

UNIVERSITY OF MINNESOTA
Department of Agriculture
and
UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
Cooperating

-----0-----

THIRD ANNUAL REPORT
of the
Better Farming Club
of
Steele County

By

W. P. Ranney and G. A. Pond
R. C. Bevan, Field Agent
H. J. Van Metre, County Agent

-----0-----

Mimeographed Report No. 47
Division of Agricultural Economics
University Farm
St. Paul, Minn.
April, 1931.

Third Annual Report of the Better Farming Club of Steele
County for the Year 1931

Prepared by W. P. Ranney and G. A. Pond

INDEX	Page
Introduction.....	1
Summary of Farm Inventories.....	4
Summary of Farm Earnings.....	5 & 6
Effect of Well Balanced Efficiency on Operator's Earnings.....	7
Measures of Farm Organization and Management Efficiency.....	8
Find Your Weak Links.....	9
Utilization of Land.....	10
Utilization of Land and Yield of Crops.....	11
Summary of Amount of Live Stock.....	12
Factors of Cost in Dairy Production.....	13
Feed Costs and Returns from Dairy Cows.....	14
Feed Costs and Returns from Young Cattle.....	15
Factors of Cost in Pork Production.....	16
Feed Costs and Returns from Poultry.....	17
Feed Costs for Horses.....	18
Comparisons of Averages for Years 1928, 1929, and 1930.....	20

INTRODUCTION

The Division of Agricultural Economics and the Division of Agricultural Extension of the University of Minnesota, the Bureau of Agricultural Economics of the United States Department of Agriculture and a group of farmers in Steele County, Minnesota, have been cooperating during the years 1928, 1929, and 1930 in a farm account project, known as the Better Farming Club of Steele County. The work was started January 1, 1928, along with similar clubs in nearby counties, viz., Dodge, Freeborn, Goodhue, Rice, and Waseca Counties. This report is a summary of the results for 1930, with a brief comparison with the results for 1928 and 1929 shown on page 20.

The project has been under the direction of G. A. Pond and W. P. Ranney of the Division of Agricultural Economics, University of Minnesota. Hearty support and assistance has been rendered by H. J. Van Metre, County Agricultural Agent of Steele County.

Type of Farming in Steele County

The farms selected for the study are livestock farms on which dairy cattle are the principal source of income. Cream for manufacture into butter is the principal dairy product sold. This is marketed through farmer owned cooperative creameries specializing in the manufacture of high quality butter. The skimmilk is retained on the farm and fed to hogs and poultry. These two classes of livestock are also an important source of income.

The principal crops grown are corn, oats, barley and hay. These crops are raised primarily as livestock feed altho a seasonal surplus may be sold. Wheat, sweet corn, canning peas, and flax are grown to a limited extent as cash crops. These farms are fairly typical of the system of dairy farming prevailing in southeastern Minnesota. This report shows that the receipts from the sales of

dairy products constitute approximately one-third, and receipts from hog sales approximately one-third of the average cash income for 32 cooperators in Steele County. These are approximately the same results as shown by the 1928 and 1929 reports.

Records Kept

The records kept by the cooperators included inventories at the beginning and end of the year, cash receipts and expenses, a report of feed fed to the various classes of livestock, and a record of farm produce used by the farm family. Supplementary information was also secured during the year regarding crop and livestock production and practices.

The cooperators were assisted and supervised in keeping their records by the field agent, Mr. R. C. Bevan, who visited each farm in the six counties several times during the year. In addition to securing the supplementary information, the field agent's duties included numerous services, viz., securing a monthly list of prices of farm products prevailing in the area, helping the farmer to place uniform values on real estate and equipment, checking the cash and feed records, and answering any questions that might arise as to how the entries should be made in the account book. The supervision resulted in uniformity in the type of records secured, in the inventory valuations and in the prices at which feed and farm produce were charged.

At the end of the year each farm was visited by a representative of the University who checked the records for completeness and accuracy. The books were then taken to the central office at University Farm, where every entry was again checked and omissions were noted. Any discrepancies found were referred back to the farmers for correction. This double checking insured a high degree of accuracy and completeness in each individual record.

Purpose of Project

The Better Farming Club renders assistance to the cooperators in keeping such records as will enable each operator to know the returns for his labor and management, the returns to capital and family labor, and the actual earnings from the farm that the family had to spend for living and personal use. The main purpose of the Club is to secure such data and information, which when compared with that secured on other farms will enable the cooperator to increase his efficiency in various enterprises and to organize his farm on a more profitable basis. For the latter purpose it was necessary for all the cooperators, tenants as well as owner operators, to include the whole farm business in order that the results would be on a comparative basis. The earnings as shown in this report are computed on an owner basis for the purposes of comparison, but each tenant was supplied a statement of his earnings on the basis of the rental system under which he was operating. Altho there is some variation in prices paid for feeds bought, uniform prices were used in making up the feed summaries and in placing values on the inventories of feed and farm products.

Capital Investment in Farm Business

The average size of the farms in this report is 183 acres. The average farm inventory is \$27,755. This does not include the value of the house in which the operator lived. In 1930, fifty-three per cent of the average farm inventory consisted of land; sixteen per cent of permanent improvements; eight per cent of feeds and supplies; seven per cent of machinery and equipment; and sixteen per

cent of livestock, of which almost two-fifth or an average of \$1,874 consists of the average cow inventory.

Analysis of the Farm Business

On pages 5 and 6 are presented financial summaries of the year's business, showing the average results for the 32 farms on which the work was completed for the twelve months' period, January 1, 1930, to December 31, 1930, and the high and low figure for each item. In the "your farm column" the results of each individual farm business is inserted in the copy sent to the farmer in order that he may compare his figures with the average.

The data on page 5 and the remaining pages, which set up the ranking in the various measures of efficiency, should suggest to each cooperator some possibilities for improvement in his organization of the various enterprises and of his business as a whole. Altho each farm is an individual problem, and has its particular advantages and limitations, the type of farming is fairly uniform in the county and undoubtedly is adapted to the present general conditions. This study should bring out trends that may be taking place toward more profitable combinations of enterprises, and to the more efficient methods of management within the enterprises.

Returns to Operators for Their Labor and Management

The average cash receipts per farm were \$5154. In addition farm produce to the value of \$311 was consumed by the farm family. The total average receipts per farm is the sum of those two items \$5465. The average total expense per farm \$3151, includes \$2905 cash expense, an estimated allowance of \$132 for board of hired labor, and an average inventory decrease of \$114 per farm. The difference between the total income and total expense figure is \$2314. This is the return which the farmer received for his own labor and management, the services of members of his family, and the use of his capital. After deducting a charge of five per cent on the average inventory valuation, \$1388, for the services of capital, there remains \$926 for the services of the farmer and his family. The average value of family labor used, if computed at hired man's wages, was \$442. The average operator's labor earning is the family earnings less their allowance of \$442, or \$484. This is the return to the farmer for his labor and management over and above a five per cent return for his capital and going wages for other members of the family. This return is considerably below that for 1928 and 1929, due to lower prices for products sold and a decrease in the value of a number of inventory items. The results of the three years are compared on page 20.

Summary of Farm Inventories - 1930

Items	Your farm	Range	
		Average	Highest
Size of Farm (acres)	183	505	80
Size of Business (days of prod. work) (1)	693	1475	375
Average farm inventory (without house)	\$27755	\$78020	\$11237
Land	14742	50380	3975
Farm improvements	4535	10590	1934
Machinery & equipment (total)	2075	5208	706
Gen. machinery and equipment	1440	3013	497
Tractor	333	1275	-
Truck	38	506	-
Auto (farm share)	181	513	-
Gas engine (farm share)	16	77	-
Electrical equip. (farm share)	67	523	-
Feeds and seeds	2070	5010	756
Misc. supplies	31	287	-
Horses (total)	537	1500	168
Horses	497	975	168
Colts	40	525	-
Productive livestock (total)	3765	9747	1366
Cows	1874	4860	710
Other cattle	1045	4388	99
Hogs	597	1864	-
Sheep	45	534	-
Poultry	204	540	30

(1) Explanation of Term: "Days of Productive Work"

The total "Days of Productive Work" for any one farm are a measure of size of that farm business using the average number of "ten-hour days" of man labor required per head of productive livestock and per acre of crops as a common figure for combining the size of the crop and the size of the livestock enterprises.

The number of days of productive work for each animal and acre of crops, computed from data presented in Minnesota Tech. Bul. 44, "A Study of Dairy Farm Organization in Southeastern Minnesota," are listed as follows:

Item	Per	No. of Days of Prod. Work	Item	Per	No. of Days of Prod. Work
Cows	Cow	16.6	Corn for grain (Husked)	acre	2.1
Other Cattle	Animal Unit*	7.6	Corn for grain (Husk. & Shrod.)	"	2.8
Sheep	Animal Unit*	2.7	Corn for silage	"	2.6
Poultry	100 hens	20.1	Corn hogged	"	1.25
Hogs	100 lbs. pork prod.	.55	Corn for fodder	"	1.8
Alfalfa	Acres	1.5	Sweet Corn	"	3.0
Tame & W. Hay	"	.6	Potatoes	"	6.4
Sm. Grain & Flax	"	1.0	Sugar beets	"	4.0
" " Hogged	"	.4			
Canning peas	"	2.5			

*Animal Unit represents one cow, one bull, two head of young cattle, seven head of sheep, fourteen lambs, five hogs, ten pigs, or 100 hens.

Summary of Farm Earnings - 1930

<u>CASH EXPENSES</u> Items	Your	Range	
	Farm	Average	Highest Lowest
Tractor (new and exp.)		\$ 197	\$ 947 \$ -
Truck (new and exp.)		37	247 -
Auto (new and exp.) (farm share)		149	814 -
Gas engine (new and exp.) (farm share)		8	46 -
Electricity (new and exp.) (farm share)		46	202 -
Machinery and equipment (new)		194	490 -
Machinery and equipment (exp.)		60	236 10
Bldgs., fences, tiling (new)		301	3117 -
Bldgs., fences, tiling (exp.)		74	505 -
Hired labor		353	1434 -
Feed for livestock		444	1730 9
Other expense for livestock		105	340 2
Horses bought		56	713 -
Cows bought		21	310 -
Other cattle bought		36	351 -
Hogs bought		198	3073 -
Sheep bought		-	- -
Poultry bought		44	166 -
Crop (seed, twine, spray)		230	846 18
Taxes and insurance		327	1237 134
General farm		25	58 12
(1) Total cash expense		2905	8136 493
(2) Decrease in farm inventory		114	1558 -
(3) Board for hired labor		132	490 -
(4) Total expenses (sum of 1, 2, & 3)		3151	9062 686
<u>CASH RECEIPTS</u>			
Horses		26	240 -
Cows		331	1547 -
Dairy products		1684	4337 597
Other cattle		389	1378 23
Sheep		25	520 -
Hogs		1694	5388 294
Poultry		114	667 -
Eggs		362	833 -
Small grain		86	961 -
Corn		10	235 -
Hay		27	298 -
Root crops		36	286 -
Other crops		179	2217 -
Miscellaneous		157	962 -
Income from work off farm		34	395 -
(5) Total cash receipts		5154	13342 2252
(6) Increase in farm inventory		-	1371 -
(7) Farm produce used in house		311	563 154
(8) Total receipts (sum 5, 6, & 7)		5465	13673 2540
Total expenses (4)		3151	9062 686
(9) Returns to capital & family labor (8 minus 4)		2314	4611 375
(10) Interest on farm inventory		1388	3903 562
(11) Family labor earnings (9 minus 10)		926	2566 -867
(12) Unpaid family labor		442	2340 15
(13) Operators labor earnings (11 minus 12)		484	2506 -1757

Summary of Farm Earnings, 1930 (A)

<u>EXPENSES AND NET DECREASES</u> Items	Your Farm	Average	Range	
			Highest	Lowest
Total power machinery and equipment		\$325	\$1187	\$ 40
Tractor		130	724	-
Truck		43	181	-
Auto (farm share)		104	279	-
Gas engine (farm share)		10	59	-2
Electric plant or current (farm share)		38	110	-
General Machinery and equipment		215	496	-112
Bldgs., fencing, tiling		200	613	-55
Hired labor		353	1434	-
Prod. livestock misc. expense		100	340	2
Misc. horse expense		5	63	-
Crop		231	846	17
Taxes and Insurance		327	1237	134
General farm		25	58	12
Decrease in Crops and Feeds		229	1654	-
Decrease in horses		39	218	-
Board for hired labor		132	490	-
Interest on farm inventory		1388	3903	562
Unpaid family labor		442	2340	15
(1) Total expenses		4011	10663	1771
<u>RETURNS AND NET INCREASES</u>				
Items				
Increase in crops and feeds		-	1292	-
Gross returns from all prod. livestock		4753	10150	1876
Cows (including milk to other livestock)		2036	5170	791
Other cattle		683	3528	128
Hogs		1546	3899	-
Sheep		17	341	-
Poultry		471	1111	33
Outside and misc. receipts		94	935	-
Increase in horses		-	175	-
(2) Total returns and net increases		4847	11498	2366
(3) Milk produced and fed on farm		352	912	44
(4) Gross returns (2 minus 3)		4495	10651	2322
Total expenses (1)		4011	10663	1771
(5) Operators labor earnings (4 minus 1)		484	2508	-1757
Gross returns per \$100 expense		117	167	70

(A) Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each item of expense in order to show gross returns and net increases, and total expenses and net decreases. The operator's labor earnings are the same as those on page 5.

Effect of Well Balanced Efficiency on Farm Profits

It is quite evident from this report that few farmers have a monopoly on efficiency. Quite often farm operators show efficient management in one part of the farm business, which is offset by poor results in other phases of the business. These farmers get medium returns while those who fall down all along the line get the lowest returns, and those few who can manage a large volume of business with high all around efficiency are well paid for their labor and management.

The data in this report indicates that the same factors show a relationship to operator's labor earnings as in 1928 and 1929. Size of business in 1930 was a disadvantage to a few who showed a loss, for the larger the business the greater the loss. However, those who excelled in most of the other factors had a return for their labor and management, which tended to be increased by size of business. Hence, a balanced standing in the following eight factors is quite essential in order to secure the highest possible returns:

1. Returns over feed cost per head of livestock.
2. Pounds of butterfat per cow.
3. Index of crop yields.
4. Index of selection of high return crops. (Crops are ranked on basis of average net return for a ten-year period in the following order on pages 10 and 11: A, B, C, D.)
5. Productive livestock units per 100 acres.
6. Size of business - days of productive work.
7. Days of productive work per worker.
8. Equipment and farm power expense (buildings, fencing, all machinery, horse feed, and miscellaneous horse expense) per day of productive work.

In Chart 1 is shown the effect of the number of the above factors in which the farmer excels on his labor earnings. The five farmers who excelled in six or more factors had average earnings of \$1353 above the average of ten farmers who did not excel in more than two factors.

Chart 1. Relation of Operator's Labor Earnings to the Number of Factors in which Farmer is above the average in efficiency.

Number of factors in which farm excels	No. of farms	Your Farm	The length of the shaded lines are in proportion to the average operator's labor earnings	Average Operator's Labor Earnings
Six or more	5		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	\$1515
Three to five	17		XXXXXXX	370
Two or less	10		XXX	162

The array in Chart 1 suggests that it will be worth while for each cooperator to study carefully his ranking on page 8, and learn through his standing in respect to each of the above factors the elements of strength and weakness in his farm business.

Measures of Farm Organization and Management Efficiency

Farm No.	Oper. Labor Earn.	Returns above Feed Cost per Head of Live-stock	Lbs. B. F. of Cow	Index of Crop Yields	Index of Selection of High Return Crops	Prod. Live-stock Units per 100 Acres	Size of Business, No. of Days of Prod. Work	Days of Prod. per Worker	Farm Power Mach. & Eq., Bldg. & Fenc. Exp. per day of Prod. Work
5191	\$2506	\$82	300	112	40.3	25.5	1039	411	\$1.72
5102	1940	72	275	105	28.3	21.2	840	380	1.33
5011	1788	69	238	103	41.8	24.1	643	456	1.84
5151	1513	94	294	107	38.2	22.7	606	285	1.68
5031	1355	35	185	79	36.5	10.2	513	454	1.36
5163	1197	67	295	97	35.6	25.4	764	328	1.42
5162	1123	78	291	105	32.2	26.8	579	426	1.66
5085	1095	81	303	89	38.8	26.2	1163	313	.97
5131	1023	52	183	84	30.3	22.4	533	305	.71
5161	837	62	359	99	34.3	25.7	375	332	1.26
5143	766	18	254	109	42.9	21.8	623	287	1.91
5232	735	54	186	85	43.4	19.3	696	296	1.83
5041	668	67	264	78	29.3	21.7	610	314	1.54
5141	629	44	362	103	28.7	29.0	607	310	1.19
5111	549	50	237	128	33.0	23.0	784	392	1.26
5122	549	55	204	99	32.0	13.2	414	311	1.52
5034	463	49	314	106	36.9	14.5	701	241	1.36
5142	445	68	220	111	30.2	29.6	781	363	1.98
5083	430	47	260	80	21.3	23.5	389	321	1.37
5071	413	42	289	104	30.2	20.4	822	377	1.31
5101	389	65	277	116	21.7	29.5	410	189	1.11
5032	267	64	280	90	39.6	19.7	812	355	1.57
5231	221	59	236	79	37.5	11.9	406	271	1.76
5194	171	21	223	105	36.1	22.4	658	272	.80
5082	77	53	194	95	28.1	20.1	602	277	1.27
5084	-12	54	253	115	44.3	21.3	1382	384	1.89
5121	-228	55	238	91	28.6	27.2	460	190	1.41
5164	-369	39	278	89	38.8	30.2	445	207	1.95
5192	-550	52	212	87	42.9	12.1	589	208	2.18
5182	-1107	62	307	117	33.8	27.1	772	238	1.77
5181	-1642	42	259	87	27.2	17.5	689	259	2.37
5021	-1757	38	175	100	30.6	14.2	1475	317	1.49
Average	484	56	258	99	34.2	21.9	693	315	1.52
High	\$2506	\$94	362	128	44.3	30.2	1475	456	.71
Low	-1757	18	175	78	21.3	10.2	375	189	2.37

Find Your Weak Links

Using your figures from page 8, locate your standing with respect to the various measures of farm organization and management efficiency. The average for the 32 farms included in this summary are located between the two lines across the center of the page:

Oper. Labor Earn.	Returns above Cost per Head of Livestock	Lbs. B. F. per Cow	Index of Crop Yields	Index of Selection of High Return Crops	Prod. Live-stock Units per 100 A.	Size of Business (No. of Days of Prod. Work)	Days of Work per Worker	Farm Power, Mach. & Eq., Bldg. & Fenc. Ex. per Day of Prod. Work
\$2506	\$ 94	362	128	44.3	30.2	1475	456	\$.71
1984	86	328	114	43.2	29.4	943	415	.92
1684	80	314	111	41.4	29.9	893	395	1.04
1384	74	300	108	39.6	26.4	843	375	1.16
1084	68	286	105	37.8	24.9	793	355	1.28
784	62	272	102	36.0	23.4	743	335	1.40
484	56	258	99	34.2	21.9	693	315	1.52
184	50	244	96	32.4	20.4	643	295	1.64
-116	44	230	93	30.6	18.9	593	275	1.76
-416	38	216	90	28.8	17.4	543	255	1.88
-716	32	202	87	27.0	15.9	493	235	2.00
-1016	26	188	84	25.2	14.4	443	215	2.12
-1757	18	175	78	21.3	10.2	375	189	2.37

Utilization of Land - 1930

Crop (A)(B)(C)(D) refer to ranking used in calcula- ting Index of Selection of High Return Crops, as explained on Page 7.	13 farms over 199 acres			11 farms from 140 to 199 A.		
	No. of farms growing this crop	Acres per farm		No. of farms growing this crop	Acres per farm	
		Your farm age	Aver- Aver. for those growing crop		Your farm age	Aver- Aver. for those growing crop
Winter wheat (B)	6	5.7	12.4	1	.2	2.5
Spring wheat (C)	1	.9	12.0	1	.8	9.0
Oats (D)	11	15.5	18.2	6	11.1	20.2
Barley (C)	6	8.2	17.7	4	6.7	18.5
Rye (D)	4	4.2	13.8	0	-	-
Flax (B)	6	5.4	11.7	5	2.3	5.0
Wheat & oats (C)	2	1.6	10.0	2	1.3	7.0
Oats & barley (C)	11	34.7	41.0	10	25.4	27.9
Canning peas (A)	3	3.6	15.6	1	.6	7.0
Other mixtures (C)	0	-	-	1	.7	8.0
Total grain		79.8			49.1	
Corn, grain (B)	13	39.7	39.7	11	26.9	26.9
Corn, silage (C)	12	11.9	12.9	10	9.0	1.0
Corn, fodder (D)	3	1.0	4.2	4	1.6	4.3
Sweet corn (C)	1	.9	12.0	4	3.7	10.3
Sugar beets (A)	1	.6	8.5	0	-	-
Potatoes (A)	12	1.9	2.0	8	.8	1.1
Other crops & summer fallow	1	.4	5.0	2	1.1	6.0
Total cultivated crops		56.4			43.1	
Alfalfa (A)	11	13.9	16.5	8	8.1	11.1
Red clover (B)	1	.8	10.0	0	-	-
Other leg. & mixtures (C)	6	9.4	20.3	3	2.3	8.3
Timothy (D)	4	2.5	8.0	5	5.1	11.2
Annual hay crop (D)	2	.3	1.9	1	.4	4.0
Other hay (till. land) (D)	1	.6	8.0	0	-	-
Wild hay (non-till. land)	7	10.3	19.1	4	2.4	6.8
Total hay		37.8			18.3	
Total crop acreage		174.0			110.5	
Sweet clover pasture (B)	4	3.8	12.5	5	7.1	15.6
Alfalfa pasture (A)	4	.8	2.5	2	1.0	5.5
Red clover or rape pasture (hogs) (B)	4	.7	2.4	0	-	-
Misc. legume pasture (C)	1	.5	6.0	4	4.1	11.4
Other tillable pasture (D)	10	12.9	16.8	4	1.7	4.6
Non-tillable pasture	12	43.8	47.5	7	19.0	29.9
Total pasture		62.5			32.9	
Timber (not pastured)	5	2.2	5.8	2	1.2	6.8
Roads and waste		11.8			5.0	
Farmstead		6.6			6.7	
Total acres in farm		257.1			156.3	
% land tillable		71.			78.	
Index of tillable land in high return crops		36.3			35.0	

Utilization of Land and Yield of Crops - 1930

Crop (A)(B)(C)(D) refer to ranking used in calculat- ing Index of Selection of High Return Crops, as ex- plained on Page 7.	8 farms from 80 to 139 A.			Yield per acre			
	No. of farms growing this crop	Acres per farm		Your farm	Aver- age	High- est	Low- est
		Your Farm	Aver- age	Aver. for those growing crop			
Winter wheat (B)	4	5.1	10.2		22.13	32.00	9.86
Spring wheat (C)	2	1.4	5.5		19.67	21.67	17.67
Oats (D)	0	-	-		54.11	70.00	40.00
Barley (C)	0	-	-		36.00	52.00	19.35
Rye (D)	0	-	-		15.66	22.00	8.33
Flax (B)	0	-	-		10.56	24.44	3.57
Wheat & oats (C)	1	.6	5.0		34.84	50.00	22.50
Oats & barley (C)	7	20.0	22.8		47.37	69.00	30.73
Canning peas (A)	0	-	-		\$52.67	\$65.00	\$45.83
Other mixtures (C)	0	-	-		-	-	-
Total grain		27.1					
Corn, grain (B)	8	17.0	17.0		54.24	80.00	21.82
Corn, silage (C)	8	8.2	8.2		8.48	14.00	4.60
Corn, fodder (D)	1	.2	2.0		2.67	4.00	1.92
Sweet corn (C)	0	-	-		3.46	4.17	1.78
Sugar beets (A)	0	-	-		9.64	9.64	9.64
Potatoes (A)	5	.4	.6		73.24	150.00	15.00
Total cultivated crops		25.8					
Alfalfa (A)	5	4.3	6.9		2.76	4.80	1.25
Red clover (B)	3	2.4	6.3		1.65	2.00	1.10
Other leg. & mixtures (C)	3	2.8	7.5		1.73	2.82	.67
Timothy (D)	4	2.1	4.3		1.45	2.56	.80
Annual hay crops (D)	1	.1	1.0		1.61	2.00	1.45
Other hay (till. land) (D)	2	.3	1.0		1.08	1.50	.50
Wild hay (non-till. land)	5	3.6	5.8		1.08	1.50	.50
Total hay		15.6					
Total crop acreage		68.5					
				Some methods farmers use to increase their crop yields			
Sweet clover pasture (B)	2	.9	3.5		1. Tile if necessary.		
Alfalfa pasture (A)	0	-	-		2. Plow under legumes--grow sweet clov. in small grain		
Red clover or rape pasture (hogs) (B)	0	-	-		3. Try commercial fertilizers		
Misc. legume pasture (C)	1	.2	2.0		4. Utilize manure effectively		
Other tillable pasture (D)	6	11.1	14.8		5. Use rotated legume pasture		
Non-tillable pasture	6	8.1	10.7		6. Raise & feed hogs on these pastures & hog down corn.		
Total pasture		20.3			7. Keep plenty of livestock.		
Timber (not pastured)	3	1.1	2.8		8. Grow recommended varieties of crops.		
Roads and waste		4.7	4.7		9. Use best tested seed available.		
Farmstead		4.7	4.7		10. Thorough & timely seedbed preparation--keep weeds under control.		
Total acres in farm		99.3					
% land tillable		78.					
Index of tillable land in high return crops		34.2					

Summary of Amount of Livestock

	Your farm	Average	Highest	Lowest
13 Large Farms; Above 199 Acres				
Number of horses (with tractors) (11 farms)		6.8	9.0	4.0
Number of horses (without tractors) (2 farms)		6.9	7.8	6.0
Number of colts		1.2	4.4	0.0
Number of cows		21.66	38.13	9.42
Number of cows per worker		8.1	10.6	5.1
Head of other cattle		26.2	60.3	4.8
Litters of pigs raised		16.0	30.0	7.0
Pounds of pork produced		23292.0	39375.0	12574.0
Head of sheep (2 lambs equal 1 head)		6.61	69.86	0.0
Number of hens		173.0	286.0	0.0
Total number of prod. livestock units		47.76	79.33	23.08
Number of workers		2.70	4.66	1.13
Number of hired workers		.75	1.60	0.0
11 Medium-sized Farms; 140 to 199 Acres				
Number of horses (with tractors) (8 farms)		5.9	7.8	4.0
Number of horses (without tractors) (3 farms)		6.8	7.3	6.0
Number of colts		.8	2.6	0.0
Number of cows		15.09	23.08	9.67
Number of cows per worker		7.5	10.7	4.5
Head of other cattle		16.3	25.2	11.3
Litters of pigs raised		12.0	20.0	0.0
Pounds of pork produced		17583.0	35758.0	0.0
Head of sheep (2 lambs equal 1 head)		6.5	41.65	0.0
Number of hens		195.0	519.0	73.0
Total number of productive livestock units		34.11	47.03	18.49
Number of workers		2.07	3.25	1.33
Number of hired workers		.77	2.00	0.0
8 Small Farms; 80 to 139 Acres				
Number of horses (with tractors) (2 farms)		4.0	4.0	4.0
Number of horses (without tractors) (6 farms)		3.7	4.9	3.0
Number of colts		.6	2.0	0.0
Number of cows		12.94	14.88	10.92
Number of cows per worker		7.8	10.3	5.5
Head of other cattle		12.4	18.0	8.1
Litters of pigs raised		7.0	11.0	0.0
Pounds of pork produced		12416.0	22144.0	7580.0
Head of sheep (2 lambs equal 1 head)		0.0	-	-
Number of hens		198.0	281.0	79.0
Total number of prod. livestock units		26.44	35.52	20.55
Number of workers		1.77	2.42	1.13
Number of hired workers		.27	2.13	0.0

Factors of Cost in Dairy Production - 1930 (per cow basis)

Farm No.	B. F. per Cow	Feed per Cow - Lbs.										Total Digest Nutri-ents	Total Digest Nutri-ents	% Pro-tein	% Cows Fresh Sept. to Dec. in-clusive	
		Corn	Small Grain	Com. Feeds under 25% Protein	Com. Feeds over 25% Protein	Tame Hay	Alfalfa	Wild Hay	Corn Fodder	Silage	Total Con- Dry- Rough- age					Total Dry- Rough- age
5141	362	-	3124	-	721	-	3237	-	-	9852	3845	3237	6217	17.2	15.6	93
5161	359	344	2568	9	385	549	2473	92	1190	5495	3306	4304	5452	15.2	14.3	57
5034	314	474	2717	-	83	-	2365	-	1429	6629	3274	3794	5349	17.0	12.8	71
5182	307	536	2030	89	170	473	3425	-	59	7206	2825	3957	5343	17.4	14.4	47
5085	303	372	2008	334	39	-	5260	-	-	8428	2753	5260	6154	20.3	15.0	64
5191	300	289	926	28	77	1139	2075	-	814	10089	1320	4028	4651	15.5	12.2	69
5163	295	45	1745	-	-	-	1911	-	151	6087	1790	2062	3415	11.6	13.1	73
5151	294	-	1169	36	-	-	2454	-	690	8742	1205	3144	3879	13.2	12.7	71
5162	291	517	1914	222	244	1576	1146	143	860	9169	2897	3725	5102	17.5	13.2	62
5071	289	258	1527	24	167	98	2889	-	751	9158	1976	3738	4916	17.0	13.5	69
5032	280	41	2448	-	-	73	1988	1159	-	6244	2489	3220	4513	16.1	12.4	73
5164	278	503	896	543	230	660	906	-	495	6018	2172	2061	3607	13.0	13.8	60
5101	277	224	934	517	242	1416	-	-	667	5833	1917	2083	3367	12.2	13.0	57
5102	275	-	1543	-	-	1769	1415	-	-	9080	1543	3184	4268	15.5	11.5	59
5041	264	193	1228	295	103	1338	-	945	1914	8100	1819	4197	4772	18.1	10.8	71
5083	260	-	1471	52	22	2571	-	375	-	5893	1545	2946	3597	13.8	11.0	54
5181	259	422	1395	215	248	2333	-	-	533	9467	2280	2866	4669	18.0	11.2	52
5143	254	544	1493	-	-	621	2378	-	827	10962	2037	3826	5200	20.5	12.1	87
5084	253	100	2305	-	67	174	2899	-	-	13913	2472	3073	5697	22.5	12.9	66
5011	238	-	1089	-	-	-	3386	-	-	10384	1089	3386	4288	18.0	13.6	47
5121	238	248	730	376	192	1075	538	739	-	6788	1546	2352	3427	14.4	12.5	77
5111	237	265	1390	-	14	1254	1104	1404	237	7478	1669	3999	4451	18.8	10.8	82
5231	236	265	2147	66	279	745	745	745	-	4557	2757	2235	3955	16.8	12.3	23
5194	223	-	1377	36	197	1840	344	-	2035	8976	1610	4219	4101	18.4	11.5	52
5142	220	218	1646	494	22	-	3466	-	173	8319	2380	3639	4967	22.6	14.2	46
5192	212	77	-	96	48	619	1582	481	1307	5914	221	3989	3028	14.3	11.1	44
5122	204	118	939	-	-	560	1665	1323	280	7283	1057	3828	3881	19.0	10.9	70
5082	194	641	1275	-	-	3150	-	-	802	8935	1916	3952	4896	25.2	9.5	38
5232	186	-	742	169	-	1249	1001	156	-	9233	911	2406	3374	18.1	13.3	56
5031	185	-	2299	-	-	1592	1699	-	212	-	2299	3503	3456	18.6	15.0	10
5131	183	-	2011	-	36	2299	-	-	-	8908	2047	2299	4185	22.9	10.1	62
5021	175	151	449	73	-	3352	-	-	1810	4563	673	5062	3750	21.4	9.5	31
Average	258	214	1548	115	112	1013	1636	236	539	7741	1989	3424	4435	17.5	12.5	59

Feed Costs and Returns for Dairy Cows - 1930 (per cow basis)

Farm No.	B.F. per Cow	Feed per Cow			Feed Cost per B. F. (Cents)	Value of Produce per Cow					Returns above Feed Cost per Cow	Price Received per Lb. B. F. Sold		
		Con- cen.	Rough.	Pasture		Total Cost	B. F. Sales	Dairy Prod. in House	Milk to other Live-stock	Apprec. or Deprec.		Total Value of Prod.	Sold as Manufact-uring Cream	Sold as Milk, Cheese, or Retail Cream
5141	362	\$51.08	\$40.75	\$6.35	\$98.18	27.1	\$131.47	\$5.36	\$31.64	\$ 4.22	\$172.63	\$74.45	\$.38	\$.80
5161	359	38.39	32.06	5.54	75.99	21.2	127.44	13.35	26.71	-10.07	157.43	81.44	.40	
5034	314	32.87	32.42	7.08	72.37	23.0	112.96	3.80	26.23	.66	143.65	71.28	.38	
5182	307	31.52	39.52	6.40	77.44	25.2	111.73	5.77	28.22	-50.33	95.39	17.95	.40	
5085	303	27.83	51.05	4.56	83.44	27.5	129.62	2.72	27.26	-18.17	141.43	57.99	.40	.62
5191	300	14.53	41.27	6.69	62.49	20.8	113.75	4.99	16.14	-5.85	129.03	66.54	.40	
5163	295	16.48	25.20	7.08	48.76	16.5	112.84	3.46	13.93	-.18	130.05	81.29	.40	1.40
5151	294	10.97	34.81	7.19	52.97	18.0	110.76	3.53	26.43	2.84	143.36	90.39	.40	
5162	291	34.85	36.61	4.54	76.00	26.1	110.04	4.18	19.52	-3.77	129.97	53.97	.41	
5071	289	22.13	40.49	6.73	69.35	24.0	107.44	4.28	23.58	-10.29	125.01	55.66	.40	
5032	280	23.56	29.58	7.16	60.30	21.5	107.17	5.05	10.93	-4.12	119.03	58.73	.41	
5164	278	28.74	22.55	7.34	58.63	21.1	100.19	7.75	17.30	-28.40	96.84	38.21	.40	
5101	277	25.98	22.13	6.04	54.15	19.5	106.93	3.85	20.65	-.54	130.89	76.74	.40	
5102	275	14.43	35.20	5.54	55.17	20.1	100.71	3.28	22.93	-2.88	124.04	68.87	.39	
5041	264	19.93	31.05	5.54	56.52	21.4	96.12	6.76	22.94	4.05	129.87	73.35	.41	
5083	260	14.79	25.81	7.08	47.68	18.3	93.48	5.38	20.38	-3.98	115.26	67.58	.40	
5181	259	26.95	30.30	6.04	63.29	24.4	96.90	3.68	15.24	-6.48	109.34	46.05	.40	
5143	254	20.55	42.45	6.31	69.31	27.3	91.38	7.92	24.47	-17.89	105.88	36.57	.40	
5084	253	24.29	44.16	5.26	73.71	29.1	125.21	3.34	24.55	-3.23	149.87	76.16	-	.54
5011	238	10.58	42.78	7.02	60.38	25.4	87.41	2.52	21.59	.70	112.22	51.84	.39	
5121	238	20.36	25.20	6.38	51.94	21.8	84.71	2.57	14.63	-6.54	95.37	43.43	.38	
5111	237	16.49	32.86	5.22	54.57	23.0	84.34	5.61	30.28	-17.94	102.29	47.22	.41	
5231	236	31.82	18.80	6.83	57.45	24.3	134.76	7.75	3.80	-1.96	144.35	86.90	-	.64
5194	223	18.87	31.04	6.99	56.90	25.5	78.35	7.33	14.25	-7.03	92.90	36.00	.40	
5142	220	24.93	39.52	5.16	69.61	31.6	77.18	7.57	21.79	25.31	131.85	62.24	.40	
5192	212	3.65	29.57	6.74	39.96	18.8	70.70	8.50	19.87	2.61	101.68	61.72	.40	
5122	204	10.15	31.81	6.30	48.26	23.7	65.16	6.30	25.94	-5.14	92.26	44.00	.39	
5082	194	19.48	35.12	5.29	59.89	30.9	71.92	2.36	7.89	1.07	83.24	23.35	.40	
5232	186	9.05	29.19	7.07	45.31	24.4	65.52	1.32	21.73	-.45	88.12	42.81	.38	.41
5031	185	21.25	20.22	5.65	47.12	25.4	63.35	5.35	13.15	2.12	83.97	36.85	.38	
5131	183	19.51	28.16	5.70	53.37	29.2	68.00	2.64	19.25	1.08	90.97	37.60	.40	
5021	175	6.53	31.35	6.29	44.17	25.2	62.69	4.70	16.21	.84	84.44	40.27	.41	
Aver.	258	21.64	32.91	6.22	60.77	23.8	96.88	5.08	20.30	-4.99	117.27	56.50	.40	.74

Feed Costs and Returns for Young Cattle - 1930

Farm No.	Feeds Used per Head, Lbs.					Feed Costs per Head					Net value of Product per Head	Net value of prod. above Feed Cost per Head	% Death Loss
	Concen.	Hay & Fodder	Silage	Whole Milk	Skim-milk	Concen.	Rough.	Milk	Pasture	Total			
5142	366	1508	2936	286	2815	\$3.87	\$13.93	\$11.75	\$1.41	\$30.96	\$68.60	\$37.64	8
5085	661	2273	2057	128	2239	6.03	18.89	7.61	1.42	33.95	58.52	24.57	10
5191	192	1442	3137	95	1523	1.77	12.63	5.34	2.07	21.81	43.96	22.15	-
5031	-	417	-	280	1429	-	2.71	8.18	2.75	13.64	34.56	20.92	-
5011	448	1569	3049	150	1475	4.11	16.30	6.11	4.04	30.56	50.10	19.54	-
5131	148	1853	4322	396	1147	1.46	16.98	9.09	2.43	29.96	43.87	13.91	12
5232	144	327	4098	211	1185	1.57	9.55	6.44	1.63	19.19	32.69	13.50	4
5162	469	914	2971	165	2506	4.56	10.89	8.85	1.23	25.53	37.98	12.45	34
5121	184	1037	2148	182	827	1.97	7.41	6.31	2.42	18.11	29.68	11.57	67
5161	808	2784	2062	255	3629	7.75	18.43	13.28	1.75	41.21	52.69	11.48	-
5082	631	1950	2184	316	577	6.30	12.94	6.78	.88	26.90	38.24	11.34	-
5151	260	1923	3231	311	1985	2.56	17.92	9.84	2.14	32.46	43.62	11.16	8
5041	388	1404	2895	221	1991	3.79	10.66	8.45	2.02	24.92	31.70	6.78	13
5182	754	2879	2424	367	2241	8.47	22.87	11.51	1.43	44.28	48.51	4.23	-
5102	343	1635	4151	362	1450	3.47	16.86	9.45	2.68	32.46	34.52	2.06	19
5111	379	1858	2222	361	3225	3.63	12.13	13.88	2.71	32.35	33.02	.67	-
5032	515	1331	2317	267	1422	4.96	11.83	7.86	2.80	27.45	27.87	.42	-
5192	150	1654	752	467	1843	1.54	6.64	12.31	3.16	23.65	23.83	.18	23
5101	178	1364	909	78	2121	1.87	8.64	6.91	2.73	20.15	18.58	-1.57	34
5071	233	1433	3150	323	1914	2.14	15.03	10.11	3.05	30.33	28.22	-2.11	10
5164	772	993	1206	182	1887	10.09	8.01	8.73	1.91	28.74	25.40	-3.34	7
5034	708	1785	2634	178	2590	6.65	13.78	9.34	2.10	31.87	28.22	-3.65	15
5163	403	1051	1825	260	3082	3.68	10.48	12.51	1.17	27.84	24.01	-3.83	66
5194	201	912	4151	380	2045	1.75	12.21	11.08	2.08	27.12	22.65	-4.47	13
5021	175	2933	1877	413	1903	1.70	16.71	11.56	2.43	32.40	26.95	-5.45	27
5141	244	889	3667	306	1175	2.23	11.61	7.61	2.90	24.35	18.41	-5.94	-
5143	265	1339	4882	150	1422	2.55	17.01	5.90	2.56	28.02	21.75	-6.27	-
5122	270	556	3175	591	2212	2.59	8.18	15.27	1.91	27.95	19.99	-7.96	24
5084	676	975	8972	248	2689	6.38	20.65	10.52	1.39	38.94	29.95	-8.99	8
5083	62	1319	1758	371	3828	.50	9.03	17.18	1.06	27.77	18.07	-9.70	-
5231	696	1593	2744	199	228	7.75	12.39	4.49	1.91	26.54	11.34	-15.20	18
5181	415	1836	2405	225	1587	4.10	13.26	7.77	1.46	26.59	9.68	-16.91	25
Average	379	1492	2822	273	1944	3.81	13.02	9.44	2.11	28.38	32.41	4.03	14

Factors of Cost in Pork Production - 1930

Farm No.	Lbs. of Feed per 100 Lbs. of Pork			Value of Feed per 100 Lbs.				Returns above Feed Cost per 100 Lbs. Pork	Price Rec'd. per 100 Lbs. Pork Sold	Total No. of Lit- ters	Aver. No. of pigs per Litter	Lbs. of Pork Prod.			
	Corn	Small Com. Grain Feeds	Total Com. & Com. Feeds	Tank. Skim- milk	Grain & Com. Feeds	Tank. & Skim- milk	Pasture Total								
5162	227	52	5	284	-	170	\$2.97	\$.42	\$.28	\$3.67	\$5.11	\$8.87	11	7.1	18085
5182	279	193	12	484	-	298	5.17	.74	.21	6.12	4.78	11.95	20	6.9	35758
5082	232	119	6	357	-	97	3.52	.24	.22	3.98	3.90	8.71	12	7.0	15960
5102	255	96	1	352	9	195	3.56	.79	.25	4.60	3.60	8.83	21	6.4	39375
5101	269	124	-	393	-	649	4.00	1.62	.04	5.66	3.35	9.77	8	8.1	10627
5192	223	181	-	404	-	180	3.75	.45	.36	4.56	3.26	8.06	11	6.3	12875
5011	224	153	-	377	-	243	3.79	.61	.06	4.46	3.06	8.79	10	6.6	23044
5032	382	84	2	468	-	67	4.93	.17	.05	5.15	2.99	9.11	11	5.5	18388
5151	274	172	2	448	-	305	4.52	.76	.18	5.46	2.96	9.69	19	7.6	24535
5191	192	315	15	522	1	202	5.27	.55	.26	6.08	2.64	9.10	20	7.0	31200
5085	233	113	-	346	-	1390	3.50	3.48	.22	7.20	2.55	11.75	17	7.8	12574
5232	225	228	-	453	-	490	4.29	1.22	.13	5.64	2.49	9.09	14	5.9	14862
5111	389	109	-	498	-	378	5.11	.95	.21	6.27	2.45	9.27	13	8.4	23880
5163	272	115	1	388	-	733	3.92	1.83	.01	5.76	2.40	9.16	18	6.9	28431
5122	245	205	-	450	-	665	4.44	1.66	-	6.10	2.30	9.73	1	9.0	3205
5121	228	165	1	394	-	639	3.70	1.60	.25	5.55	2.28	8.11	3	8.0	7580
5143	247	304	1	552	-	387	5.40	.97	.14	6.51	2.22	9.64	13	5.8	15233
5181	259	244	-	503	4	183	4.75	.61	.21	5.57	2.21	8.54	14	7.2	20042
5131	265	161	-	426	-	456	4.16	1.14	.26	5.56	2.19	8.00	11	5.8	14551
5084	243	324	7	574	-	310	5.66	.77	-	6.43	2.07	9.74	23	6.2	34970
5164	312	125	28	465	-	1059	5.13	2.65	.24	8.02	1.42	10.24	7	8.6	8909
5021	349	202	-	551	3	359	5.56	1.00	.18	6.74	1.17	9.24	30	6.6	36012
5041	415	117	18	550	4	143	5.64	.52	.31	6.47	1.00	8.17	10	7.5	14638
5071	486	147	2	635	-	317	6.42	.79	.15	7.36	.88	8.87	19	5.8	29425
5161	396	37	-	433	-	657	4.44	1.64	.18	6.26	.76	7.48	3	8.6	9076
5141	182	222	1	405	-	907	4.05	2.27	.11	6.43	.49	9.47	0	-	22144
5031	497	151	-	648	-	189	6.60	.47	.22	7.29	.39	8.76	14	4.4	16404
5194	535	215	1	751	-	31	7.36	.08	.32	7.76	.02	9.03	14	5.6	17165
5034	411	126	-	537	-	779	5.44	1.95	.19	7.58	-.04	8.84	7	5.9	12785
5083	165	145	2	312	-	1793	3.04	4.48	.44	7.96	-.70	8.47	10	3.4	8352
5142	416	330	20	766	-	518	8.18	1.30	.27	9.75	-1.46	8.83	15	6.0	15449
Average	301	170	4	475	1	477	4.78	1.22	.19	6.19	2.02	9.15	13	6.7	19212

Feed Costs and Returns for Poultry - 1930 (per hen basis)

Farm No.	Total Feed (Lbs.) per Hen		Cost of Feed per Hen			Value per Hen			Returns above Feed Cost per Hen	Eggs Laid per Hen	Price Rec'd. per Doz. Eggs Sold
	Concen.	Skimmilk	Concen.	Skim-milk	Total	Eggs Sold & Used in House	Poultry Sold & Used in House; Plus Apprec. or Less Deprec.	Total			
5151	135	67	\$1.65	\$.17	\$1.82	\$4.32	\$.44	\$4.76	\$2.94	218	\$.24
5082	196	37	2.06	.09	2.15	3.56	.65	4.21	2.06	186	.24
5122	75	125	.85	.31	1.16	2.09	.83	2.92	1.76	113	.22
5021	156	-	2.23	-	2.23	2.19	1.78	3.97	1.74	112	.24
5041	86	80	1.04	.20	1.24	2.63	.33	2.96	1.72	145	.22
5191	105	67	1.39	.17	1.56	2.68	.54	3.22	1.66	152	.21
5032	148	89	1.79	.22	2.01	3.19	.45	3.64	1.63	160	.24
5111	72	50	.73	.13	.86	1.36	1.11	2.47	1.61	72	.24
5121	95	32	1.34	.08	1.42	2.44	.54	2.98	1.56	136	.22
5083	94	178	1.09	.44	1.53	2.41	.64	3.05	1.52	134	.22
5164	80	14	.94	.03	.97	2.03	.40	2.43	1.46	119	.21
5071	100	163	1.11	.40	1.51	2.80	.15	2.95	1.44	153	.22
5181	97	22	1.43	.05	1.48	2.85	.07	2.92	1.44	147	.23
5142	76	25	1.09	.06	1.15	1.94	.60	2.54	1.39	107	.22
5131	60	47	.65	.12	.77	1.83	.31	2.14	1.37	96	.23
5034	93	38	.96	.09	1.05	2.01	.21	2.22	1.17	115	.21
5162	105	58	1.23	.15	1.38	2.15	.24	2.39	1.01	122	.21
5141	105	82	1.21	.20	1.41	2.49	-.12	2.37	.96	137	.22
5182	36	37	.42	.09	.51	2.09	-.69	1.40	.89	117	.22
5084	110	78	1.56	.20	1.76	2.47	.17	2.64	.88	118	.25
5163	76	37	.83	.10	.93	1.65	.15	1.80	.87	93	.21
5102	108	65	1.18	.16	1.34	2.20	-.05	2.15	.81	130	.20
5232	73	67	.86	.17	1.03	2.00	-.17	1.83	.80	121	.20
5101	79	25	.92	.06	.98	1.42	.14	1.56	.58	86	.20
5011	58	31	.55	.08	.63	1.32	-.30	1.02	.39	79	.20
5194	220	133	2.42	.33	2.75	2.55	.54	3.09	.34	147	.21
5085	57	70	.63	.18	.81	1.25	-.39	.86	.05	59	.29
5143	142	11	2.06	.03	2.09	1.44	.61	2.05	-.04	118	.20
5192	145	112	1.42	.28	1.70	1.14	.51	1.65	-.05	73	.18
5231	91	26	1.01	.06	1.07	1.26	-.32	.94	-.13	76	.20
5161	48	70	.53	.17	.70	.85	-.43	.42	-.28	48	.19
Average	101	62	1.20	.16	1.36	2.15	.29	2.44	1.08	119	.22

Feed Costs per Horse and Other Power Expense Items (Tractor Farms)

Farm No.	% Colts Are of Horses	Feed per Horse--Lbs.			Feed Costs per Horse				Crop Acres per Horse	Tractor & Horse Exp.		Total Farm Power Exp. per day of Prod. Work	Farms with Truck $\frac{1}{2}$ Ton or Larger	Size of Farms
		Grain	Tame Hay & Alfalfa	Wild Hay & Fodder	Grain	Rough.	Pasture	Total		per Acre of Crop Day	per			
5031	17.2	1444	862	1034	\$13.40	\$8.19	\$5.96	\$27.55	38	\$2.07	\$.73	\$.95	No	Large
5162	-	1170	1250	2750	11.08	12.88	4.75	28.71	19	4.88	.65	1.00	No	Small
5085	21.8	1822	1733	-	16.43	11.26	3.43	31.12	24	2.11	.34	.53	No	Large
5084	-	1768	1040	3315	17.18	13.58	2.80	33.56	36	4.01	.80	1.13	Yes	Large
5143	-	1167	2436	897	11.64	18.91	3.20	33.75	15	4.87	.92	1.33	No	Medium
5163	16.1	2648	1112	247	25.80	7.22	3.62	36.64	19	2.42	.40	.84	No	Medium
5181	12.3	2324	1404	2106	23.59	11.00	3.27	37.86	31	2.22	.51	.91	No	Large
5141	-	1162	3500	2500	11.12	26.00	2.63	39.75	21	4.60	.63	.83	No	Small
5192	-	2240	2109	3141	22.05	17.40	1.80	41.25	26	3.94	.71	1.08	Yes	Large
5032	-	2281	896	5375	22.57	18.96	2.38	43.91	23	2.95	.57	.75	No	Large
5142	-	1896	5556	-	19.55	23.52	2.35	45.42	23	3.25	.51	.85	No	Medium
5231	-	2260	2667	2583	24.05	19.58	2.09	45.72	23	3.08	.70	1.12	Yes	Medium
5122	-	2826	4200	400	28.36	15.40	3.56	47.32	18	4.51	.98	1.08	No	Medium
5041	3.9	1620	1930	5176	15.78	27.06	4.60	47.44	14	3.73	.64	.92	No	Medium
5021	-	2873	2741	1482	30.02	16.11	2.30	48.43	35	3.67	.79	.94	No	Large
5011	7.8	3744	1719	1875	34.85	12.50	3.80	51.15	21	5.41	1.02	1.41	Yes	Medium
5232	9.5	2858	2542	3948	27.00	23.81	2.53	53.34	23	5.07	1.14	1.37	Yes	Large
5191	-	2870	3750	2875	31.44	24.32	2.37	58.13	20	4.45	.68	.94	Yes	Large
5102	-	4238	-	6750	40.65	20.25	.91	61.81	20	4.95	.93	1.09	Yes	Large
5034	12.5	4115	-	5100	42.92	14.96	4.21	62.09	21	4.39	.93	1.01	No	Large
5161	-	3960	3333	3000	38.65	24.33	-	62.98	18	3.96	.57	.90	No	Small
Average	4.8	2442	2132	2598	24.20	17.48	2.98	44.66	23	3.84	.72	1.00		

Feed Costs per Horse and Other Power Expense Items (Farms without Tractors)

Farm No.	% Colts Are of Horses	Feed per Horse--Lbs.			Feed Costs per Horse				Crop Acres per Horse	Horse Expense per Acre of Crop Day Prod. Work	Total Farm Power Exp. per Day of Prod. Work	Farms with Truck $\frac{1}{2}$ Ton or Larger	Size of Farms	
		Grain	Tame Hay & Alfalfa	Wild Hay & Fodder	Grain	Rough.	Pasture	Total						
5083	11.2	747	2000	2000	\$ 6.72	\$14.11	\$3.43	\$24.26	16	\$1.78	\$.30	\$.65	No	Small
5131	17.0	2102	4746	-	19.39	17.97	1.06	38.42	19	1.68	.29	.37	No	Small
5082	4.2	2981	-	2192	30.02	6.58	2.59	39.19	15	2.81	.48	.67	No	Medium
5071	20.4	2172	2755	1939	21.40	14.90	3.10	39.40	18	3.22	.55	.86	Yes	Large
5121	11.2	2204	-	5333	21.63	16.00	2.78	40.41	17	2.79	.41	.70	No	Small
5194	9.0	3394	2273	-	29.76	9.68	3.63	43.07	21	2.79	.53	.71	No	Medium
5101	-	2666	2333	1933	25.65	16.33	1.67	43.65	16	3.25	.39	.87	No	Small
5182	1.4	2812	1893	4056	27.04	23.66	1.26	51.96	15	4.79	.68	.92	No	Medium
5151	19.4	3378	1290	4194	32.38	18.39	3.09	53.86	20	4.96	.83	1.22	Yes	Medium
5111	-	4384	-	4334	41.97	11.33	3.54	56.84	20	2.74	.41	.74	No	Large
5164	-	3992	3000	3333	38.19	24.50	1.37	64.06	19	4.21	.55	1.37	No	Small
Average	8.5	2803	1845	2656	26.74	15.77	2.50	45.01	18	3.18	.49	.83		

Comparisons of Averages for the Years 1928, 1929, and 1930

Items	1928	1929	1930	Items	1928	1929	1930
	27	30	32		27	30	32
	Farms	Farms	Farms		Farms	Farms	Farms
Total cash receipts	\$5004	\$5629	\$5154	Increase in crops and feeds	\$ 51	\$ 320	\$ -
Increase in inventory	477	1054	-	Decrease in crops and feeds	-	-	229
Farm produce used in house	275	309	311	Gross returns from cows	2351	2353	2036
Total receipts	5756	6992	5465	" " " other cattle	831	972	683
Total cash expenses	2687	3072	2905	" " " hogs	1083	1633	1546
Decrease in inventory	-	-	114	" " " sheep	5	6	17
Board for hired labor	83	110	132	" " " poultry	513	587	471
Total expenses	2770	3182	3151	Returns above feed per cow	\$ 93	\$ 84	\$ 57
Returns to capital & family labor	2986	3810	2314	" " " " head other			
Interest on farm inventory	1155	1290	1388	cattle	21	25	4
Family labor earnings	1851	2520	926	" " " " 100# pork	.87	3.11	2.02
Unpaid family labor	411	445	442	" " " " hen	2.02	2.00	1.08
Operator's Labor Earnings	1440	2075	484				
Average Farm Inventory	\$22688	\$25819	\$27755	Feed cost per cow	\$69.	\$71.	\$61.
Acres in farm	158.2	168.2	183.0	" " " head other cattle	31.	30.	28.
Percent land tillable	73	76	75	" " " 100# pork	7.60	6.88	6.19
Crop acres in farm	108.1	115.8	125.8	" " " hen	1.46	1.62	1.36
				" " " horse	56.	51.	45.
Number of cows	14.41	15.46	17.22	Price rec'd per lb. B. F. (manf'g.			
Head of young cattle	16.01	17.56	19.33	cream)	\$.53	\$.50	\$.40
Litters of spring pigs	5.6	7.0	8.4	" " " 100# pork	8.25	9.68	9.15
Litters of fall pigs	3.2	3.7	4.0	" " " doz. eggs	.27	.28	.22
Pounds of pork produced	12,842	15,944	18,610	Number of pigs per litter	6.5	6.4	6.7
Head of sheep	.7	1.3	4.9	" " eggs " hen	108.	108.	119.
Number of hens	155	169	187				
Total no. of prod. L. Stock units	30.53	33.08	37.74	Yield of corn per acre, bu.	38.9	52.0	54.2
Lbs. of butterfat per cow	262	261	258	" " oats " " "	44.0	51.0	54.1
Index of high return crops	29.7	31.8	34.2	" " barley per acre, bu.	38.8	42.0	36.0
Prod. livestock units per 100 A.	19.7	20.7	21.9	" " wheat " " "	17.0	26.0	24.3
No. of days of prod. work	565	618	693	" " alfalfa " " tons	2.6	3.3	2.8
No. days prod. work per worker	279	288	315				
Power, Mach., Bldg. expense per				Number of work horses	5.7	5.7	5.8
day of prod. work	\$ 1.88	\$ 1.69	\$ 1.52	Number of colts	.8	.8	.8
				No. of horse units (2 colts=1 horse)	6.1	6.1	6.2