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### AGRICULTURAL EXTENSION DIVISION UNIVERSITY OF MINNESOTA

## W. C. Coffey, Acting Director

MINNESOTA FARM BUSINESS NOTES

June 20, 1934

No. 138

Prepared by the Division of Agricultural Economics University Farm, St. Paul, Minnesota

## EARNINGS ON MINNESOTA FARMS Prepared by W. P. Ranney and G. A. Sallee

Farm records kept by 160 farmers in three parts of Minnesota in cooperation with the Department of Agriculture, University of Minnesota, indicate that in southeastern and in northern Minnesota the earnings of the better farmers in 1933 were sufficient to cover interest on a conservative valuation of the investment and also leave some return for their labor (Table 1). In western Minnesota, be-

#### Table 1

Receipts, Expenses, and Earnings for Minnesota Farms, 1933

	Average per Farm								
Part of state:	Southe	astern	West C		Northern				
Fiscal year:	Jan.1 t	o Dec.31	Mar.l t	o Feb.28	Apr.l t	o Mar.31			
Number of farms	108		22		30				
Cash receipts:									
Dairy products	\$1064		\$348		\$575				
Cattle	304		575		104				
Hogs	510		453		60				
Sheep and wool	62		88		53				
Poultry and eggs	376		409		128				
Crops	395		349		426				
Miscellaneous	225	\$2936	322	\$2544	310	\$1656			
Cash expenses:									
Power and machinery	392		372		241				
Buildings, fences and tiling	77		85		65				
Hired labor	208		8 <sup>1</sup> 4		86				
Feed	200		258		197				
Livestock expense	226		146		80				
Crop	107		98		73				
Taxes	228		238		90				
Miscellaneous	72	1510	63	1344	29	861			
Net cash income		1426		1200		795			
Farm produce used in house		193		216		193			
Increase in inventory		_505	-	-		61			
Total income less cash expense		2124		1416		1049			
Decrease in inventory	-		290		-	-			
Board for hired labor	71		64		39				
Interest at 5% on farm inventor;	y 826		865		393				
Wages for unpaid family labor	241	1138	356	1575	268	700			
Operator's labor earnings		986		-159		349			

Published in furtherance of Agricultural Extension Act of May 8 and June 30, 1914, W. C. Coffey, Acting Director, Agricultural Extension Division, Department of Agriculture, University of Minnesota, cooperating with U.S. Department of Agriculture. cause of the severe drouth, the earnings were insufficient to pay the five per cent interest charge on the investment without allowing anything for the labor and management of the operator. Most of these farmers are more efficient managers than the average of their respective counties, as in general only the better farmers are interested in keeping accounts and in making a farm business analysis. Altho these farms averaged larger in size, they are representative of the types of farming prevailing in their respective areas.

The farmers in this study included the following groups: farm owners, part owners, cash tenants and stock share tenants. Some were entirely out of debt while a few had practically no equity. For purpose of comparison, all financial statements are presented on a full-owner basis. The value of the house the operator lived in, any expenses on it, and any rental value for it are omitted in calculating the earnings. All interest and rent payments actually made are omitted from the cash expenses. The net cash income is the difference between cash receipts and cash expenses when calculated as indicated. In arriving at the operator's labor earnings, the non-cash receipts, such as the value of farm produce used in the house and any net increase in inventory, and the non-cash expenses, such as the value of the board furnished to hired laborers, any net decrease in inventory, interest on the total farm investment and a fairy wage for the work done by members of the family, as well as the cash receipts and expenses, were considered.

The change in farm inventory represents the combined effect of changes both in physical quantities and in unit prices. During 1933 prices of farm products, in general, were rising. In western Minnesota, a decrease in inventory occurred in spite of increased prices, because of the reduction in physical quantities of both feed and livestock as a result of the drouth.

The southeastern Minnesota records are from 108 dairy farms in Dodge, Freeborn, Goodhue, Le Sueur, Mower, Rice, Steele, and Waseca Counties. Cream for manufacture into butter was the principal dairy product sold from these farms, the skimmilk being retained on the farms and fed to hogs and poultry. The 22 records for west central Minnesota are from diversified farms in Stevens County and are representative of the farms in that area. Dairy products, hogs, cattle and grain are produced for sale. The 30 northern Minnesota records were from farms in Beltrami, Carlton, Clearwater, Hubbard, Itasca, St. Louis, and Wadena Counties. Dairying is the most important enterprise on these farms with the production of root and truck crops also of considerable importance.

# Recent Trend in Earnings

Twenty-one farmers in southeastern Minnesota kept records thruout the period 1928-33, 19 farmers in northern Minnesota for the period 1931-33, and 18 farmers in west central Minnesota in 1932 and 1933. In order to show the recent trend in earnings, the data for these farms are summarized in Table 2. Facts concerning the size, organization, production and prices received for products sold are also presented. In this table, the acreages are the seeded acres but the yields are for the acreage harvested.

								19 Farm	s,	18 F	arms,
		1 Farms								Western	
	1928	1929	1930	1931	1932	1933	1931	1932	1933	1932	1933
Net cash income	\$2881	\$3131	\$2751	\$2057	\$1496	\$1703	\$717	\$623	\$869	\$1048	\$1263
Increase in inventory	300	978	-	-	-	400	-	-	-		~
Farm produce used in house	360	_353	324	245	<u>190</u>	185	202	188	<u>196</u>	179	<u>197</u> 1460
Total income less cash expense	3541	4462	3075	2302	1686	2288	919	811	1065	1227	1460
Decrease in farm inventory		-	480	1172	1074	-	87	442	. 7	1120	409
Board for hired labor	136	140	171	108	70	75	58	43	41	82	67
Interest at 5% on farm inventory	1466	1504	1513	1140	852	S <b>3</b> 2	509	472	452	946	901
Wages of unpaid family labor	206	247	298	<u>192</u>	<u>145</u>	159	276	237	232	319	<u> </u>
Total other charges	1808	1891	2462	2612	2141	1066	930	1194	732	2467	1684
Operator's labor earnings	1733	2571	613	-310	-455	1222	-11	-383	333	-1240	-224
Size and organization:		,	,								
Acres in cultivated crops	45	48	48	51	52	55	25	25	23	86	87
Acres in small grain	57 24	53	60	59	55 26	52	37	35	31	186	183
Acres in hay		26	25	23		27	36	39	ų́ц	44	4/
Acres in pasture	47	52	46	41	41	42	85	85	85	54	50 .
Acres in farmstead, road and waste	_11	11	12	15	<u> </u>	<u> </u>	<u>30</u> 213	30	31	20	19
Total acres	134	190	191	189	188	190		214	214	390	386
Number of cows	15.8	19.1	17.3	17.2	17.9	18.3	9.9	11.1	11.1	16.4	16.4
Pounds of hogs produced	16630	177 <b>7</b> 4	199,29	20032	17156	17376	3483	3386	2574	16269	10722
Number of laying hens	196	197	242	269	296	、303	56	65	56	<b>10</b> 6	<b>, 11</b> 2
Animal units of productive livestoc	k 37.6	38.1	39.6	42.6	42.0	43.3	18.7	21.6	22.4	47.1	42.5
Production:	,						١.				
Corn, bu. per acre	42.0	51.5	51.2	37.7	53.5	57.8	24.0	20.8	24.6	29.1	10.0
Oats, bu, per acre	45.8	50.0	57.5	41.7	52.0	36.3	43.0	33.0	29.7	44.9	11.5
Alfalfa, tons per acre	2.6	3.3	2,9	3.0	3.4	2.5	1,5	1.8	1.5	•9	•5
Butterfat per cow, 1b.	252	266	264	256	258	250	244	229	203	185*	198*
Pigs per litter	6.5	7.0	6.4	6.5	6.4	5.8	7.5	6.2	7.8	5.9	5.8
Eggs per hen	102	116	126	124	109	125	108	104	101	81	89
Prices received:											
Butterfat, per lb.	\$.54	\$.51	\$.40	\$.30	\$_22	\$.22	\$.26	\$.19	\$.23	\$.19	\$_22
Hogs, per 100 lb.	8.44	9.75	9.07	5.35	3.24	3.49	5.82	3.05	3.84	2.59	3.57
Eggs per doz.	.27	.29	.22	.16	.13	.13	.14	.12	.14	.12	.11
-00- F											

Trend of Earnings and Factors Affecting on Identical Farms

\*Farms on which the cows were kept primarily for raising beef calves were excluded in calculating average butterfat per cow.

## Table 2

## MINNESOTA FARM PRICES FOR MAY 1934 Prepared by Adena E. Terras

The index number of Minnesota farm prices for the month of May 1934 was 53.1. When the average of farm prices of the three Mays 1924-25-26 is represented by 100, the indexes for May of each year from 1924 to date are as follows:

May	1924 -	84.3		1930				
11	1925 -	106.1				63.5		
11	1926 -	110.1				43.1		
11	1927 -	109.0	Ħ	1933	-	48.6*		
11	1928 -	113.4	11	1934	-	53.1*		
11	1929 -	112.6					*Preliminary	

The price index of 53.1 for the past month is the net result of increases and decreases in the prices of farm products in May 1934 over the average of May 1924-25-26 weighted according to their relative importance.

Average Farm Prices Used in Computing the Minnesota Farm Price Index, May 15 1934 with Comparisons\*

May 15, 1934, with Comparisons*								
	May 15,	Apr.15,	May 15,	Av. May	% May 15,	% May 15,	% May 15,	
	1934	1934	1933	1924-25-	193 <sup>1</sup> 4 is	1934 is	1934 is of	
				26	of Apr.	of May	May 15,	
					<u>15, 1934</u>	15, 1933	1924-25-26	
Wheat	\$.74	\$.72	\$.59	\$1.31	103	125	56	
Corn	.36	.35	.29	.65	103	124	55	
Oats	.27	.26	.18	.35	104	133	77	
Barley	.48	.48	.32	• 59	100	150	81	
Rye	.47	•47	.39	•75	100	121	63	
Flax	1.67	1.57	1.22	2.32	106	137	72	
Potatoes	• 50	•55	.27	•83	91	185	60	
Hogs	3.00	3.40	3.90	9.60	ଞ୍ଚ	7,7	31	
Cattle	3.95	3.80	3.80	6.38	104	104	62	
Calves	4.80	4.60	4.50	8.07	104	107	59	
Lambs-shee		7.07	4.67	11.39	100	151	62	
Chickens	.092	.085	,086	.189	108	107	49	
Eggs	.12	.13	.11	.22	92	109	55	
Butterfat	.24	.23	.21	.40	104	114	60	
Hay	9.18	8.40	6.14	11.49	109	150	80	
Milk	1.26	1.23	.86	1.95	102	147	65	

\*Except for milk, these are the average prices for Minnesota as reported by the United States Department of Agriculture.

Indexes and Ratios of Minne	esota Agri	culture*		
	May	April	May	Av. May
	1934	1934	1933	1924-26
U.S. farm price index	53.2	52.9	44.6	100.0
Minnesota farm price index	53.1	52.5	48.6	100.0
U.S. purchasing power of farm products	67.2	67.5	66.9	100.0
Minnesota purchasing power of farm products	67.1	67.0	72.5	100.0
U.S. hog-corn ratio	6.5	7.4	10.0	12.1
Minnesota hog-corn ratio	8.3	10.3	13.4	15.1
Minnesota egg-grain ratio	12.9	14.5	15.5	14.4
Minnesota butterfat-farm-grain ratio	28.8	28.3	36.2	34.5

\*Explanations of the computation of these data are given in Farm Business Notes No. 126.