

I have just been reading a letter entitled "Art in Public Schools" by "One Farmer's Wife," in Sept. 13th issue of "The Farmer's Advocate." I agree with her that perhaps a little too much stress is laid on art in school work, and I think it should be a bonus subject.

So far so good, but when I read the last paragraph censuring the study of the things around us, nature study, in schools I immediately took up my pen to reply. "Such a waste of time," says the Farmer's Wife. I wonder how many of the common plants she knows by name. When she sees a bad weed does she know how to eradicate it? No, she does not, nor does she want her sons and daughters to know. She does not see any need of knowing the insects by name, whether they do good by destroying other insects or whether they are harmful to farm crops, and how to destroy them.

"They are expected to go to the bush and hunt for some simple flower," she says. It is easily seen

goes back through the lane to the woods on a quiet Sunday morning she does not see the sermon that is written in every blade of grass under her feet, she does not recognize the beautiful wild flowers of woodland and meadow which should add such a charm to farm life. She does not hear the sweet singing of the birds; there is no music for her in the gurgling and liquid notes of the Bobolink or in the mimicking carols of the Brown Thrasher.

I could go on, but this, I think, is enough. Yes, let us continue to have nature study in our public schools. It appeals only to a few back numbers as a "waste of time," but it is to be hoped that all will soon come to see the great pleasure it adds to farm life especially, and the great advantage of knowing the weeds, whether bad or not, and how to keep them in check or eradicate them.

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What Did That Crop Cost You?

A commercial business that has a poor system of keeping books, or that has careless accountants, sooner or later finds its business or credit waning, but, with little pretence at bookkeeping or cost accounting farmers have kept their heads above water for centuries. Occasionally one goes bankrupt, many find difficulty in reducing the mortgage, while a few are fortunate enough to make a financial success of agriculture. It is generally admitted that while a living can be extracted from most farms, there is no big money in the business. In fact, it is not a difficult task to figure that the average farmer and his family are working for a mere pittance if interest on investment, depreciation, etc., are allowed on the same basis as in a commercial enterprise. Certain crops are grown and harvested year after year and fed to certain classes of live stock, but little attempt is made to ascertain if it pays to grow a particular crop on a certain field, or whether or not every member of the herd and flock is paying for its keep. The status of the bank account at the end of the year is the gauge which measures the success or failure of the business and a fairly accurate gauge it is. However, it does not show all. The farm, stock, implements, etc., may have a higher or a lower value at the end of this year than they had last year, owing to various circumstances; the bank book doesn't show this increase or decrease in actual wealth. Some years the real balance would be satisfactory, while other years it would create a disturbing sensation in the minds of most financiers. Undoubtedly, farming is the most difficult business to keep books on as so many features over which the manager has little control influence the returns. Again, the farmer is not entrusted with setting his own price. It is set for him with every product he has to sell, irrespective of what it costs to produce, and yet he is compelled to purchase his supplies on a controlled market. Manufacturers, using the same class of machinery and raw material, have approximately the same cost for putting a finished article on the market, therefore, can readily set a price which returns a profit. Not so with a number of farmers growing or manufacturing a certain crop or animal. One farm produces a better crop of wheat, oats, corn, etc., than the adjoining farm, and by reason of this at a smaller expense per bushel. If the selling price were set to give a reasonable profit over what it cost the farmer on the low-yielding farm to grow the crop, it would give a big advantage to those located on

as compared with his commercial brother when it comes to regulating yearly profits. Legislation discriminates in favor of the manufacturer. It always has. The tiller of the soil, representing the most essential class of people to the country, is made the goat. He receives promises, advice, etc., but little financial or legislative assistance from the powers that be. He must work out his own destiny as best he can, oftentimes under adverse conditions.

While cost accounting on the farm may not influence or regulate the price of farm products, it will indicate the crop, class of stock or branch of farming which pays best. True, some crops which entail a lot of work and do not always prove remunerative in themselves must be grown to aid in making a balanced ration when feeding the more profitable crops. There is too much custom and not enough initiative or studying of the business. Why grow a certain acreage of oats year after year if the soil is unsuited and it costs as much to grow a bushel as it can be bought for, when that same soil might grow a paying crop of wheat, corn, hay or pasture, or vice versa? In this age of keen competition it is essential to success that a close study be made of the business so that the least profitable phases may be eliminated, leaving more time to be devoted to the other branches. To do this it is necessary to have some idea of what it costs to grow the various crops, or feed the various individuals in the herd or flock. In regard to crops—rent of land, seed, man and horse labor, machinery, time, etc., must be considered; with stock—cost of feed, labor, interest on investment, use of buildings, etc., are items to be taken into account. To secure authentic figures necessitates keeping records of work done with each crop and of feeding operations. Few bother with figures and judge the profitability of a crop by the appearance, regardless of the amount of labor entailed in securing it. However, we believe that there would be a marked change in the operations on many farms if the owners followed a system of cost accounting.

The actual cost of producing ordinary farm crops is figured out on very few farms, but to give an idea of the expenses under certain conditions we publish herewith a table showing the cost of producing several crops at the Ontario Agricultural College, in 1915, and an additional column of figures gives an estimate of the cost per bushel or ton in 1917.

Crop	Acres	Rent of Land	Use of Bldgs.	Seed	Man labor	Horse labor	Use of machinery	Twine	Extra labor, threshing	Manure applied	Interest	Total cost	Value un-exhausted manure and labor and seed	Value straw	Net cost	Total yield	Yield per acre	Cost per bushel or ton 1915	Estimated cost per bushel or ton in 1917
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$.c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	Bush-els	Bush-els	c.	c.
Barley.....	36	180.00	60.00	44.80	182.40	170.60	67.45	8.25	7.00		20.00	740.50		72.00	668.50	2,040	56.6	36½	48½
Oats, all fields.....	106	530.00	147.00	171.60	516.88	502.67	198.68	26.57	50.28	30.75	56.57	2,240.90	13.87	257.00	1,970.03	6,108	57.6	32½	38¾
Wheat.....	11	55.00	22.00	25.20	135.17	141.36	55.89	5.10			16.07	455.79		32.00	423.79	550	50	77	92½
Mangels.....	10	50.00	48.00	4.40	189.35	124.66	49.43				82.50	563.01	68.31		494.70	10,540	1,054	4½	5½
Turnips.....	6	30.00	24.00	1.80	97.00	71.16	28.14				52.50	313.42	26.25		287.17	2,860	476	10	12
																Tons	Tons		
Alfalfa.....	20	100.00	32.00	133.34	72.78	44.72	17.68				13.42	413.94	66.67		347.27	44½	2½	\$7.76	\$9.31
Clover.....	34	170.00	65.00	68.88	57.38	46.33	18.31				6.36	432.26			432.26	66½	1	6.53	7.83
Clover.....	22	110.00	30.00	46.20	40.17	21.61	8.54				3.92	260.44			260.44	32½	1½	8.00	9.60
Timothy.....	40	200.00	55.00		45.45	29.03	11.47				2.86	343.81			343.81	52	1	6.61	7.92
Corn Silage, all fields..	50	250.00	80.00	24.68	410.42	487.83	194.87	37.44		210.50	36.20	1,744.94	175.57		1,569.37	402	8	3.90	4.68

the best farms. On the other hand, if prices were set on the basis of cost of production on the best farms, where would the other farmers not so favorably situated get off? Again, moisture is often the deciding factor in crop production, but showers may be local. One locality may be favored with showers once a week during the growing period, while a mile distant not a drop of rain falls for weeks at a stretch. One or two farms may be singled out for the path of a cyclone or hail storm, which leaves a devastated trail, which would materially increase the cost of production on the farm. There is no question but that the farmer is at a disadvantage

The yield greatly influences the cost per bushel or ton so that while the figures give the actual cost on the College farm, they are but approximate for the average farm, depending on the yield, rent charged, work performed, etc. It is rather significant that the hay crops were grown at from thirty to fifty per cent. cheaper than they could be purchased at that time, and oats cost from seventy-five to eighty-five per cent. of what they could be bought for. This relationship shows that all roughages needed should be grown on the farm. They can be grown cheaper than the grains. There may be districts, however, where grains do better than the hay

for 1917 we left the rent of land and use of buildings the same as in 1915. The cost of seed and twine was placed fifty per cent. higher, and labor was estimated to be a third higher this year than it was two years ago. Interest and use of machinery were left the same. Thus we found that figuring on the same yield for the two years a bushel of barley would cost 48 1/2 cents this year as compared with 36 1/2 cents in 1915. Oats figured out at 6 1/2 cents more per bushel. The market price of these grains is considerably higher than it was two years ago and more than offsets the increased cost of production. No one can afford to sell hay at eight or nine dollars per ton and secure rent, wages, interest, etc., if it costs that much to produce it. Ten dollars a ton may look like a fair price to those who never stopped to figure up the cost of a ton when placed in the barn.

The cost of horse labor was arrived at by keeping an account of feed, bedding, drugs, time, use of buildings, interest on money invested and blacksmith bills of all horses used for the entire year, and dividing it by the number of hours worked. On this basis horse labor cost 10 1/2 cents per hour. It will cost around that figure on the average farm if every item of expense is counted. It will be higher if there are many idle days.

It is nothing more than good business to know the cost price of every article produced on the farm. It is one way of making the farm an efficient factory. It can be done by keeping track of the hours spent plowing, cultivating, seeding, harvesting and threshing each field, and charging the time at so much an hour. Rent of land, seed, twine and use of machinery would have to be added in order to arrive at the total cost of the crop on a certain field. If the grain is not measured as it comes from the machine, the number of bushels can be estimated in the bin. The bushels of roots in a cellar or tons of corn in a silo can also be estimated. There is nothing very complicated about cost accounting, and it certainly shows the profit or loss in each department of the farm. The weak points can be strengthened or eliminated from the operations, and something of more value substituted. Make note of the time spent this fall in plowing a field for grain or hoed crop next year, and follow it up next spring by marking down time spent at seeding operations. Consider the various items of expense as given in the preceding table. It should be at least interesting to know what it actually costs to grow a bushel of grain, or a ton of corn or hay on the home farm. It may lead to more careful planning of the rotation and of work in general.

Cure Some Corn.

EDITOR "THE FARMER'S ADVOCATE":

I will outline conditions as I see them at present, and also some things emphasized by this year's corn crop.

The weather conditions of last spring and early summer were none too favorable for corn. This summer has not only been cool but according to temperatures recorded, below the average in coolness—in fact, the coolest in 18 years. Hence Ontario, being almost on the northern limit of the corn maturing zone of America has not a crop of corn that will mature well this fall. There will be comparatively little mature corn of high feeding value, in Ontario, apart from that saved as seed, which will reach the market, and far below the ordinary amount in general. Many farmers will only have a small per cent mature, and many will not have any mature corn.

From this it is plain that Ontario should put forth an extra effort to save as much seed as possible. Next year's crop depends upon it, or else a large amount of American corn will be sown for husking purposes. This is not advisable.

Ontario strains that mature well here are the only ones to select. Maturity and adaptability are two big words in selecting corn for seed. The season is late. Corn will not have the usual weather conditions to dry it. By all means seed corn should be picked in the field from healthy stalks bearing ears of medium height from the ground. The higher the ear is on the