

THE UP-TO-DATE FARMER KEEPS FARM ACCOUNTS EXACTLY AS ANY OTHER CAPTAIN OF INDUSTRY

Head of Farm Management Department At Ontario Agricultural College Tells of System By Which Any Farmer Knows What Each Farming Operation Costs Him, and Practically At a Moment's Notice Can Ascertain His Success Or Failure.

GOOD-BY TO THE HAPPY-GO-LUCKY FARMER

When you see a man using a team of horses, hitched to a plow or to any other implement used around a farm, you can take out your little note book and make an entry saying that it costs 94 cents per hour to do that.

How do we make that statement? Because Professor Leitch of the farm management department at the O. A. C. at Guelph, says so.

And how does he know? Well, if you must have the details, here is how it happens. The advertiser asked Professor Leitch in his office at Guelph if there was anything practical in the work of bookkeeping on the farm. And he turned right around and asked The Advertiser man what he meant. So the first thing he thought of was a man driving a team of horses hitched to a plow or a mower, and so the question was framed in that direction.

Professor Leitch sits in an office that is decorated with figures. Figures to the right of him, figures to the left of him. Figures upstairs and figures downstairs. Without any preliminaries he turned up his records and said:

"It costs 94 cents an hour to operate any horse-drawn machinery or implements with a team of horses and a driver, and that takes in everything."

How Result Was Reached.

"These figures," remarked Professor Leitch, "are the average taken from 17 farms in Oxford County for the year ending May, 1921. They may vary a little from that now, with the price of feed. But here is how we found out. We kept records of some 400 farms, but for some purposes it is better to confine the effort to a certain number of representative farms where records can be very carefully kept. The number of farms worked on these farms is five. Taken on the basis of five horses, here are the figures:

Feed and bedding \$ 62.42
Shoeing 14.64
Use of pasture, taxes, and fencing 25.32
Share of buildings including depreciation, at 6 per cent. and use 34.67
Man labor 184.97
Porks, shovels, blankets 14.75
Veterinary, etc. 2.48
Interest at 5 per cent 89.05

Increase in worth of horses \$1,058.31
Total cost of 5 1,032.72

"That gives an hour cost of 26.93 cents for a horse. When you hitch a horse up to an implement, you increase your hour cost by 7.7 cents per hour, making 34.63 cents per hour. So, speaking in terms of a team hitched to a plow, you have two horses at 34 cents an hour, and the

average for farm labor on those 17 farms was 26 cents per hour, making the total of 94 cents an hour."

What "Cost" Includes.

"But when you use that word, 'cost,' in there, what do you mean?" asked the reporter. "It is a fairly inclusive term," replied Professor Leitch, "and if a man gets that return from his farming he is playing safe. It includes enough to provide another horse by the time the old one is worn out. It is a fair estimate that can be safely adopted by any farmer who wants to know exactly what a certain crop is costing him."

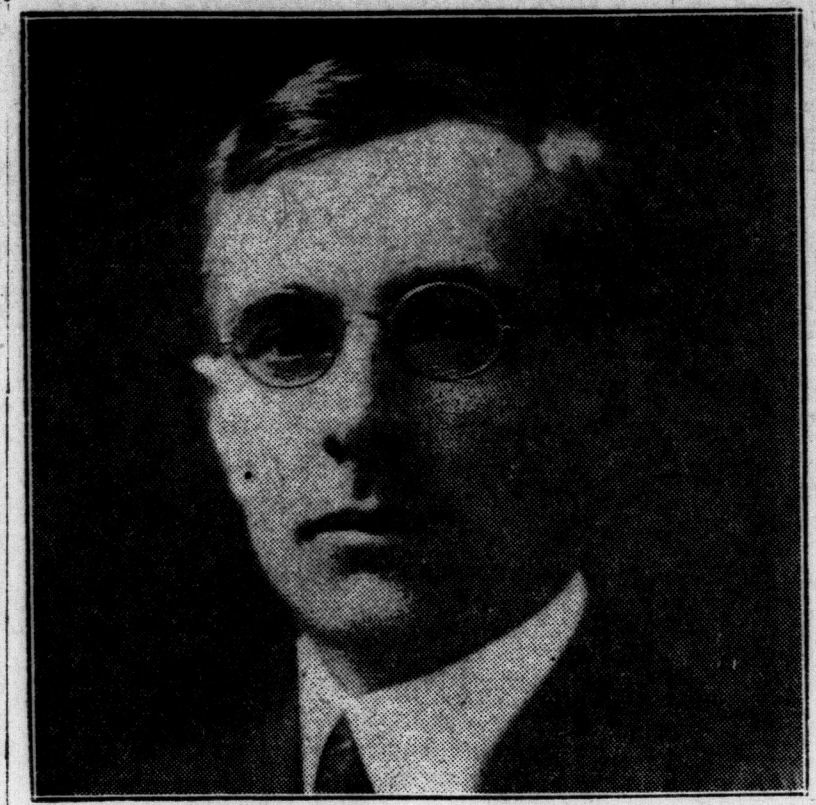
Having put the team of horses and the plow in their proper columns in the books for the night, why the next question came very easily. It was one that every person wants to know about. Perhaps it may have been born of a purely inquisitive turn, but it seemed to follow.

Records Are Fair.

"When we keep records of farms, and these are the same 17 farms I spoke of before, we try to do it fairly. When we took in Oxford County, we made sure they were truly representative places. In some cases a man may be very successful in bee culture, and make a neat return out of that. We passed such a place up. In another a man might have 800 chickens, and be specializing in that, so we kept that place out, too, in an effort to have the records so thoroughly representative that any man engaged in agriculture in these parts could take our findings safely, and know that the totals we give are pretty close to the mark. Now, when we start with a farmer we discuss the question of salary to be allowed him. We try to find out what he thinks he could secure were he to go out and look for a position similar to running a place like his, or what he would probably have to pay another man to come in and take over his responsibilities for a year. In this way we come to a reasonable basis, and one that is fair to the farmer and fair to the records."

"Yes, but the man on the farm gets a lot of things that the man in the city has to pay cash for."

"Not so fast—not so fast," cautioned Professor Leitch. "This thing is worked out on just the same basis as the man who owns his place in the city, or who is in business for himself in any other line. After arriving at what we think is a fair salary, we proceed to charge against that salary rent for the house, based on



PROF. ARCHIBALD LEITCH.

of the farm management department of the O. A. C. He is the pioneer of this work on a large scale in Canada. Not a theorist, nor a faddist, and realizing the need for simplicity in a system that will be useful and not cumbersome, Prof. Leitch now proposes to branch out into other lines. The latest is in finding the cost of handling milk, through the present system of distribution, from the time it leaves the producer until it comes to the consumer.

the cost of it, state of repair, interest, etc. Then we charge the farmer for things he gets in the way of supplies, any fuel he takes or the use he makes of horses for driving or pleasure purposes. He keeps a separate account of his cash expenditures for the table, clothing, education, etc., and right here let me say it would be a good thing for a good many people in the cities if they would keep their household accounts as straight as some of the farmers are doing right now. On these 17 farms in Oxford the averages are shown in this table:

Purchased feed.....	21.9c
Labor hired.....	20.5c
Cash cost fencing, pasture, taxes.....	05.4c
Depreciation of cows and buildings.....	15.7c
Cash expenses.....	63.5c
Supplied by Farmer.	
Farm-grown feed.....	134.3c
Use of farm horses.....	2.7c
Use of equipment.....	3.1c
Labor Costs.	
Farmer and family help.....	35.2c
Interest on investment—cows, building, etc., at 5 per cent.....	24.1c
Total cost.....	\$2.63
Allow for calves.....	14.1c
Actual cost price.....	\$3.49
Then there is the marketing of the milk, which gives these figures:	
Use of horses.....	07.9c
Labor.....	07.7c
Total.....	\$2.40
Add cost.....	\$2.40
100 pounds milk costs.....	\$2.70

"That includes labor at 26c per hour, 5 per cent on the investment, depreciation, and the market value of farm feed, with milk stuff at current prices."

"In computing the price of feed supplies by the farmer, the current market prices prevail. If the farmer got that price \$2.70 per hundred pounds, according to prices at that date, he was getting along fairly well. He was getting paid for his work, or work done by members of the family, taking care of the operation of his herd and buildings, etc. He was not padding his accounts, but simply including in them items that rightly belong there, as any man would do in any other line of business."

"Do other counties do as well as the dairy farmers in Ontario?" asked The Advertiser.

Other Figures.

"As a general thing, no. Here are some figures that include parts of Dufferin, Peel and Wellington:

Labor allowance.....	\$ 827.00
Interest earned.....	\$ 98.00
Total income.....	\$1,825.00
Here is what they spent:	
House rent.....	\$ 207.00
Supplies, services, etc.....	784.00
Cash expenses.....	1,222.00
Total.....	\$2,285.00

"Well, hold on a bit, professor. I don't think that shows that there was a loss of \$460 on these farms?"

"Exactly what it represents. It means that they had to take from their capital \$460 to break even on the year. You may say that this does not represent an actual cash loss. As far as that goes, you can call it what you like. Figured on a fair business basis, those farmers did not make money. They were dealing in beef cattle, potatoes, hogs, sheep, mixed farming generally, and perhaps felt the crops in the little sooner than the dairy men did. The records were kept just as thorough as any way in the other, so we are quite sure of the figures."

"Any more questions?" asked Prof. Leitch, as he settled down to the next query.

Cost Per Bushel.

"All right, here are the figures. And out comes another sheaf of records, dealing mostly with Banner and O. A. C. 72, the varieties largely grown in Oxford. 'The cost of growing a bushel of oats in Oxford in the year ending May, 1921, was 45.5 cents. Here are the figures:

Seed.....	6.3 cents
Twine.....	1.1 cents
Threshing.....	3.6 cents
Spring and fall work.....	6.6 cents
Use of a wide range, as 150 ft. of this is nearly always some crop which is a bumper one, and some a partial failure. Also, that there is a proper time for sowing each crop, as it follows another in rotation. Prof. Leitch brought this to our attention last year, not to be carried away by finding that one crop paid better than another, as if we sowed all one crop part would be sown too early for that crop, or too late. It would pay better to grow a number of crops and average returns. To obtain best results, crops should be sown in the following order: Spring wheat, barley, oats, corn, millet, buckwheat. This allows of a wide range of seedling until July, but each has its proper time to be sown to obtain maximum results."	2.1 cents
Other labor.....	2.1 cents
Horses.....	7.1 cents
Equipment.....	2.3 cents
Use of land.....	1.0 cents
Use of manure.....	5.7 cents
Manure.....	7.8 cents
Land, horses, machinery.....	9.1 cents
Straw credit.....	12.0 cents
Net cost.....	45.5 cents

"You will see," remarked Prof. Leitch, "that if the farmer feeds his stock and gets a return of 45.5c per bushel for oats he is getting on all right. There is a wide spread in the cost of raising oats, and if a person has not given the matter much thought some of the figures would be hard to believe. Here, for instance, are the figures for the cost of raising seventeen farms—29, 33, 48, 46, 50, 51, 53, 55, 58 and 76 cents per bushel."

"But on, not so fast," interrupted the reporter, "you must be out on your count here some place, for you don't mean to say there could be a spread of from 29 cents per bushel to 76 cents in the same county?"

"Exactly as it is there," and the farmer reckoner was ready with his explanation. "Here we have a wet, fertile field in oats, one is on fairly high ground, is well manured and in good shape. The other is perhaps in a low spot. We have a wet, fertile field or rust or something else. The cost has been the same, but one man gets a good crop and the other man does not. One man has a low cost per bushel and the other man has a high cost. That is one of the hazards of farming that many of the people in the cities seem inclined to overlook at times. If the farmer took oats that cost him 76 cents a bushel to town and showed a statement that he would have to get 76 cents for each bushel he would be laughed at and told that the figures for the day were 45 or 50 cents, or whatever the market might be at that time."

Average Crop Costs.

"Want any more crop costs for Oxford? Might as well have them now that you are here?" suggested the O. A. C. man.

"Well, then, give us average costs for farm crops in Oxford." That seemed like a fairly large order, but he came through quite readily.

Barley.....	\$12.83
Corn, silage, ton.....	6.47
Mixed (oats, barley).....	.49
Field wheat.....	1.34
Mangels, bushel.....	7-10c

Many Accounts Kept.

There are hundreds of farmers keeping accounts in various parts of Ontario. The account book is sold largely through farmers' clubs, and the cost is only 15 cents each, but the farmer must make application. In Oxford alone books are kept on 460 farms. The extensive entries from which the above cost prices were taken are secured by some 25 farmers who make entries each day. At the end of the year all these records are sent to the farm accounting department at the O. A. C. where each item is taken and placed in its proper place. These also include all the labor operations for the year. It takes almost five weeks to file complete accounting for the year on one farm. This amount of work could not be applied to a large number of farms, but by doing it on a few selected places it is possible to obtain definite and reliable totals that can be safely used as a working operation by any other farmer in that or a similar district.

In the small account book records take in the following: Inventory of farm, land and buildings, horses, cows, cattle, sheep, hogs, poultry, bees, grain; then all the farm machinery, and what a list is left for this. Here are some items for which blanks are left: Wagons, buggies, cutters, sleighs, plows, tractor, disc, harrow, cultivator, roller, grain binder, corn planter, grain drill, mower, hay rake, tedder, hay loader, hay rack, slings, litter carrier, manure spreader, feed drive, ensilage cutter, fanning mill, potato machinery, orchard sprayer, gasoline engine, farm tractor, work harness, light harness, milking machine, cream separator, scales, etc. One can readily realize after looking over the list what is meant in farm sale ads, by that line, "Other articles too numerous to mention." But they all cost money, they are all needed, therefore, they are included.

Other accounts are for horses, including all shoeing, veterinary fees, etc., cattle account, the same for sheep and swine, poultry, crops, feed, labor, milk sales, equipment, etc.,

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Accurate Cost Accounting Systems Show Good Farmers Their Mistakes, Makes Successful Farming Easier

"With Books Well Kept You Don't Guess Whether Your Farm Is a Success Or Failure—You Know," Say Farmers Who Advocate Cost Accounting On All Farms.

Mr. W. W. Nancekivell, Ingersoll, finds that he gets much of his most valuable information by comparing his returns with those of others. "Cost-keeping," he claims, "will be of most benefit to farmers who at present are not getting satisfactory labor incomes. This was the reason I took up cost accounting, and I have never regretted the step. For some years I had not received my returns from my farm I thought I should, and if there had been a specialist to go over my business with me, as some manufacturers have, I would have employed one; so when Prof. Leitch put on his first survey, I was very well pleased, and I have been farming just as I was before. I am satisfied that the information I later took up cost accounting in the same way.

"I get the best information by comparing my returns with those of others, and with the conclusions of Prof. Leitch on a study of all the farms. That was the first thing I did when I received my returns from Guelph. In doing so, I found that I was obtaining too much of my income from dairy cows, which were around 60 per cent. My wife had been told me this, but I could not believe it. I immediately proceeded to correct this by reducing my herd, and growing some cash crops, as this was Prof. Leitch's recommendation. My chief cash crop is hay, and a few pigs, and some pure-bred cattle. By some slight changes otherwise, I was enabled to raise my labor income from below the average to the top next year."

Cost Accounting.

"Cost accounting has shown me that the average farmer should not specialize too much. That it is to his interests to extend his operations over a wide range, as I find there is nearly always some crop which is a bumper one, and some a partial failure. Also, that there is a proper time for sowing each crop, as it follows another in rotation. Prof. Leitch brought this to our attention last year, not to be carried away by finding that one crop paid better than another, as if we sowed all one crop part would be sown too early for that crop, or too late. It would pay better to grow a number of crops and average returns. To obtain best results, crops should be sown in the following order: Spring wheat, barley, oats, corn, millet, buckwheat. This allows of a wide range of seedling until July, but each has its proper time to be sown to obtain maximum results."

"I found another weak point in my farming, but it was not so essential to my income. This was that I had not enough of my farm under cultivation—114 acres out of 150. Of this seventeen farms—29, 33, 48, 46, 50, 51, 53, 55, 58 and 76 cents per bushel."

"But on, not so fast," interrupted the reporter, "you must be out on your count here some place, for you don't mean to say there could be a spread of from 29 cents per bushel to 76 cents in the same county?"

"Exactly as it is there," and the farmer reckoner was ready with his explanation. "Here we have a wet, fertile field in oats, one is on fairly high ground, is well manured and in good shape. The other is perhaps in a low spot. We have a wet, fertile field or rust or something else. The cost has been the same, but one man gets a good crop and the other man does not. One man has a low cost per bushel and the other man has a high cost. That is one of the hazards of farming that many of the people in the cities seem inclined to overlook at times. If the farmer took oats that cost him 76 cents a bushel to town and showed a statement that he would have to get 76 cents for each bushel he would be laughed at and told that the figures for the day were 45 or 50 cents, or whatever the market might be at that time."

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I have kept cost accounts of each crop of different kinds of grain, and also of the different kinds of stock on the farm. The time spent in keeping the different accounts is trifling. It requires not more than five minutes each night to enter in the books the time a person puts on each kind of crop, also on the different branches of live stock which he engaged in; but it is necessary to enter in the books each night, while it is fresh in a person's mind, for accuracy is the first and most important part in bookkeeping."

"I have made some improvements in the handling of different branches of my farm work which showed a loss of money, and I would recommend any farmer who is anxious to get the most out of farming to keep the cost of everything he does on the farm, and he will know what it costs to grow a bushel of oats, also oats and barley mixed, and find which is the better way, to grow each variety by itself. I am satisfied that any person who has once kept cost accounts of different branches will at once give careful thought to those accounts which show a loss, and will correct any leakage which may occur, if possible, or cut out that line and put more energy on the more profitable branches."

Recommendations.

"I would recommend any farmer to keep cost accounts, for it shows which crop makes money, and the one that loses money; also each line of live stock how much it costs to raise, if any, and at the end of the year how much he has made after allowing interest on investment and salary for himself."

Mr. George A. Brown, of Beachville, has been keeping books in one form or another for seven years, and as he has been farming just the number of years it means that he has always kept books. Speaking to The Advertiser of his experience, Mr. Brown said:

"I am now just finishing my third year in 'cost accounting' for the O. A. C. and prior to that I kept accounts for a couple of years in connection with the same institution, which was then conducting a farm survey. For two years before that I had kept a system of books with the aid of a Merchants Bank account farm book. This makes a total of seven years, which is the exact period I have been engaged in farming. One might gather from that that such a short term of experience in practical farming would not be adequate to form