How and Why to Figure the Cost of Production

When the barn is full, the cows are doing well, and we have cut expenses in quite a few areas, it is easy to fall into the trap of thinking we don't need to know what it costs us to produce milk. Then we realize that lately the milk check has been spent before all the expenses are paid, which means we need to calculate where the money is going and how to make our farm profitable

Using a record keeping system makes calculating the cost of production easier, but for those who don't have a system, it helps to use the Schedule F form from the federal tax return. For the sake of discussion we have made up numbers for three fictitious herds. Here are "Amos King's" Schedule F figures

To calculate the cost of production per hundredweight (cwt) of milk, we divide the total of all

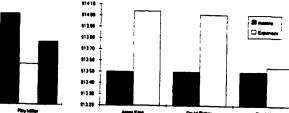
Schedule F (Form 1040)						
Name of Proprietor Amo	s King	-				
Part Farm Income-Cash	Meth	od.		·		
11 Gross Income,	11	\$95.020°				
*Amos King sold 6800 cwt m				had 17 000lb average for	or 40 co	WB.
end 11 culi cows @\$510 ea						
Intil Farm ExpensesCa	sh an					
13 Chemicals	13	740	28	Rent or lease		
15 Custom hire	15	2295	1	a Machinery	26a	3041
16 Depreciation	16	5214	1	b Other (land)	26b	1493
18 Feed purchased	18	22,153	27	Repairs	27	9468
19 Fertilizers and lime	19	1561		Seeds	28	1594
20 Freight and trucking	20	4784		Supplies	30	5147
21 Gasoline, fuel and oil	21	2257		Utilities	32	195
22 Insurance	22	435	33	Veterinary etc	33	7214
23 Interest				Other (bedding, etc.)	34	8139
Mortgage	234	2849	1		-1	
24 Labor hired	24		1			
		· · · · · · · · · · · · · · · · · · ·	٠	<u> </u>		
35 Total expenses		\$95,448				

expenses by the number of cwt sold for the year, which can be figured by adding up the pounds of milk sold as recorded on the milk check receipts. In Amos King's case the expense total was \$95,448, divided by 6800 cwt of milk which equals \$14 04, which is his cost of production per cwt of milk

To figure out the cost per cwt of each expense separately, just divide the total for each expense by the total cwt of milk sold. (Keep in mind that family living expenses are not included when using the Schedule F form figures)

To see what the total income per cwt was for the year, divide the amount on line 11 of the Schedule F form by the total cwt sold. The figure on line 11 might not include cull cow and calf income, depending on how the accountant fills out the form so make sure that income is added in

Here is a comparison of three herds in graph form



Note "Feed Cost" includes chemicals, custom hire, purchased feed, fertilizer, lime, seed, and gas "Debt Repayment" includes depreciation, interest and rent "Other" includes supplies, utilities, vet, breeding, bedding, hauling, insurance, labor, repairs and any other expenses

From these figures we can see that the cost of production is too high in all three herds. These farmers have two options (a) Hope the price of milk goes up, and if it doesn't, they will probably sell out, or (b) Find a way to lower their cost of production

Let's try making one change in each herd and seeing how it affects the cost of production

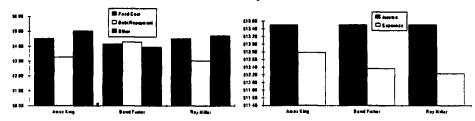
For Amos, let's assume the reason his milk production is at the level of 17,000 lbs. per cow for 40 cows is that his cows don't always have lots of feed in front of them. Amos decides that he doesn't mind taking trough sweepings out to his heifers, and because he now feeds his cows more, his milk production goes up to 20,000 lbs per cow. He is still able to feed his cows for \$4.50 per cwt, but now sells 8000 cwt of milk instead of 6800.

David's debt is what makes his cost of production so high. The rest of his costs appear reasonable His debt is fixed over 15 years. He decides to buy some cows, increasing the herd to 50, which means he sells 10,000 cwt milk per year. He pays \$12,000 for the cows, which adds \$1,200 to his interest payment and \$2,000 more for depreciation. His purchased feed goes from \$3 08 to \$3 30 per cwt because he now

David might have been able to avoid this situation by doing some projections before he signed the loan. We will write more on this subject in a later article and would appreciate any suggestions or examples readers would like to share with us.

Roy has a high herd average, but his feed costs are way too high. He decides to quit feeding some of those expensive "super feeds" that his feed man sells. After all, he figures, what good does a high herd. average do if you aren't making a profit? He drops his feed cost to \$4.50 per cwt, losing a bit of production, which means he probably was getting a small response to his "super feed," but not enough to make it

Here's what the charts look like after these changes have been made



There are many different ways to lower the cost of production so that the farm becomes profitable But first it is necessary to figure out what the costs are and compare the total expenses per cwt to income per cwt. Those figures will pinpoint where the money is going and how much profit or loss there is. Then the farmer can decide what options he has calculating what affects certain changes will have on the totals and make whatever adjustments are necessary to make a profit

As always we invite readers to send us their idea, and experiences so that we can all learn from



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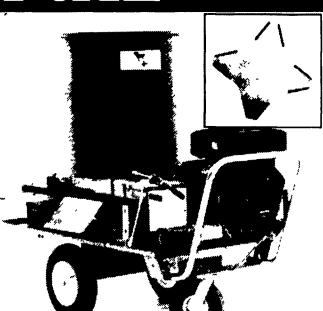
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