MINNESOTA FARM MANAGEMENT SERVICE NOTES

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RETURNS FROM DAIRYING IN 1925

The dairymen on the Askov Farm Accounting Route received an average net return per cow of $14.09 in 1925. T he details of cost and income are shown on page 3. These figures are based on cost records covering 273 cows on 25 farms.

High production is most profitable. The most striking fact brot out by these figures is the wide range between different farms in the various items of income and expense. Altho there was a range of less than 5 cents per pound in the price received for butterfat by the different farmers, the net return per cow varied from a loss of $36.50 to a profit of $66.99. The cost of producing a pound of butterfat varied from 29.4 cents to 71.2 cents. An important factor in economy of production and in profit is the production per cow. This is apparent from the following table.

Production group	Number herds	Average prod.B.F. per cow	Cost per lb. B.F. Feed (cents)	Labor (cents)	Other (cents)	Return per hour man labor (cents)	Net return per cow
Under 200 lbs.	5	187	30.7	28.9	10.7	14.6	-$15.12(loss)
200 - 250 "	7	220	28.8	21.6	8.3	22.7	5.74
250 - 300 "	8	275	26.5	18.4	7.4	29.9	22.65
Over 300 "	5	315	24.6	14.0	7.1	39.4	38.61

The decrease in costs and increase in profits with increasing production is quite striking. It takes practically as much time to feed, care for, and milk a poor cow as a good one. The poor cow takes as much space in the barn, as much equipment and, in general, nearly as much overhead expense. She requires as much feed to maintain her body. The more butterfat a cow produces the less will be the cost per pound since these overhead charges are distributed over more pounds. The profit increases with increasing production even faster than the unit costs decrease since the margin between cost and selling price is multiplied by an increased number of pounds.

High production requires a balanced ration. In order to get high production a cow must not only receive sufficient feed but the feed must contain the ingredients essential for milk production. One of the most important of these is protein. It is also the one most commonly deficient in dairy rations. Those herds receiving a ration low in protein (with a nutritive ratio wider than 1:8) produced only 191 pounds of butterfat per cow. The herds with a fairly good supply of protein (nutritive ratio 1:7 or narrower) averaged 275 pounds butterfat per cow with a feed cost per pound butterfat more than four cents lower.

	Lbs. Feed per Cow			Lbs. Feed per lb. B.F.			Nutri-	Prod.
	Concen- trates	Dry rfg.	Silage & roots	Concen- trates	Dry rfg.	Silage & roots	tive ratio	B.F. per cow
Askov Route	1241	3611	7527	5.0	14.7	31	1:7.3	246
Steele Co. Route	1697	2369	8273	8.8	12.3	43	1:8.6	193

The importance of protein in a ration is further emphasized by the above comparison of these Askov figures with similar data from Steele County. If these feeds are valued at the average Minnesota farm price in 1925 the feed cost is approximately $55.80 per cow for each group of cows. Altho the cows at Askov are probably of no higher quality than those in Steele County they produced 27½ per cent more butterfat at the same feed cost per cow. The feed cost per pound of butterfat was 22.7 cents as compared with 28.9 cents in Steele County. The chief difference between the feed received by these two groups of cows was the higher percentage of protein used at Askov as shown by the nutritive ratio. Alfalfa is the farmer's cheapest source of protein where it can be grown. Where it is not available high protein feeds such as oilmeal must be purchased if dairy production is to be maintained at a high level. Oilmeal may profitably supplement alfalfa with any high producing herd.

Average dairymen received moderate returns in 1925. These dairy figures as presented on page 3 can hardly be considered as representative of the state. The Askov farms are in the cutover country and still in the development stage. The limited acreage of cleared land make necessary the purchase of much of the concentrates from other parts of the state. This results in higher prices for feed than prevail in the developed sections. On the other hand the Askov farmers are dairymen of much more than average ability. They more than offset their disadvantage in feed prices by their skill as feeders. The following table based on cost figures covering 1753 cows in Steele County for a five year period gives a more representative picture of the returns from dairying in the typical developed regions of the state. The average Minnesota farm price for feeds in 1925 has been applied to the quantities of feed determined during the previous years.

Receipts	- Per Cow -	Expenses	
Butterfat	$96.11	Feed	$55.80
Skimmilk	12.50	Labor	32.61
Manure	11.38	Other	29.84
Totals	119.99		118.25
B.F. per cow	193 lbs.	Net Return	1.74
Cost per lb. B.F.	48.9 cents		
Return per hr. man labor	22 cents		

These figures indicate that representative dairymen in 1925 obtained just a trifle over market price for their feed, going wages for their labor and market rates for the other factors used in production. In the long run this is all the average producer in any line may expect. Profits are the rewards for superior skill in selecting and using the factors of production.

In any study of dairy costs and income such as this it should be remembered that dairy cows furnish a market for some feeds such as roughage and pasture that otherwise might not be used. They also furnish employment for the farmer and his family at times when they might not be able to employ their services profitably in any other way. Furthermore they bring in a steady dependable cash income. All these factors tend to render the contribution of the dairy cow to the farmer's income more valuable than this computation would indicate.

RECEIPTS AND EXPENSES PER COW - ASKOV, 1925

	Average amount	Range	Average value	
RECEIPTS:				
Butterfat, lbs.	246	176 - 320	122.62	
Skimmilk, lbs.	5284	2328 - 8316	13.21	
Manure, tons	7.6	4.2 - 15.4	11.38	
TOTAL RECEIPTS		($104.52 - 190.03)		$147.21
EXPENSES:				
Feed -				
Concentrates, lbs.	1241	259 - 2001	23.00	
Hay & fodder, lbs.	3611	2236 - 4637	19.98	
Silage & roots, lbs.	7527	1049 - 11415	18.14	
Pasture, days	150	121 - 196	6.11	
Total Feed Cost		($38.38 to 83.40)		67.23
Labor -				
Man labor, hrs.	230	164 - 373	45.98	
Horse work, hrs.	8	1 - 54¼	.86	
Total Labor Cost		($33.07 to 79.05)		46.84
Other Costs -				
Shelter			11.41	
Equipment			2.69	
Interest			3.82	
Depreciation			.60	
Cash costs			.53	
Total Other Costs		($9.43 to 38.12		19.05
TOTAL EXPENSE		($91.21 to 169.11)		133.12
NET RETURN PER COW		(-$36.50* to 66.99)		$14.09
Feed cost per lb. butterfat		(22.2¢ - 40.3¢)	27.3 cents	
Total cost per lb. butterfat		(29.4¢ - 71.2¢)	44.1 "	
Return per hour man labor		(5.4¢ - 56.1¢)	26.1 "	

*Minus indicates loss

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