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RETURNS FROM DAIRYING IN 1927

Returns. The dairy enterprise on the cut-over farms of the Pine County farm accounting route at Askov yielded a substantial return in 1927. The net return over and above the cost of feed, labor, shelter, equipment and interest averaged \$34.85 per cow for 254 cows in 24 herds. This was \$20.76 more than was realized in 1925 and \$12.85 more than in 1926. The financial statement for the dairy cows is given in Table I.

TABLE I
Returns per Dairy Cow, Pine County, 1927
(Average of 254 cows on 24 farms)

	Amount		Average value	
	Average	Range		
Receipts:				
Butterfat, lbs.	270	186 - 368	\$141.72	
Skimmilk, lbs.	5640	3804 - 9208	14.10	
Manure, tons	6.4	1.5 - 13.8	9.60	
Appreciation			1.71	\$167.13
Expenses:				
Feed - Concentrates, lbs.	1638	352 - 2558	\$29.87	
Hay and fodder, lbs.	3162	1462 - 5035	24.02	
Silage and roots, lbs.	5830	2091 - 10589	16.30	
Pasture, days	170	151 - 181	5.98	\$76.17
Labor - Man labor, hrs.	175 $\frac{1}{2}$	101 $\frac{1}{2}$ - 270 $\frac{3}{4}$	\$35.06	
Horse work, hrs.	7 $\frac{1}{2}$	1 $\frac{1}{4}$ - 36 $\frac{1}{4}$	1.10	\$36.16
Other Costs - Shelter			\$11.57	
Equipment			3.58	
Interest @ 6%			4.08	
Cash			.72	\$19.95
Total expense (range \$94.48 to \$170.57)				\$132.23
Net return per cow (range -\$1.46 to \$68.11)				34.85
Return over feed cost (range \$60.06 to \$132.09)				90.96

These dairymen received returns which probably are well above the average for the state. Their disadvantage in having to buy a considerable part of their feed is offset by their skill as dairymen and by their possession of relatively high producing cows.

Feed Prices. In general feed prices to these farmers were somewhat higher in 1927 than in the preceding year. Home grown hays were slightly cheaper but purchased alfalfa raised the total cost of the roughage. Grains and other concentrates were quite a little higher than in 1926. This resulted in a higher feed cost per cow.

Production of Butterfat Per Cow. The production per cow averaged 20 pounds higher than in 1926, quite a significant increase. This large production was to some extent due to the better selection of cows, but probably was more

largely due to improvement in the quality of the ration and to better pasture. The improvement in the quality of the ration is evidenced by the nutritive ratio of the feeds fed which was 1 to 6.5 in 1927 compared with a ratio of 1 to 7.3 in 1926. The ration not only contained more protein but it was of better quality than that fed during the previous year, due to the larger proportion of alfalfa hay and bran. A second factor which helped increase the production was the greater abundance of good pasture which resulted from the numerous rains and the cool weather last spring and summer. Even though the price of butterfat had remained the same, the increased production would have more than offset the increased feed cost.

Price Received for Butterfat. The average selling price of the butterfat sold was 52.6 cents in 1927, an increase of 3.8 cents over the 48.8 cents received in 1926. This is the highest average yearly price received for butterfat since 1920. This higher price together with the increased production resulted in a very favorable return per cow in spite of the increased cost.

Three Years Comparisons - 1925, 1926, 1927

A comparison of certain facts concerning the dairy enterprise on these Pine County farms for the years 1925, 1926 and 1927 is given in Table II. A study of the table shows that the production per cow has increased.

TABLE II
Summary of Data Concerning the Dairy Enterprise on the Farms
in the Pine County Farm Accounting Route

	1925	1926	1927
Number of cows	273	262	254
Butterfat produced per cow, lbs.*	246	250	270
Man labor per cow, hrs.	230	186 $\frac{1}{4}$	175 $\frac{1}{2}$
Total digestible nutrients per cow, lbs.**	3556	3541	3512
Nutritive ratio	1:7.3	1:7.3	1:6.5
Feed cost (per cow)	\$67.23	\$70.88	\$76.17
Return over feed cost (per cow)	81.63	79.48	90.96
Net return (per cow)	14.09	22.00	34.85
Feed cost per lb. B.F.	27.3¢	28.3¢	28.2¢
Net cost per lb. B.F.	44.1¢	40.0¢	39.6¢
Average selling price of B.F. per lb.	49.8¢	48.8¢	52.6¢
Return per hour of man labor	26.0¢	31.8¢	39.9¢

*Based upon actual sales and records of dairy products used on the farm. Cow testing association records would give a production approximately 10 to 15 per cent higher for the same herd.

**Exclusive of pasture.

In 1927 these farmers were securing more total pounds of butterfat from the same number of cows than in either 1925 or 1926. This increased production per cow was not made at the expense of more feed and labor. Instead it was made possible by better cows and by improving the quality of the ration through increased protein content as reflected by the narrower nutritive ratio. There was a substantial reduction in the amount of man labor used per cow, particularly between 1925 and 1926. Higher feed prices and the increase in the protein resulted in an increase in the feed cost per cow. However, the greater production helped keep the feed cost per pound of butterfat fairly constant. With the feed cost per pound of butterfat remaining the same, the net return depended upon the other factors of cost, the production per cow and the price received. Reduction in the amount of

labor used in 1926 was largely responsible for the larger return that year. Increase in both the production and the price received was largely responsible for the gain in 1927 over 1926. These dairymen have been successful in reducing costs per unit and increasing production, thereby increasing their returns. Such accomplishments are the result of careful intelligent culling, feeding and management based upon carefully kept records of feed and production. These data give an indication of what may be done by showing what actually has been done on these Askov farms.

Future Prospects

In looking ahead to the dairy program for the coming year a number of factors should be taken into consideration because of their influence on the returns from this enterprise. Some of the seemingly important factors are briefly discussed in the following paragraphs.

Consumption. Consumption of dairy products has been increasing slightly faster than production. Measured in terms of total milk equivalent production for the first three months of 1928 was 1.6 per cent and consumption 3.1 per cent greater than for the corresponding period of last year. The consumption depends to a certain extent upon business conditions. As a whole business has not shown any very marked trend and therefore there are no developments at the present time which would indicate any material change in consumption.

Number of Milk Cows and Heifers. According to the United States Department of Agriculture reports, the number of cows and heifers two years old and over being kept for milk throughout the United States was less than one per cent greater on January 1, 1928 than a year previous. There has been a somewhat greater increase (3%) in the number of heifers being kept for milk cows. Consequently increased production within the next year may be expected to come primarily from increased production per cow rather than from an increase in the number of cows.

Production. According to the Market News Service of the United States Department of Agriculture, production of butter for the months of January to March inclusive has apparently been only slightly greater than that of a year ago. The output of condensed and evaporated milk increased 4.8 per cent and cheese production 6.2 per cent during the same period. Whether production will continue to run above last year will depend to some extent upon the feed situation. The amount of these products in storage at the present time is encouraging to the dairy farmer.

Feed Situation. It is still too early to predict the feed situation with any high degree of accuracy. Hay will probably be higher. Wheat mill feeds may be somewhat higher since the condition of the winter wheat crop is much below that of last year. The cold late spring has retarded pasture and delayed planting. If the unfavorable conditions continue feed prices may be as high or higher than last year.

The conditions seem to justify continuing the present scale of dairy production on Minnesota farms. Those who are thinking of expanding the dairy enterprise will do well to consider the possibilities of a slump in industrial conditions with a resulting lower price for dairy products, the probability of higher feed prices and the present high price of dairy stock before taking any definite action. All dairymen should continue to strive for high production per cow and low cost per unit of product.

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