raising a feeder to 2 1/2 years of age, I am of the opinion that the great difference lies not so much in the food given during the yearling stage (although partly so), as in the fact that, during the summers, the supply of pastures is not sufficiently liberal, while the animal is allowed to run with cows and heifers, to his great detriment, and then during the winter the animal is in his two-year-old form, he is just wintered over, as the custom is, rather than given a full ration. By this

method there would be a difference in cost of probably \$10.00 to \$12.00 saved in not feeding the animal a sufficiency of grain, etc. This saving compels the owner to carry this animal from two to four months longer, and sell him as a feeder for from \$45.00 to \$50.00 in the fall, so that his cost would be from \$35.00 to \$37.00, and the cost of the third summer's grass, leaving but a small margin over the cost of production, whereby if the additional ten or twelve dollars' worth of food was given earlier, the margin, as already indicated, would be anywhere from fifteen to thirty dollars, according to the market price of choice beef animals.

At this stage, I would like to solicit the system of feeding followed by farmers who make a practice of selling their two-year-old steers for feeding purposes.

With regard to the production of younger baby beef—that is, animals ready for the block at from twelve to eighteen months of age—I cannot give any personal experience, as, in the past, in this country, it has been difficult to get them sufficiently heavy at that age to command the highest price. Although home demand is gradually strengthening for such animals, yet in the past we have been differently situated in Canada to what our American neighbors are. For years past across the border the highest-priced animals have invariably been purchased for home consumption, whereas the highest-priced Canadian bullocks have been shipped abroad, and therefore demanded a weight of at least 1,300 lbs., as the cost of ocean shipment is per head rather than by weight. As the home demand gradually strengthens, however, and it is found that the highest market price can be obtained for animals somewhat lighter in weight than formerly, there is no doubt an effort will be made to cater to this growing trade. In the foregoing estimate, no value has been placed upon manure, and nothing allowed for labor, the one being an offset against the other.

In the course of the successful farming operations of the future, great value must necessarily be placed upon our barnyard manure. The foremost consideration in the mind of every up-to-date farmer must be the INCREASED FERTILITY OF HIS SOIL.

That is the great keystone of advancing agriculture, and all the varied operations of the farm must ever be directed with that main object in view. The questions of crop rotation, corn and root-growing, land cleaning, cattle-feeding and manure-saving operations, all so dovetail themselves together, and are so unalterably correlated that the student of agriculture must recognize their united importance in the science of his choice. Huron Co., Ont., THOS. McMILLAN

Contagious Abortion.

Faith in the efficacy of the carbolic-acid treatment as a remedy for contagious abortion in cows, is evidently increasing in Europe, as well as in America, judging from accumulating testimony published in farm and stock papers on both continents.

A correspondent of the Farmer and Stock-breeder (British) bears striking testimony to the efficacy of the carbolic-acid treatment. He cites the case of a herd of 16 Jersey cows, near Dorking, in which, in two years, 17 abortions took place. Hearing of the carbolic-acid cure, he decided to try it, and each cow was drenched on Monday morning, starting with a dose of one drachm of No. 4 carbolic acid to half a pint of pure linseed oil. This treatment was continued regularly once a week to each cow for one year, the dose gradually being increased to a maximum of 3/4 oz., given to the cows which had aborted twice, and 1/2 oz. to the remainder. The result was that there was not a single case of abortion after the start of the treatment; the coats of the cows improved immensely, and, in fact, the cows were examples of all a healthy cow should be.

The feeding value of alfalfa is largely in its chemical compound, known as protein; its extreme digestibility is another desirable quality to be considered, and not least is its appetizing character. Not only do all animals like it, but when given in moderate quantities it seems to increase the general appetite for more fat-making feeds. Steers beginning to "fall off" on a heavy diet of corn will come to their appetites after being fed only a few pounds of alfalfa daily, and will eat and assimilate more corn than before. Alfalfa alone is not a fat-making feed. Animals fed upon it grow in weight, but the weight is principally of bone, blood and muscle. It is without a sufficiency of fat and carbohydrates, and these should be added in such feeds as corn, corn meal, or, to a limited degree, even corn stover, sorghum or millet. When alfalfa is fed alone, all the protein cannot be digested, and, therefore, it is always economical to add some carbonaceous foods, if animals are to be fattened.—[From Coburn's "The Book of Alfalfa."