

UNIVERSITY OF MINNESOTA
Department of Agriculture
and
UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
and the
Farm Bureaus of
Dodge, Freeborn, Goodhue, Le Sueur, Mower, Rice,
Steele, and Waseca Counties
Cooperating

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Annual Report
of the
Farm Management Service
for
Farmers in Southeast Minnesota
for the year
1931

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Cooperator: _____

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First Annual Report of the Farm Management Service
of Dodge, Freeborn, Goodhue, LeSueur, Mower, Rice, Steele, and Waseca
Counties for the Year 1931

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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 the farm bureaus of Dodge, Freeborn, Goodhue, Le Sueur, Mower, Rice, Steele, and Waseca Counties

In Goodhue, Dodge, and Mower counties, and the eastern part of Rice and Steele Counties, the soil is generally lime deficient, and applications of lime are necessary in order to grow alfalfa and sweet clover. In the remainder of the area, it is not necessary, as a rule, to add lime in order to grow these two crops. For this reason, the cropping systems are reported separately for these two areas (pages 12 to 17). Some of the differences in soil, topography, and drainage follow county boundaries fairly closely. The three northern counties, Goodhue, Rice and Le Sueur, were more severely hurt by the drouth than the remainder of the area in 1931. Parts of these three counties are also included in the whole milk area adjacent to the Twin Cities. In parts of Dodge, Goodhue, LeSueur, Rice and Steele counties, there are facilities for marketing of canning crops, and in LeSueur and Waseca for sugar beets, also. For these various reasons, some of the information is given by counties (pages 25, 26, and 28 to 33, inclusive).

In spite of the differences between conditions of various counties, as explained above, it is significant that the same general factors account for financial success in all of the eight counties.

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, R. C. Bevan, who visited each farm in the eight 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 areas, 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 Farm Management Service 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 service 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. For the purpose of comparison, the earnings as shown in this report are computed as if each farm was owned by its operator; however, each tenant is supplied a statement of his earnings on the basis of the rental system under which he was operating.

CAPITAL INVESTMENT IN FARM BUSINESS

The average size of the farms in this report was 198 acres. The average farm inventory was \$23,060. This does not include the value of the house in which the operator lived. In 1931, 47.7 per cent of the average farm inventory consisted of land; 20.5 per cent of permanent improvements; 7.6 per cent of feeds and supplies; 9.2 per cent of machinery and equipment; and 15 per cent of livestock, of which almost one-half or an average of \$1,551 consisted of the average cow inventory.

ANALYSIS OF THE FARM BUSINESS

On pages 7 and 8 are presented financial summaries of the year's business, showing the average results for the 147 farms on which the work was completed for the twelve months' period, January 1, 1931 to December 31, 1931, and the average results for the highest one-fifth of the farms in respect to Operator's Labor Earnings, and likewise for the lowest one-fifth. On page 27 a financial summary of the year's business is shown as an average for six groups of farms, classified on basis of size (total acres in farm).

In the "your farm" column, in the copy sent to the farmer, the results of his individual farm business are inserted in order that he may compare his figures with the averages of the various groups.

The data on page 10 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 the 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 area and undoubtedly is adapted to the present general condition. This study should bring out trends toward more profitable combinations of enterprises, and also toward more efficient methods of management within the enterprises.

RETURNS TO OPERATORS FOR THEIR LABOR AND MANAGEMENT

The average cash receipts per farmer were \$3,804. In addition farm produce to the value of \$242 was consumed by the farm family. The total average receipts per farm is the sum of those two items, \$4,046. The average total expense per farm, \$3,248, includes \$2,177 cash expense, and estimated allowance of \$100 for board of hired labor, and an average inventory decrease of \$971 per farm. The difference between the total income and total expense

figure is \$798. 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. This lacks \$355 of being enough to cover a 5 per cent interest charge on the average inventory valuation without allowing anything to the family for their services. The average value of the family labor other than that of the farmer himself, if computed at hired man's wages, was \$267. If these two figures are added together to get the farmers' labor earnings of \$-622 it means that on the average these farmers fell \$622 short of paying operating expense, a 5 per cent charge for the use of their capital and a moderate wage for work done by members of their families and had nothing left for their own services.

A comparison of the financial returns for the four years 1928, 1929, 1930 and 1931, along with other miscellaneous information, is given on page 36.

The average total value of farm produce used in the house, \$242, represents a larger percentage of the farmer's returns than in previous years. On many farms a saving could be made if more produce were raised on the farm rather than purchased. The table on page 24 shows the average amounts and values for each item included in the total of farm produce used in the house.

Eighty-eight farmers included in this report kept a detailed record of personal and household expenses, and asked for a distribution of these expenses. This distribution is shown on page 24, with averages for the eighty-eight farms and for the eighteen most profitable and eighteen least profitable in this group. Taking into consideration the number of members (adult equivalents) in his family and the number in the average family, each farmer can compare his items of expense with those of the average.

Summary of Farm Inventories 1931

Items	Your farm	Average of 147 farms	30 most profitable farms	30 least profitable farms
Size of farm (acres)	198	179	282
Size of business (days of prod.work)(1)	769	869	983
Average farm inventory (without house)	\$.....	\$23060	\$21373	\$34216
Land	11005	10218	16352
Farm improvements	4729	3998	7391
Machinery & equipment (total)	2146	2199	3204
Gen. machinery & equipment	1468	1531	2074
Tractor	362	360	643
Truck	91	103	164
Auto (farm share)	133	131	182
Gas engine (farm share)	28	24	38
Electrical equipment (farm share)	64	50	103
Feeds & seeds	1672	1562	2357
Miscellaneous supplies	38	30	57
Horses (total)	493	437	610
Horses	443	400	552
Colts	50	37	58
Productive livestock (total)	2977	2929	4245
Cows	1551	1638	2111
Other cattle	802	759	1197
Hogs	401	338	629
Sheep	75	16	176
Poultry	148	178	132

(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. The average number of "ten-hour days" of man labor required per head of productive livestock and per acre of crops is used in combining the crops and the livestock in one single measure of size of business.

The number of days of productive work for each animal and each acre of crops, computed from data presented in Minnesota Technical Bulletin 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	Acre	2.1
Other cattle	Animal unit*	7.6	: (Husked)	"	
Sheep	Animal unit*	2.7	: Corn for grain	"	2.8
Poultry	100 hens	27.1	: (Husk. & shred.)	"	
Hogs	100 lbs. pork prod.	.55	: Corn for silage	"	2.6
			: Corn hogged	"	1.25
Alfalfa	acre	1.5	: Corn for fodder	"	1.8
Tame & wild hay	"	.6	: Sweet corn	"	3.0
Sm. grain & flax	"	1.0	: Potatoes	"	6.4
Sm. grain hogged	"	.4	: Sugar beets	"	4.0
Canning peas	"	2.5	:		

*Animal Unit represents one cow, one bull, two head of young cattle, seven head of sheep, fourteen lambs, 2100 lbs. of pork produced, or 100 hens.

Summary of Farm Earnings 1931

Items	Your farm	Average of 147 farms	30 most profitable farms	30 least profitable farms
<u>CASH EXPENSES</u>				
Tractor (new and exp.)	\$.....	\$ 151	\$ 125	\$ 279
Truck (new and exp.)	53	62	69
Auto (new and exp.) (farm share)	89	99	98
Gas engine (new and exp.)(farm share)	13	11	19
Electricity (new and exp.)(farm share)	36	43	52
Machinery and equipment (new)	134	181	166
Machinery and equipment (exp.)	63	61	95
Bldgs., fences, tiling (new)	69	84	112
Bldgs., fences, tiling (exp.)	37	32	41
Hired labor	275	292	363
Feed for livestock	380	417	568
Other expense for livestock	82	81	116
Horses bought	26	12	45
Cows bought	18	16	15
Other cattle bought	45	18	103
Hogs bought	69	87	106
Sheep bought	15	3	52
Poultry bought	39	35	47
Crop (seed, twine, spray)	200	176	279
Taxes and insurance	349	327	472
General farm	34	31	38
(1) Total cash expense	2,177	2,193	3,135
(2) Decrease in farm inventory	971	437	1,985
(3) Board for hired labor	100	85	117
(4) Total expense (sum of (1)(2) & (3))	3,248	2,715	5,237
<u>CASH RECEIPTS</u>				
Horses	26	15	23
Cows	174	113	278
Dairy products	1,276	1,724	1,466
Other cattle	286	197	503
Hogs	1,024	864	1,597
Sheep	46	6	107
Poultry	143	183	124
Eggs	231	315	186
Small grain	145	88	217
Corn	43	123	14
Hay	13	17	26
Root crops	38	116	16
Other crops	84	134	105
Miscellaneous	135	144	195
Income from work off the farm	140	383	72
(5) Total cash receipts	3,804	4,422	4,929
(7) Farm produce used in house	242	259	276
(8) Total receipts (sum of (5) & (7))	4,046	4,681	5,205
Total expenses (4)	3,248	2,715	5,237
(9) Ret. to cap. & famllabor(8)minus(4)	798	1,966	-32
(10) Interest on farm inventory	1,153	1,068	1,711
(11) Family labor earnings (9)minus (10)	-355	898	-1,743
(12) Unpaid family labor	267	280	421
(13) Oper. labor earnings (11)minus (12)	-622	618	-2,164

Summary of Farm Earnings 1931 (A)

Items	Your farm	Average of 147 farms	30 most profitable farms	30 least profitable farms
<u>EXPENSES AND NET DECREASES</u>				
Total power machinery & equipment	\$.....	\$ 397	\$ 354	\$ 585
Hired	88	72	101
Tractor	111	90	211
Truck	58	56	97
Auto (farm share)	89	79	107
Gas engine (farm share)	14	13	19
Elec. plant or current (farm share)	37	44	50
Gen. machinery and equipment	202	196	294
Bldgs., fencing, tiling	188	134	308
Hired labor	275	292	363
Prod. livestock misc. expense	60	61	83
Misc. horse expense	2	1	1
Crop	152	140	235
Taxes	313	291	421
Insurance	36	35	51
General farm	33	31	38
Crops and feeds	244	15	606
Horses	23	22	28
Board for hired labor	100	85	117
Interest on farm inventory	1153	1068	1711
Unpaid family labor	268	280	421
(1) Total expenses	3446	3005	5262
<u>RETURNS AND NET INCREASES</u>				
All productive livestock	2884	3427	3242
Cows (including milk to other lvst.)	1368	1848	1428
Other cattle	381	442	434
Hogs	724	613	1021
Sheep	31	5	64
Poultry	380	519	295
Miscellaneous	18	22	23
Income from work off the farm	140	383	72
(2) Total	3042	3832	3337
(3) Milk produced and fed on farm	218	209	239
(4) Tot. ret. & net incr., (2) minus (3)	2824	3623	3098
Total expenses (1)	3446	3005	5262
(5) Operator's labor earn., (4) minus (1)	-622	618	-2164

(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 receive returns well above the average.

The data in this report and the reports of recent years in this same area, indicate that there are many factors of various degrees of importance which show relationships with operator's labor earnings or which offer opportunities for increasing earnings. Size of business in 1931 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. Likewise, if live-stock shows a loss, it is not an advantage to have more livestock. Hence, a balanced standing in the following eight factors is quite essential in order to secure the highest possible returns:

1. Pounds of butterfat per cow.
2. Returns above feed cost for productive livestock (other than cows) per animal unit.
3. Crop yields.
4. Percentage of tillable acres in high return crops.
5. Size of business--days of productive work.
6. Productive livestock units per 100 acres.
7. Days of productive work per worker.
8. Equipment and farm power expense (building, fencing, all machinery, horse feed, and miscellaneous horse expense) per day of productive work.

In Chart I is shown the effect of the number of the above factors in which the farmer excels in his labor earnings. The farmer who excelled in 8 factors had earnings of \$1,989 above the average of 17 farmers who did not excel in more than one factor.

Chart I Relation of Operator's Labor Earnings to the Number of Factors in which Farmer is above the Average

No. 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 earnings
Eight	1		XXXXXXXXXXXX	\$708
Six or seven	25		X	73
Four or five	58		XXXXXXXXXX	-636
Two or three	46		XXXXXXXXXXXX	-768
One or none	17		XXXXXXXXXXXXXXXXXXXX	-1281

The array in Chart I suggests that it will be worth while for each co-operator to study carefully his ranking on pages 10 and 11, 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, Management Efficiency, and Other Factors: 1931

Measure	Your farm	Average of 147 farms	30 most profitable farms	30 least profitable farms
Operator's Labor Earnings	\$-622	\$618	\$-2164
Lbs. of butterfat per cow		241	263	222
Returns over feed per cow	\$ 21.54	\$ 41.21	\$ 6.10
% protein in ration	12.6	13.3	12.4
% of fall freshening	60	63	59
Ret. over feed (pr. lvst. other than cows)*		\$ 5.10	\$ 13.59	\$ 26.30
Ret. over feed per head of cattle	\$ -4.57	\$ -2.25	\$ -6.72
Ret. over feed per cwt. pork prod.	- .24	- .02	- .40
Feed cost per cwt. pork prod.	4.03	3.83	4.25
Price rec'd. per cwt. pork sold	5.33	5.45	5.43
No. of pigs per litter	6.4	6.5	6.0
Ret. over feed per hen	\$ 1.22	\$ 1.22	\$ 1.05
No. of eggs laid per hen	119	118	112
Ret. over feed per head sheep	-	\$ 1.07	\$.16
Crop yields*		100	113	91
% of tillable land in high return crops**		33.4	37.8	29.7
Size of business—days of prod. work		776	834	983
Days of prod. work on crops	204	192	285
Days of prod. work on prod. livestock	517	509	674
Days of other prod. work	55	133	24
No. of acres in farm	198	179	282
No. of crop acres in farm	137	120	196
% of land tillable	77	74	79
Prod. livestock units per 100 acres		21.7	23.4	20.5
% of prod. lvst. units that are cows	44.1	47.0	41.0
% of prod. lvst. units that are cattle	25.6	26.0	26.5
% of prod. lvst. units that are hogs	22.3	20.6	23.6
% of prod. lvst. units that are sheep	3.9	1.5	6.1
% of prod. lvst. units that are poultry	4.1	4.9	2.8
Days of prod. work per worker		354	378	376
No. of workers	2.2	2.2	2.6
No. of hired workers6	.6	.8
Power & eq. exp. per day of prod. work		\$ 1.37	\$ 1.14	\$ 1.50
Power exp. per day of prod. work	\$.86	\$.73	\$.95
Mach. & eq. exp. per day of prod. work26	.23	.31
Bldgs. & fen. exp. per day of prod. work25	.19	.34

*Given as returns over feed cost per animal unit.

**Crops are marked on pages 12 to 17 as (A), (B), (C), (D). All of acres in (A) crops, one-half of acres in (B) crops, and one-fourth of acres in (C) crops are used in calculating per cent of tillable land in high return crops.

Find Your Weak Links

Using your figures from page 10, locate your standing with respect to the various measures of farm organization and management efficiency. The average for the 147 farms included in this summary are located between the two lines across the center of the page.

	Oper. Labor Earn.	Lbs. B.F. per Cow	Ret. above Feed;Prod. Livestock Other than Cows	Crop Yields	High Return Crops	Days of Prod. Work	Prod. Livestock Units per 100 A.	Days Prod. Work per Worker	Pow. & Eq. Exp. per Day Prod. Work
High	\$2325	429	\$133	155	67.1	3423	43.5	607	\$.51
	1878	341	40	140	48.4	1276	31.7	504	.67
	1378	321	33	132	45.4	1176	29.7	474	.81
	878	301	26	124	42.4	1076	27.7	444	.95
	378	281	19	116	39.4	976	25.7	414	1.09
	-122	261	12	108	36.4	876	23.7	384	1.23
Aver.	-622	241	5	100	33.4	776	21.7	354	1.37
	-1122	221	-2	92	30.4	696	19.7	324	1.51
	-1622	201	-9	84	27.4	616	17.7	294	1.65
	-2122	181	-16	76	24.4	536	15.7	264	1.79
	-2622	161	-23	68	21.4	456	13.7	234	1.93
	-3122	141	-30	60	18.4	376	11.7	204	2.07
Low	-4005	131	-38	53	12.1	306	9.1	176	2.53

Distribution of Acres in Farm 1931
(High lime area--14 farms--195, and above, tillable acres)

Crop (A)(B)(C)(D) refer to ranking used in calculat- ing % of tillable land in High Return Crops (see page 10)	No. of farms growing this crop	Aver. of those growing crop	Your farm	Aver. of 14 farms	5 farms highest in High Return Crops	5 farms lowest in High Return Crops
Winter wheat	(B) 7	14.9	.....	7.4	12.6	8.2
Spring wheat	(C) -	-	.....	-	-	-
Oats	(D) 10	32.8	.....	23.4	14.0	41.0
Barley	(C) 12	47.6	.....	40.8	42.2	58.7
Rye	(C) 5	17.6	.....	6.3	1.6	16.0
Flax	(B) 3	30.0	.....	6.4	2.8	15.2
Wheat and oats	(C) 5	33.6	.....	12.0	7.6	16.0
Oats and barley	(C) 7	43.0	.....	21.6	30.4	-
Flax and wheat	(B) 3	21.9	.....	4.7	6.2	7.0
Other mixtures	(A) 3	9.9	.....	2.1	.9	5.0
Canning peas	(C) 1	35.0	.....	2.5	7.0	-
Total grain				127.2	125.3	167.1
Corn, grain	(B) 14	44.1	.....	44.1	53.8	31.6
Corn, silage	(C) 12	21.8	.....	18.7	11.8	26.1
Corn, fodder	(D) 5	5.6	.....	2.0	1.8	-
Sweet corn	(C) 2	8.5	.....	1.2	2.4	1.0
Sugar beets	(A) -	-	.....	-	-	-
Potatoes	(A) 4	5.4	.....	1.5	4.0	-
Truck crops	2	1.3	.....	.2	.5	-
Summer fallow	2	6.5	.....	1.0	-	-
Total cultivated crops				68.7	74.3	58.7
Alfalfa	(A) 10	16.0	.....	11.4	8.4	9.0
Red clover	(B) 4	23.3	.....	6.6	5.6	9.0
Other legumes & mixtures	(C) 6	18.7	.....	8.0	13.6	8.8
Timothy	(D) 4	23.3	.....	6.6	1.2	15.0
Annual hay	(D) -	-	.....	-	-	-
Wild hay (tillable land)	(D) 3	7.3	.....	1.6	4.0	-
Hay (non-tillable land)	4	35.5	.....	10.2	15.6	1.8
Total hay				44.4	48.4	43.6
Total crop acreage				240.3	248.0	269.4
Sweet clover pasture	(B) 4	20.5	.....	5.9	11.4	-
Alfalfa pasture	(A) 2	4.0	.....	.6	.8	-
Red clov. or rape pasture (hogs)	(B) 3	15.7	.....	3.4	1.4	-
Misc. legume pasture	(C) 2	24.0	.....	3.4	-	9.6
Other tillable pasture	(D) 7	44.1	.....	22.0	.4	32.9
Non-tillable pasture	11	40.5	.....	31.7	44.2	27.0
Total pasture				67.0	58.2	69.5
Timber (not pastured)	6	25.1	.....	10.8	11.8	11.0
Roads and waste	-	-	.....	6.2	8.6	6.0
Farmstead	-	-	.....	7.8	7.6	7.6
Total acres in farm	-	-	.....	332.1	334.2	363.5
% of land tillable	-	-	.....	80.0	74.0	84.0
% of tillable land in high ret. crops-	-	-	.....	31.1	33.6	23.4

Distribution of Acres in Farm 1931
(High lime area--41 farms--115 to 194 tillable acres)

Crop (A)(B)(C)(D) refer to ranking used in calculat- ing % of tillable land in High Return Crops (see page 10)	No. of farms growing this crop	Aver. of those growing crop	Your farm	Aver. of 41 farms	14 farms highest in High Return Crops	14 farms lowest in High Return Crops
Winter wheat	(B) 14	14.3	.....	4.9	8.6	3.5
Spring wheat	(C) 6	7.7	.....	1.1	1.2	.9
Oats	(D) 34	20.6	.....	17.1	10.6	25.8
Barley	(C) 28	18.6	.....	12.7	9.2	17.3
Rye	(C) 3	11.4	.....	.8	-	2.0
Flax	(B) 5	7.4	.....	.9	.8	.6
Wheat and oats	(C) 8	17.4	.....	3.4	3.4	6.5
Oats and barley	(C) 23	25.4	.....	14.3	19.6	8.9
Flax and wheat	(B) 5	14.7	.....	1.8	-	3.8
Other mixtures	(A) 5	28.4	.....	3.5	1.4	.5
Spring peas	(C) 4	13.8	.....	1.3	2.6	-
Total grain				61.8	57.4	69.8
Corn, grain	(B) 40	31.6	.....	30.9	36.1	24.7
Corn, silage	(C) 36	17.2	.....	15.1	15.7	13.7
Corn, fodder	(D) 15	7.3	.....	2.7	.6	4.6
Sweet corn	(C) 4	20.8	.....	2.0	4.3	-
Sugar beets	(A) 1	38.5	.....	.9	2.8	-
Potatoes	(A) 27	1.2	.....	.8	.9	.7
Truck crops	1	1.0	.....	.1	-	-
Summer fallow	5	8.6	.....	1.0	.8	2.3
Total cultivated crops				53.5	60.5	46.0
Alfalfa	(A) 35	12.7	.....	10.9	16.6	6.9
Red clover	(B) 6	9.9	.....	1.5	1.5	1.1
Other legumes & mixtures	(C) 19	9.8	.....	4.5	2.8	4.6
Timothy	(D) 12	7.5	.....	2.2	.3	4.2
Annual hay	(D) 3	4.7	.....	.3	.4	.6
Wild hay (tillable land)	(D) 4	14.5	.....	1.4	.4	3.8
Hay (non-tillable land)	14	10.6	.....	3.6	5.7	2.0
Total hay				24.4	27.7	23.2
Total crop acreage				139.7	145.6	138.9
Sweet clover pasture	(B) 17	18.1	.....	7.5	9.9	1.9
Alfalfa pasture	(A) 9	3.2	.....	.7	1.5	.4
Red clov. or rape pasture (hogs)	(B) 9	4.6	.....	1.0	.7	.6
Misc. legume pasture	(C) 5	18.0	.....	2.2	2.9	3.2
Other tillable pasture	(D) 15	16.5	.....	6.0	.5	14.5
Non-tillable pasture	29	36.7	.....	26.0	29.7	24.0
Total pasture				43.4	45.2	44.6
Timber (not pastured)	13	11.6	.....	3.7	6.0	3.0
Roads and waste	-	-	.....	8.1	9.8	9.9
Farmstead	-	-	.....	6.1	5.9	6.6
Total acres in farm	-	-	.....	201.0	212.5	203.0
% of land tillable	-	-	.....	76.0	73.0	78.0
% of tillable land in high ret. crops-	-	-	.....	34.8	44.1	24.9

Distribution of Acres in Farm 1931
(High lime area--41 farms--35 to 114 tillable acres)

Crop (A)(B)(C)(D) refer to ranking used in calculat- ing % of tillable land in High Return Crops (see page 10)	No. of farms growing this crop	Aver. of those growing crop	Your farm	Aver. of 41 farms	14 farms highest in High Return Crops	14 farms lowest in High Return Crops
Winter wheat	(B) 8	9.1	.....	1.8	2.5	.5
Spring wheat	(C) 6	4.2	.....	.6	1.3	.4
Oats	(D) 23	12.8	.....	7.2	3.4	8.4
Barley	(C) 14	10.4	.....	3.5	2.5	1.7
Rye	(C) 2	5.5	.....	.3	-	.8
Flax	(B) 1	16.0	.....	.4	-	-
Wheat and oats	(C) 10	11.1	.....	2.7	3.2	1.6
Oats and barley	(C) 26	19.6	.....	12.4	11.1	16.5
Flax and wheat	(B) 2	7.4	.....	.4	-	.5
Other mixtures	(A) 4	12.4	.....	1.2	1.0	1.3
Canning peas	(C) 1	5.0	.....	.1	.4	-
Total grain				30.6	25.4	31.7
Corn, grain	(B) 36	20.0	.....	17.6	19.4	16.1
Corn, silage	(C) 33	11.1	.....	8.9	8.2	9.0
Corn, fodder	(D) 15	3.6	.....	1.3	1.1	1.0
Sweet corn	(C) 4	13.5	.....	1.3	2.6	-
Sugar beets	(A) 1	16.0	.....	.4	1.1	-
Potatoes	(A) 26	1.0	.....	.6	1.1	.3
Truck crops	2	1.8	.....	.1	.3	-
Summer fallow	3	2.3	.....	.2	.1	.1
Total cultivated crops				30.4	33.9	26.5
Alfalfa	(A) 37	8.1	.....	7.4	9.1	4.0
Red clover	(B) 11	6.7	.....	1.7	.8	2.8
Other legumes & mixtures	(C) 15	7.4	.....	2.7	.7	5.9
Timothy	(D) 8	4.5	.....	.9	.8	.8
Annual hay	(D) 4	3.4	.....	.3	.2	.4
Wild hay (tillable land)	(D) 2	3.5	.....	.2	.3	.2
Hay (non-tillable land)	18	12.2	.....	5.4	3.1	6.2
Total hay				18.6	15.0	20.3
Total crop acreage				79.6	74.3	78.5
Sweet clover pasture	(B) 15	9.1	.....	3.3	4.1	3.5
Alfalfa pasture	(A) 10	2.0	.....	.5	.3	.3
Red clov. or rape pasture (hogs)	(B) 5	1.8	.....	.2	.2	.1
Misc. legume pasture	(C) 2	4.0	.....	.2	-	.1
Other tillable pasture	(D) 11	11.0	.....	3.0	.8	5.4
Non-tillable pasture	33	31.7	.....	25.4	27.2	23.9
Total pasture				32.6	32.6	33.3
Timber (not pastured)	18	10.8	.....	4.7	3.9	5.5
Roads and waste	-	-	.....	4.0	2.3	4.1
Farmstead	-	-	.....	5.3	4.8	5.3
Total acres in farm	-	-	.....	126.2	117.9	126.7
% of land tillable	-	-	.....	65.0	65.0	65.0
% of tillable land in high ret. crops	-	-	.....	37.3	44.8	30.7

Distribution of acres in Farm 1931
(Low lime area--15 farms--195, and above, tillable acres)

Crop (A)(B)(C)(D) refer to ranking used in calculat- ing % of tillable land in High Return Crops (see page 10)	No. of farms growing this crop	Aver. of those growing crop	Your farm	Aver. of 15 farms	5 farms highest in High Return Crops	5 farms lowest in High Return Crops
Winter wheat	(B) 3	10.3	.....	2.1	1.0	-
Spring wheat	(C) 2	11.0	.....	1.5	4.4	-
Oats	(D) 13	34.2	.....	29.7	14.8	42.2
Barley	(C) 14	23.0	.....	21.4	23.4	13.0
Rye	(C) 6	19.3	.....	7.7	5.4	12.2
Flax	(B) 3	31.7	.....	6.3	12.0	-
Wheat and oats	(C) 3	13.5	.....	2.7	2.4	1.1
Oats and barley	(C) 8	49.8	.....	26.5	42.4	31.2
Flax and wheat	(B) 4	33.3	.....	8.9	11.4	7.4
Other crops & mixtures	(A) 3	11.7	.....	2.3	1.0	6.0
Canning peas	(C) 1	37.5	.....	2.5	-	-
Total grain				111.6	118.2	113.1
Corn, grain	(B) 14	41.4	.....	38.6	57.0	36.8
Corn, silage	(C) 14	28.8	.....	26.9	23.0	30.2
Corn, fodder	(D) 7	13.4	.....	6.3	3.8	14.4
Sweet corn	(C) 1	.3	.....	-	-	-
Sugar beets	(A) -	-	.....	-	-	-
Potatoes	(A) 9	3.4	.....	2.0	3.5	2.3
Truck crops	-	-	.....	-	-	-
Summer fallow	-	-	.....	-	-	-
Total cultivated crops				73.8	87.3	83.7
Alfalfa	(A) 10	13.2	.....	8.8	9.1	6.2
Red clover	(B) 3	24.2	.....	4.8	3.0	4.7
Other legumes & mixtures	(C) 11	19.5	.....	14.3	11.4	14.0
Timothy	(D) 3	18.3	.....	3.7	2.4	6.6
Annual hay	(B) 4	2.9	.....	.8	.6	-
Wild hay (tillable land)	(D) 1	8.0	.....	.5	1.6	-
Hay (non-tillable land)	3	13.8	.....	2.8	5.9	2.4
Total hay				35.7	34.0	33.9
Total crop acreage				221.1	239.5	230.7
Sweet clover pasture	(B) 5	22.0	.....	7.3	17.0	-
Alfalfa pasture	(A) -	-	.....	-	-	-
Red clov. or rape pasture (hogs)	(B) 3	1.3	.....	.3	.4	.2
Misc. legume pasture	(C) 5	28.7	.....	9.6	6.2	-
Other tillable pasture	(D) 6	46.3	.....	18.7	.6	31.3
Non-tillable pasture	9	49.9	.....	29.9	33.4	36.8
Total pasture				65.8	67.6	68.3
Timber (not pastured)	4	27.5	.....	7.3	4.0	2.6
Roads and waste	-	-	.....	7.5	12.2	7.2
Farmstead	-	-	.....	9.6	11.1	8.4
Total acres in farm				311.3	334.4	317.2
% of land tillable				82.0	77.0	82.0
% of tillable land in high ret. crops-				28.6	35.2	21.1

Distribution of Acres in Farm 1931
(Low lime area--25 farms--115 to 194 tillable acres)

Crop		Nc. of	Aver. of	Your	Aver.	8 farms	8 farms
(A)(B)(C)(D) refer to ranking used in calculating % of tillable land in High Return Crops (see page 10*)		farms	those	farm	of 25 farms	highest in High Return Crops	lowest in High Return Crops
		growing this crop	growing crop				
Winter wheat	(B)	4	17.5	.....	2.8	2.5	2.0
Spring wheat	(C)	1	3.0	.....	.1	-	-
Oats	(D)	18	20.1	.....	14.5	12.0	15.3
Barley	(C)	17	18.8	.....	12.8	6.6	9.3
Rye	(C)	2	19.7	.....	1.5	-	4.8
Flax	(B)	4	15.3	.....	2.4	-	3.5
Wheat and oats	(C)	6	19.2	.....	4.6	3.3	2.9
Oats and barley	(C)	18	25.9	.....	18.7	20.6	20.7
Flax and wheat	(B)	1	5.0	.....	.2	-	-
Other mixtures	(A)	4	18.3	.....	2.9	8.0	.6
Canning peas	(C)	2	13.5	.....	1.1	3.4	-
Total grain					61.6	56.4	59.1
Corn, grain	(B)	22	27.8	.....	24.4	28.5	24.6
Corn, silage	(C)	25	20.2	.....	20.2	22.1	18.4
Corn, fodder	(D)	5	3.6	.....	.7	.6	1.3
Sweet corn	(C)	2	13.8	.....	1.1	3.4	-
Sugar beets	(A)	-	-	.....	-	-	-
Potatoes	(A)	14	1.5	.....	.9	1.4	.4
Truck crops		1	1.0	.....	.1	-	-
Summer fallow		4	10.9	.....	1.7	-	3.8
Total cultivated crops					49.1	56.0	48.5
Alfalfa	(A)	17	11.2	.....	7.6	14.0	4.9
Red clover	(B)	7	12.1	.....	3.4	8.5	-
Other legumes & mixtures	(C)	13	15.6	.....	8.1	.6	6.5
Timothy	(D)	6	19.2	.....	4.6	2.3	9.6
Annual hay	(D)	5	6.7	.....	1.3	.6	3.6
Wild hay (tillable land)	(D)	-	-	.....	-	-	-
Hay (non-tillable land)		6	10.3	.....	2.5	2.4	2.6
Total hay					27.5	28.4	27.2
Total crop acreage					138.2	140.8	134.8
Sweet clover pasture	(B)	5	11.6	.....	2.3	6.6	.6
Alfalfa pasture	(A)	4	7.3	.....	1.2	.9	.3
Red clov. or rape pasture (hogs)	(B)	3	15.0	.....	1.8	.9	-
Misc. legume pasture	(C)	12	21.8	.....	10.5	10.3	10.6
Other tillable pasture	(D)	10	19.8	.....	7.9	.3	17.4
Non-tillable pasture		18	32.7	.....	23.5	30.1	21.2
Total pasture					47.2	48.8	50.1
Timber (not pastured)		5	23.3	.....	4.7	10.8	-
Roads and waste		-	-	.....	3.3	3.0	3.6
Farmstead		-	-	.....	6.0	6.2	6.0
Total acres in farm					199.4	209.6	194.5
% of land tillable					80.0	75.0	83.0
% of tillable land in high ret. crops					30.3	39.2	22.9

Distribution of Acres in Farm 1931
(Low lime area--11 farms--35 to 114 tillable acres)

Crop (A)(B)(C)(D) refer to ranking used in calculat- ing % of tillable land in High Return Crops (see page 10)	No. of farms growing this crop	Aver. of those growing crop	Your farm	Aver. of 11 farms	4 farms highest in High Return Crops	4 farms lowest in High Return Crops
Winter wheat	(B) 1	15.0	.....	1.4	-	3.7
Spring wheat	(C) 2	2.5	.....	.5	.7	.5
Oats	(D) 5	19.4	.....	8.8	10.3	10.5
Barley	(C) 5	11.6	.....	5.3	5.0	7.8
Rye	(C) -	-	.....	-	-	-
Flax	(B) 1	10.0	.....	.9	2.5	-
Wheat and oats	(C) 2	16.5	.....	3.0	3.8	-
Oats and barley	(C) 4	24.5	.....	8.9	4.3	5.0
Flax and wheat	(B) -	-	.....	-	-	-
Other mixtures	(A) 1	39.0	.....	3.5	9.7	-
Canning peas	(C) -	-	.....	-	-	-
Total grain				32.3	36.3	27.5
Corn, grain	(B) 10	23.1	.....	21.0	25.3	18.8
Corn, silage	(C) 10	10.1	.....	9.2	8.9	6.9
Corn, fodder	(D) 4	7.5	.....	2.7	-	2.0
Sweet corn	(C) -	-	.....	-	-	-
Sugar beets	(A) -	-	.....	-	-	-
Potatoes	(A) 3	.5	.....	.1	.1	.3
Truck crops	-	-	.....	-	-	-
Summer fallow	1	3.0	.....	.3	-	.7
Total cultivated crops				33.3	34.3	28.7
alfalfa	(A) 7	8.8	.....	5.6	5.5	2.5
Red clover	(B) 1	5.0	.....	.5	1.3	-
Other legumes & mixtures	(C) 6	14.8	.....	8.1	4.7	14.5
Timothy	(D) 4	8.5	.....	3.0	1.3	5.8
Annual hay	(D) 2	17.8	.....	3.2	-	8.9
Wild hay (tillable land)	(D) -	-	.....	-	-	-
Hay (non-tillable land)	2	6.0	.....	1.1	1.7	1.2
Total hay				21.5	14.5	32.9
Total crop acreage				87.1	85.1	89.1
Sweet clover pasture	(B) 2	10.0	.....	1.8	3.0	2.0
alfalfa pasture	(A) 1	4.0	.....	.4	1.0	-
Red clov. or rape pasture (hogs)	(B) 1	2.0	.....	.2	.5	-
Misc. legume pasture	(C) -	-	.....	-	-	-
Other tillable pasture	(D) 6	10.8	.....	5.8	.8	7.9
Non-tillable pasture	8	30.4	.....	22.1	30.7	15.3
Total pasture				30.3	36.0	24.9
Timber (not pastured)	5	14.7	.....	6.7	1.3	15.9
Roads and waste	-	-	.....	3.1	2.3	4.3
Farmstead	-	-	.....	5.0	5.6	3.7
Total acres in farm				132.2	130.3	137.9
% of land tillable				71.0	68.0	71.0
% of tillable land in high ret. crops				29.9	34.7	24.3

Yield of Crops 1931

Yield of crops	High Lime Area				:	Low Lime Area			
	Your farm	Average 96 farms	32 most profitable farms	32 least profitable farms	:	Your farm	Average 51 farms	17 most profitable farms	17 least profitable farms
Winter wheat	23.2	25.1	23.5	:	.....	18.4	19.5	26.4
Spring wheat	18.2	22.3	16.9	:	.....	17.4	18.0	20.0
Oats	42.1	46.6	41.1	:	.....	33.4	37.7	31.6
Barley	27.0	30.1	25.7	:	.....	21.7	19.4	21.4
Rye	17.1	16.9	18.0	:	.....	20.5	18.0	18.2
Flax	8.6	7.8	8.4	:	.....	9.1	11.0	10.3
Wheat & oats	27.9	31.2	24.2	:	.....	31.5	34.3	29.7
Oats & barley	36.7	40.0	35.4	:	.....	28.9	31.1	27.1
Flax & wheat	11.3	-	10.9	:	.....	14.2	-	10.7
Oats, barl., & wheat	35.0	34.5	35.9	:	.....	34.3	36.0	-
Canning peas	\$9.38	\$8.74	\$8.48	:	.....	\$1.26*	\$9.69	\$8.30
Corn, grain	33.3	35.1	30.7	:	.....	29.7	32.2	22.9
Corn, silage	6.7	7.1	6.3	:	.....	5.8	6.2	5.2
Corn, fodder	2.2	2.7	2.1	:	.....	1.9	2.3	1.8
Sweet corn	2.5	2.6	2.7	:	.....	1.7	2.5	-
Sugar beets	11.9	11.9	-	:	.....	-	-	-
Potatoes	66.8	82.1	62.1	:	.....	68.1	67.5	79.0
Alfalfa	2.5	3.0	2.3	:	.....	1.8	2.1	1.7
Red clover	1.4	1.3	1.3	:	.....	1.1	1.1	1.2
Clover & timothy	1.3	1.9	1.1	:	.....	1.2	1.3	1.2
Annual hay	1.4	1.6	1.5	:	.....	1.3	1.3	1.0
Timothy	1.3	1.5	1.1	:	.....	.9	1.1	1.1
Wild hay	1.3	1.4	1.4	:	.....	.4	-	-
Wild hay(non-till.)	1.1	1.2	1.2	:	.....	1.0	1.1	.8

*Includes some crop failures.

Some methods farmers use to increase their crop yields:

1. Tile, if necessary.
2. Plow under legumes--grow sweet clover in small grains on high lime soil--lime for alfalfa, if necessary.
3. Test out commercial fertilizers on strips of land to see if they pay.
4. Utilize manure effectively.
5. Use rotated legume pastures.
6. Raise and feed hogs on these pastures and hog down corn.
7. Grow recommended varieties of crops.
8. Use best tested seed available.
9. Prepare seed-bed thoroughly and timely.

Summary of amount of Livestock

	Your farm	Average	Most prof. farms	Least prof. farms
Large farms (220 A. & above); No. of farms:				
		48	16	16
No. of horses (with tractor)	6.9	6.2	6.0
No. of horses (without tractor)	8.3	6.6	7.2
No. of colts	1.4	1.5	.9
No. of cows	22.6	21.9	26.8
No. of cows per worker	8.3	8.5	9.0
Head of other cattle	31.5	29.2	37.3
Litters of pigs raised	17.8	14.0	21.4
Pounds of pork produced	24053.0	19960.0	29175.0
Head of sheep (2 lambs equal 1 head)	20.6	10.7	35.8
No. of hens	142.0	138.0	162.0
Total no. of productive livestock animal units	54.7	49.5	66.5
% of tot. prod. livestock units that are cows	41.7%	44.7%	40.5%
% of tot. prod. livestock units that are o. cattle	29.5	30.6	29.4
% of tot. prod. livestock units that are hogs	21.1	18.8	21.3
% of tot. prod. livestock units that are sheep	4.9	2.9	6.2
% of tot. prod. livestock units that are hens	2.8	3.0	2.6
Medium-sized farms (140 to 219 A.); No. of farms:				
		48	23	23
No. of horses (with tractor)	5.2	5.4	5.2
No. of horses (without tractor)	5.6	5.4	5.8
No. of colts8	.6	.7
No. of cows	16.8	18.2	16.0
No. of cows per worker	8.4	9.2	8.1
Head of other cattle	16.5	16.7	17.0
Litters of pigs raised	14.0	14.0	13.0
Pounds of pork produced	18925.0	20197.0	18996.0
Head of sheep (2 lambs equal 1 head)	10.6	2.8	12.0
No. of hens	165.6	172.0	139.0
Total no. of productive livestock animal units	38.9	39.0	37.6
% of tot. prod. livestock units that are cows	44.5%	46.6%	44.2%
% of tot. prod. livestock units that are o. cattle	22.9	22.6	23.7
% of tot. prod. livestock units that are hogs	23.9	24.6	23.9
% of tot. prod. livestock units that are sheep	4.4	1.0	4.6
% of tot. prod. livestock units that are hens	4.3	4.0	3.6
Small farms (60 to 139 acres); No. of farms:				
		31	10	10
No. of horses (with tractor)	3.6	3.0	3.5
No. of horses (without tractor)	4.2	3.0	4.5
No. of colts3	.2	.4
No. of cows	12.0	11.3	12.5
No. of cows per worker	7.7	7.4	7.1
Head of other cattle	11.7	12.3	12.6
Litters of pigs raised	7.7	6.8	7.0
Pounds of pork produced	10802.0	10431.0	9175.0
Head of sheep (2 lambs equal 1 head)	2.9	.9	3.1
No. of hens	160.0	212.0	115.0
Total no. of productive livestock animal units	25.5	25.1	25.1
% of tot. prod. livestock units that are cows	47.0%	44.0%	49.5%
% of tot. prod. livestock units that are o. cattle	25.3	26.2	27.1
% of tot. prod. livestock units that are hogs	20.2	22.4	16.9
% of tot. prod. livestock units that are sheep	1.5	.5	1.6
% of tot. prod. livestock units that are hens	6.0	6.9	4.7

Factors of Cost and Returns in Dairy Production 1931

Items	Your farm	Average 147 farms	30 farms highest in B.F. per cow	30 farms lowest in B.F. per cow
Butterfat per cow	241	310	176
Feeds per cow, lbs.				
Corn	375	393	312
Small grain	1443	1734	1152
Com. feeds - under 25% protein	250	401	139
Com. feeds - over 25% protein	105	165	40
Tame hay	868	474	1185
Alfalfa	1692	2425	1250
Wild hay	162	116	149
Corn fodder	693	711	805
Silage	7163	7616	5782
Total concentrates	2173	2693	1643
Total dry roughage	3415	3726	3389
Total digestible nutrients	4404	4989	3819
Total digest. nutrients per lb. B.F. *	18.3	16.1	21.7
% protein in ration	12.6	13.7	11.9
% cows fresh - Sept. to Dec. inclusive	60.	66.	42.
Feed cost per cow				
Concentrates	\$18.16	\$23.10	\$13.11
Roughages	30.89	35.17	27.23
Pasture	4.93	4.43	5.20
Total feed cost	53.98	62.70	45.54
Feed cost per lb. B.F. (cents)	22.4	20.2	25.9
Value of produce per cow				
B.F. sales	\$69.03	\$86.38	\$44.58
Dairy produce used in house	3.98	3.87	3.59
Milk to other livestock	12.80	15.89	9.89
Appreciation or depreciation	-10.29	-10.25	-8.43
Total value of product	\$75.52	\$95.89	\$49.73
Returns above feed cost per cow	21.54	33.19	4.19
Price received per lb. B.F. sold				
Sold as manufacturing cream29	.29	.29
Sold as milk, cheese or retail cream51	.49	.31
Number of cows**	17.7	17.4	17.4

*Not including nutrients secured from pasture.

**All cows which have at some time in the past freshened are included in the dairy herd, and affect the average number of cows used in computing this table. There is some variation in the number of months of dry period per cow; however this variation is small for the majority of the farms.

Feed Costs and Returns for Other Cattle and Sheep 1931

Items	Your farm	Average of all farms	Farms highest in returns above feed per head	Farms lowest in returns above feed per head
Other cattle; no. of farms:		147	30	30
Feeds used per head, lbs.				
Concentrates	497	491	539
Hay and fodder	1415	1233	1601
Silage	2377	1963	3109
Whole milk	377	291	399
Skimmilk	1404	1543	1399
Feed costs per head			
Concentrates	\$ 3.89	\$ 3.86	\$ 4.26
Roughages	11.02	9.29	14.00
Milk	6.80	6.01	7.13
Pasture	1.79	1.56	1.77
Total	23.50	20.72	27.16
Returns per head	18.93	31.84	8.05
Returns above feed cost per head	-4.57	11.12	-19.11
% death loss	16	15	27
Number of head of young cattle	20.3	23.4	21.5

Sheep; no. of farms:		55	11	11
Feeds used per head*, lbs.				
Concentrates	.....	65	51	90
Tame hay	.....	41	56	12
Alfalfa	.....	70	33	147
Corn fodder and wild hay	.....	54	9	40
Silage	.....	73	40	88
Feed cost per head				
Concentrates	.....	\$ .51	\$.40	\$.70
Roughages	.....	.91	.57	1.18
Pasture	.....	.89	.95	.79
Total	.....	\$ 2.31	\$ 1.92	\$ 2.67
Value of production per head				
Wool	.....	\$ .67	\$.82	\$.51
Mutton	.....	1.64	3.42	-1.01
Total	.....	\$ 2.31	\$ 4.24	\$ -.50
Returns above feed cost per head	.....	\$ 0	\$ 2.32	\$ -3.17
Price per lb. wool sold	.....	.13	.13	.13
Value per lamb sold	.....	4.36	4.55	3.49
% lamb crop	.....	86	95	50
% death loss	.....	7	4	6
No. of head of sheep*	.....	33.8	29.5	25.4

*Two lambs under 6 months of age considered as one head.

Feed Costs and Returns for Hogs 1931

Items	Your farm	Average 143 farms	30 farms highest in returns above feed per 100 lbs.	30 farms lowest in returns above feed per 100 lbs.
Lbs. of feed per 100 lbs. of pork produced				
Corn	257	198	345
Small grain	153	132	146
Commercial grain feeds	15	18	11
Total grain and grain feeds	425	348	502
Tankage	3	2	3
Skimmilk	399	318	508
Value of feed per 100 lbs. of pork produced				
Grain and commercial feeds	\$ 3.20	\$ 2.64	\$ 3.74
Tankage and skimmilk66	.53	.83
Pasture17	.15	.20
Total	\$ 4.03	\$ 3.32	\$ 4.77
Returns per 100 lbs. pork produced	3.79	4.26	3.22
Ret. above feed cost per 100 lbs. pork prod.....		-.24	.94	-1.55
Price received per 100 lbs. of pork sold	\$ 5.33	\$ 5.59	\$ 5.15
Total no. of litters	14	13	15
Total no. of pigs weaned per litter	6.4	6.9	6.0
Lbs. of pork produced	19406	18904	17017

Feed Cost and Returns for Poultry 1931

Items	Your farm	Average 139 farms	28 farms highest in returns above feed per hen	28 farms lowest in returns above feed per hen
Lbs. of feed per hen				
Concentrates	104	124	99
Skimmilk	54	60	57
Cost of feed per hen				
Concentrates	\$.96	\$ 1.16	\$.90
Skimmilk08	.09	.09
Total	1.04	1.25	.99
Value of product per hen				
Eggs sold and used in house	\$ 1.54	\$ 2.13	\$ 1.13
Poultry sold and used in house plus appreciation or less depreciation72	1.45	.11
Total	2.26	3.58	1.24
Returns above feed cost per hen	\$ 1.22	\$ 2.33	\$.25
Price received per doz. eggs sold	\$.16	\$.17	\$.16
Eggs laid per hen	119	158	90
No. of hens	166	195	132

Feed Costs per Horse and Other Power Expense Items

Farms with Tractors	Your farm	Average	Most profitable farms	Least profitable farms
Number of farms:	96	19	19
Feed per horse,* lbs.	..			
Grain	2447	2689	2496
Tame hay & alfalfa	2327	2376	2527
Wild hay & fodder	1748	1771	1237
Feed costs per horse				
Grain	\$18.30	\$20.43	\$18.76
Roughage	14.80	14.67	14.55
Pasture	3.21	3.08	3.10
Total	\$36.31	\$38.18	\$36.41
Number of work horses	5.7	5.6	7.1
Number of colts	1.1	.9	1.0
Crop acres per horse	28	26	33
Tractor & horse expense per crop acre	\$2.85	\$3.12	\$2.81
Farm power expense per day prod. work86	.71	.94

Farms without Tractors

Number of farms:	.....	51	10	10
Feed per horse,* lbs.				
Grain	.....	2591	2632	3110
Tame hay & alfalfa	.....	2435	3002	3879
Wild hay & fodder	.....	1534	1619	978
Feed costs per horse				
Grain	.....	\$19.27	\$19.97	\$23.31
Roughage	.....	15.34	18.83	20.12
Pasture	.....	2.95	2.77	2.11
Total	.....	\$37.56	\$41.57	\$45.54
Number of work horses	.....	5.4	4.9	6.4
Number of colts	.....	.6	.5	.5
Crop acres per horse	.....	19	19	22
Horse expense per crop acre	.....	\$2.38	\$2.74	\$2.60
Farm power expense per day prod. work	.....	.85	.71	.98

*Two colts equal one horse.

Distribution of Farm Produce Used in House 1931

	Quantities		Values	
	Your farm	Average 147 farms	Your farm	Average 147 farms
Whole milk	1491 qts.	.....	\$33.87
Cream	292 pts.	.....	26.36
Farm made butter	8 lbs.	.....	2.55
Eggs	201 doz.	.....	30.15
Poultry	36	.....	18.22
Cattle	262 lbs.	.....	12.58
Hogs	558 lbs.	.....	32.48
Sheep	8 lbs.	.....	.38
Potatoes	31 bu.	.....	18.88
Vegetables and fruit	-	33.77
Farm fuel	8 cds.	.....	33.31
Total	\$242.55
Value of farm dwelling	\$2404.00

Distribution of Household and Personal Expenses for Those Farms which Kept Complete Accounts of These Expenses 1931

	Your farm	Average 88 farms	18 most profitable	18 least profitable
Number of persons (adult equivalent).....		4.1	4.7	4.3
Household				
Food	\$262.07	\$323.65	\$256.37
Fuel	31.24	31.88	24.86
Furnishings	22.06	23.70	33.04
General supplies	21.06	30.25	18.77
Hired help for the house	15.09	15.27	7.56
Electric bill or plant expense	21.27	21.15	27.43
Gas engine	1.83	.67	.60
Repairs and expense on dwelling	119.41*	12.66	206.92**
Total household cash expenses	\$494.03	\$459.23	\$575.55
Personal				
Clothing and dry goods	\$99.34	\$132.98	\$98.19
Doctor, dentist and medicine	46.12	82.70	37.25
Railroad and travel expense	7.42	15.09	1.72
School expense	25.96	24.00	68.35
Reading matter, etc.	6.13	7.23	7.13
Church and benevolence	28.69	29.25	32.42
Clubs and organizations	2.95	1.64	2.33
Amusement	4.88	4.56	2.16
Life insurance, investment	91.42	110.80	105.51
Auto expense	124.11	136.54	162.92
Miscellaneous	128.77	93.96	389.60
Given to members of family	30.51	45.82	38.61
Musical instruments	10.91	9.87	23.28
Total personal cash expense	\$607.21	\$694.44	\$969.47

* Includes two new houses.

**Includes one new house.

Summary of Farm Inventories

County:	Dodge	Freeborn	Goodhue	LeSueur
Number of farms	17	26	33	12
Average farm inventory (without house)	\$20,935	\$23,079	\$22,744	\$25,629
Land	9125	11878	10968	14241
Farm improvements	4534	3964	5258	4807
Machinery and equipment (total)	2108	2104	2077	1892
Gen. Machinery and equipment	1448	1405	1434	1251
Tractor	423	382	315	371
Truck	67	85	105	66
Apto (farm share)	100	133	122	151
Gas engine (farm share)	39	29	41	12
Elec. equip. (farm share)	31	70	60	41
Feeds and seeds	1541	1768	1555	1636
Misc. supplies	49	29	44	45
Horses (total)	465	507	521	410
Horses	425	465	460	396
Colts	40	42	61	14
Productive livestock (total)	3113	2829	2321	2598
Cows	1561	1411	1196	1293
Other cattle	951	706	618	672
Hogs	361	494	278	465
Sheep	94	55	122	77
Poultry	146	163	107	91
County:	Nowar	Rice	Steele	Waseca
Number of farms	8	22	18	11
Average farm inventory (without house)	\$34,341	\$19,011	\$23,206	\$24,105
Land	17199	8697	9637	10780
Farm improvements	6661	3927	5090	4778
Machinery and equipment (total)	2838	1831	2364	2559
Gen. machinery and equipment	1950	1268	1607	1817
Tractor	458	292	383	397
Truck	257	66	59	109
Auto (farm share)	142	125	177	131
Gas engine (farm share)	17	12	12	50
Elec. equipment (farm share)	14	68	126	55
Feeds and seeds	1978	1451	1902	1877
Misc. supplies	25	43	23	38
Horses (total)	610	430	505	531
Horses	524	382	432	499
Colts	86	48	73	32
Productive livestock (total)	5030	2632	3685	3542
Cows	3023	1431	1955	1725
Other cattle	1340	677	1012	1012
Hogs	499	373	459	425
Sheep	55	33	47	99
Poultry	113	118	212	281

Summary of Farm Earnings 1931

Items	Dodge	Freeborn	Goodhue	LeSueur	Mower	Rice	Steele	Waseca
CASH EXPENSES								
Tractor (new & exp.)	\$ 202	\$ 131	\$ 122	\$ 54	\$ 440	\$ 75	\$ 175	\$ 208
Truck (new & exp.)	35	39	68	52	100	63	40	30
Auto (new & exp.)	108	95	82	90	109	54	114	85
Gas Eng. (new & exp.)	22	19	13	14	17	6	4	14
Elec. (new & exp.)	22	26	14	40	87	37	69	53
Mach. & equip. (new)	165	127	107	107	382	73	137	148
Mach. & equip. (exp.)	55	62	63	66	93	48	69	78
Bldgs., fen., til. (new)	30	86	53	88	78	108	43	68
Bldgs., fen., til. (exp.)	25	28	51	29	41	26	46	46
Hired labor	184	276	266	297	404	153	394	370
Feed for livestock	374	312	283	309	1,127	247	444	535
Other exp. for lvst.	91	61	76	131	99	51	113	87
Horses bought	42	7	27	18	68	12	41	31
Cows bought	33	11	23	28	9	15	9	11
Other cattle bought	70	49	47	57	57	24	28	36
Hogs bought	69	96	24	44	259	60	88	17
Sheep bought	6	27	15	9	102	-	-	-
Poultry bought	38	30	32	20	37	43	46	87
Crop (seed, twine, spray)	232	194	172	165	318	145	233	260
Taxes & insurance	312	335	325	352	572	341	386	302
General farm	32	31	35	37	31	38	30	34
Total cash expense	2,147	2,042	1,898	2,007	4,430	1,619	2,509	2,500
Dec. in farm inven.	1,383	778	897	1,049	962	886	1,220	694
Board for hired labor	65	92	115	99	91	67	139	143
Total expense	3,595	2,912	2,910	3,155	5,483	2,572	3,868	3,337
CASH RECEIPTS								
Horses	33	16	20	-	79	28	46	5
Cows	244	122	154	144	275	141	269	121
Dairy products	1,075	1,072	1,092	1,198	3,153	1,056	1,586	1,267
Other cattle	421	262	275	262	254	193	375	258
Hogs	1,004	1,233	731	1,187	1,376	917	1,140	1,033
Sheep	36	48	57	36	126	17	47	38
Poultry	159	139	83	84	132	111	152	435
Eggs	192	167	192	112	113	167	377	658
Small grain	197	87	265	105	5	171	43	105
Corn	107	38	20	95	5	36	5	68
Hay	29	4	12	7	8	17	8	15
Root crops	4	95	1	-	25	-	4	250
Other crops	114	35	39	58	26	72	126	321
Miscellaneous	182	148	109	46	247	157	123	106
Work off farm	125	137	140	163	555	85	89	35
Total cash receipts	3,922	3,603	3,190	3,497	6,379	3,168	4,390	4,715
F.prod. used in house	240	255	247	253	202	226	226	280
Total receipts	4,162	3,858	3,437	3,750	6,581	3,394	4,616	4,995
Total expenses	3,595	2,912	2,910	3,155	5,483	2,572	3,868	3,337
Ret. to cap. & fam. lab.	567	946	527	595	1,098	822	748	1,658
Int. on farm inven.	1,047	1,154	1,137	1,281	1,717	951	1,160	1,205
Fam. labor earnings	-480	-208	-610	-686	-619	-129	-412	453
Unpaid family labor	276	233	271	230	548	209	243	317
Oper. labor earnings	-756	-441	-881	-916	-1,167	-338	-655	136

Summary of Farm Earnings 1931 (Grouped by size of farm)

Range in Size	60 to 99 A.	100 to 139 A.	140 to 179 A.	180 to 219 A.	220 to 259 A.	260 A. & above
Number of farms	13	18	45	23	21	27
<u>CASH EXPENSES</u>						
Tractor (new & exp.)	49	91	88	86	220	345
Truck (new & exp.)	5	80	51	56	49	60
Auto (new & exp.) (f. sh.)	70	94	85	102	89	92
Gas engine (new & exp.) (f. sh.)	11	9	9	18	14	20
Elec. (new & exp.) (f. sh.)	10	35	27	43	52	46
Mach. & equip. (new)	95	82	104	94	247	183
Mach. & equip. (exp.)	23	33	56	68	71	106
Bldgs., fenc., tiling (new)	8	12	78	70	61	125
Bldgs., fenc., tiling (exp.)	27	13	43	36	31	52
Hired labor	47	121	241	344	367	414
Feed for livestock	258	314	311	327	441	595
Other expense for livestock	62	75	78	93	89	90
Horses bought	6	20	18	18	25	63
Cows bought	12	21	16	25	10	21
Other cattle bought	47	23	22	27	40	115
Hogs bought	51	61	63	38	38	144
Sheep bought	2	3	2	4	17	59
Poultry bought	20	46	35	32	31	62
Crop (seed, twine, spray)	102	134	170	194	225	328
Taxes & insurance	179	236	274	370	439	544
General farm	28	34	33	34	32	38
Total cash expense	1112	1537	1804	2079	2588	3502
Decr. in farm inventory	524	521	875	1210	994	1423
Board for hired labor	21	56	96	123	124	137
Total expense	1657	2114	2775	3412	3706	5062
<u>CASH RECEIPTS</u>						
Horses	7	30	14	19	50	36
Cows	76	110	154	184	216	256
Dairy products	772	974	1064	1309	1624	1771
Other cattle	172	196	218	215	334	537
Hogs	466	632	933	1153	1111	1530
Sheep	14	12	27	55	33	119
Poultry	93	227	124	147	88	183
Eggs	173	296	255	251	142	226
Small grain	52	47	83	112	288	278
Corn	11	44	58	3	51	60
Hay	12	11	5	7	14	31
Root crops	1	28	2	74	4	17
Other crops	65	82	79	61	38	264
Miscellaneous	62	105	130	113	152	206
Work off farm	138	87	89	165	270	137
Total cash receipts	2114	2881	3235	3868	4415	5651
Farm prod. used in house	204	222	226	226	251	308
Total receipts	2318	3103	3461	4094	4666	5959
Total expenses	1657	2114	2775	3412	3706	5062
Ret. to cap. & family labor	661	989	686	682	960	897
Interest on farm inventory	570	749	945	1139	1370	1891
Fam. labor earnings	91	247	-259	-457	-410	-994
Unpaid family labor	109	259	205	181	264	531
Operator's labor earnings	-18	-19	-464	-638	-674	-1525

Distribution of Acres in Farm 1931

Crop	(A)	(B)	(C)	(D)	Dodge	Froe- born	Good- hue	Le Sueur	Mower	Rice	Steele	Waseca
(A)(B)(C)(D) refer to ranking used in calculating Index of Selection of High Return Crops, as explained on page 10												
Winter wheat	(B)	-	1.3	7.2	3.0	-	4.4	1.6	5.5			
Spring wheat	(C)	.2	.4	.7	1.3	.4	.9	.6	1.3			
Oats	(D)	10.8	11.1	22.2	18.1	31.5	13.4	7.5	11.1			
Barley	(C)	11.2	6.1	28.1	6.7	13.4	12.1	6.1	8.5			
Rye	(C)	.6	1.9	5.9	-	-	-	1.5	.5			
Flax	(B)	8.9	3.6	-	-	-	2.3	-	1.3			
Wheat and oats	(C)	5.4	5.1	.7	10.5	7.5	1.9	.9	9.7			
Oats and barley	(C)	20.5	25.4	5.1	4.8	20.6	12.2	32.0	10.1			
Flax and wheat	(B)	-	-	8.8	-	-	.5	-	-			
Other mixtures	(C)	1.1	5.3	2.6	2.7	-	2.8	.3	2.9			
Canning peas	(A)	2.2	-	-	1.9	-	-	3.4	3.5			
Total grain		60.9	60.2	81.3	49.0	73.4	50.5	53.9	54.4			
Corn, grain	(B)	31.6	40.2	15.0	42.2	23.8	17.6	26.2	35.1			
Corn, silage	(C)	18.1	13.8	17.5	10.8	30.5	15.4	14.0	6.1			
Corn, fodder	(D)	2.6	2.4	1.5	.5	8.8	2.6	.7	2.9			
Sweet corn	(C)	1.2	-	.2	1.1	-	1.8	1.8	6.5			
Sugar beets		-	-	-	-	-	-	-	5.0			
Potatoes	(A)	.4	2.3	.3	.2	2.8	.6	.7	.6			
Truck crops		-	-	-	-	-	.2	.1	.1			
Summer fallow		.2	.4	1.4	-	1.6	.5	.9	.1			
Tot. cultivated crops		54.1	58.3	35.9	54.8	67.5	38.7	44.4	57.4			
Alfalfa	(A)	4.4	6.1	8.0	9.9	13.1	10.5	13.6	8.5			
Red clover	(B)	4.0	2.7	2.1	3.0	2.5	2.0	2.3	3.6			
Other leg. & mixtures	(C)	9.5	5.4	9.3	.4	15.8	3.4	4.8	1.5			
Timothy	(D)	8.9	1.3	3.7	1.1	4.7	1.6	1.6	-			
Annual hay		3.5	.2	.2	1.0	-	.5	.5	.5			
Wild hay (till. land)	(D)	-	1.6	-	.5	-	.3	1.9	.7			
Hay (non-till. land)		2.1	10.0	.2	6.3	-	2.2	2.7	13.7			
Total hay		32.4	27.3	23.5	22.2	36.1	20.5	27.4	28.5			
Total crop acreage		147.4	145.8	140.7	126.0	177.0	109.7	125.7	140.3			
Sweet clover pasture	(B)	5.5	4.7	6.2	1.9	-	3.9	7.5	5.0			
Alfalfa pasture	(A)	-	1.0	.5	-	1.5	.8	.7	.4			
Red clov. or rape past. (hogs)	(B)	.4	.3	.9	.1	.3	.1	1.0	3.9			
Misc. legume pasture	(C)	6.0	1.1	7.4	-	10.6	4.0	2.3	-			
Other tillable pasture	(D)	20.8	3.5	9.7	10.8	11.6	5.6	4.8	1.8			
Non-tillable pasture		18.0	28.7	23.4	36.8	40.0	17.8	22.4	41.1			
Total pasture		50.7	39.3	48.1	49.6	64.0	32.2	38.7	52.2			
Timber (not pastured)		1.8	3.7	11.2	6.2	7.3	4.2	1.9	3.6			
Roads and waste		5.4	7.9	5.8	2.5	3.6	4.0	4.5	8.6			
Farmstead		6.5	7.6	5.7	4.3	6.9	5.4	7.1	6.4			
Total acres in farm		211.8	204.3	211.5	188.6	258.8	155.5	177.9	211.1			
% land tillable		84.0	72.0	78.0	70.0	78.0	78.0	78.0	65.0			
Index of tillable land in high return crops		28.3	34.9	29.1	36.5	28.5	35.3	36.1	42.4			

Yields of Crops 1931

Counties:	Dodge	Free-born	Goodhue	Le Sueur	Mower	Rice	Steele	Waseca
Crops								
Winter wheat	-	28.5	18.3	27.4	-	24.1	22.5	30.5
Spring wheat	14.5	22.2	15.4	21.6	17.0	20.3	16.8	12.5
Oats	24.6	43.6	34.3	47.4	24.8	43.9	45.3	47.2
Barley	20.2	31.4	19.3	33.8	19.5	31.1	26.4	28.7
Rye	16.5	23.1	17.3	-	-	-	21.4	10.3
Flax	6.7	9.8	-	-	-	9.2	-	10.9
Wheat & oats	31.5	31.8	19.6	30.6	26.7	23.0	23.5	37.9
Oats & barley	29.7	38.4	22.4	44.8	26.9	33.4	37.0	44.8
Flax & wheat	-	-	12.2	-	-	12.5	-	-
Oats, barley & wheat	-	34.4	16.7	55.2	-	41.3	-	31.2
Canning peas	\$ 8.30	-	-	\$ 3.47	-	-	\$ 4.42	\$13.58
Corn, grain	30.1	36.9	25.3	31.9	30.5	30.7	37.1	37.0
Corn, silage	6.0	7.5	5.1	6.4	5.1	6.1	7.0	8.9
Corn, fodder	2.6	2.7	1.5	2.0	2.0	1.7	1.9	2.8
Sweet corn	1.3	-	1.7	3.1	-	2.3	2.7	2.6
Sugar beets	-	-	-	-	-	-	-	11.9
Potatoes	72.0	72.4	81.1	66.0	81.8	68.8	45.4	42.6
Alfalfa	1.7	2.4	2.1	2.3	1.2	2.3	2.7	3.1
Red clover	.7	1.5	.9	1.3	.7	1.4	1.6	1.9
Clover & timothy	1.1	1.3	1.2	1.6	1.0	1.7	1.4	1.3
Annual hay	1.4	2.0	1.2	.7	-	1.6	1.1	1.0
Timothy	1.0	1.4	.8	1.6	1.0	1.4	1.2	-
Wild hay (tillable)	-	1.4	-	2.0	-	1.5	.9	.8
Wild hay (non-tillable)	.8	.9	1.0	1.5	-	.9	.9	1.4

Factors Related with Earnings 1931

Counties:	Dodge	Freeborn	Goodhue	LeSueur
Lbs. B.F. per cow	241	228	228	262
Ret. above feed (P.L.S. other than cows)	\$5.51	\$.17	\$5.38	\$-1.34
Crop yields (% of average)	89	116	82	107
% tillable land in high returns crops	28.3	34.9	29.1	36.5
Days of productive work	783	796	686	716
Prod. livestock units per 100 A.	21.1	21.7	18.5	19.9
Days prod. work per worker	393	391	312	336
Power & equip. expense per day prod. work	\$1.23	\$1.18	\$1.54	\$1.61
Counties:	Mower	Rice	Steele	Waseca
Lbs. B.F. per cow	240	254	268	225
Ret. above feed (P.L.S. other than cows)	\$2.61	\$2.25	\$7.14	\$26.52
Crop yields (% of average)	75	103	110	120
% tillable land in high return crops	28.5	35.3	36.2	42.4
Days of productive work	1350	631	517	857
Prod. livestock units per 100 A.	22.1	22.2	26.8	25.2
Days prod. work per worker	384	349	343	357
Power & Equip. expense per day prod. work	\$1.35	\$1.26	\$1.42	\$1.46

Summary of Amount of Livestock 1931

Counties:	Dodge	Freeborn	Goodhue	LeSueur
<u>Items</u>				
No. of horses (farms with tractor)	5.3	5.9	5.9	5.9
No. of horses (farms without tractor)	4.6	5.8	5.7	5.6
No. of colts	.7	.6	1.1	.3
No. of cows	17.9	17.5	18.1	15.1
No. of cows per worker	9.2	8.7	7.4	7.2
Head of other cattle	24.0	19.7	17.4	18.5
Litters of pigs raised	13.0	17.0	11.0	15.0
Pounds of pork produced	18257.0	22457.0	15064.0	21176.0
Head of sheep (2 lambs equal 1 head)	14.7	8.0	19.0	11.6
No. of hens	152.0	170.0	133.0	111.0
Tot. no. of prod. livestock animal units	42.3	41.7	36.3	37.2
% of tot. prod. livestock units that are cows	44.1%	42.4%	44.5%	43.5%
% of tot. prod. livestock units that are cattle	27.8	24.0	25.1	24.0
% of tot. prod. livestock units that are hogs	20.7	26.0	19.4	27.0
% of tot. prod. livestock units that are sheep	3.2	3.4	7.5	3.1
% of tot. prod. livestock units that are hens	4.2	4.2	3.5	2.4

Counties:	Mower	Rice	Steele	Waseca
<u>Items</u>				
No. of horses (farms with tractor)	6.0	4.4	5.8	6.8
No. of horses (farms without tractor)	5.8	4.7	5.8	6.0
No. of colts	1.6	.7	1.5	1.1
No. of cows	29.7	14.8	19.6	19.4
No. of cows per worker	9.2	8.2	8.2	8.4
Head of other cattle	25.7	16.6	23.3	25.8
Litters of pigs raised	17.0	13.0	16.0	17.0
Pounds of pork produced	24737.0	17422.0	20772.0	22520.0
Head of sheep (2 lambs equal 1 head)	14.2	5.2	9.1	15.6
No. of hens	109.2	110.0	253.0	316.0
Total no. of prod. livestock animal units	58.1	33.2	45.5	48.4
% of tot. prod. livestock units that are cows	50.1%	45.3%	44.2%	40.8%
% of tot. prod. livestock units that are cattle	23.2	27.2	26.2	26.9
% of tot. prod. livestock units that are hogs	23.0	22.5	21.0	20.1
% of tot. prod. livestock units that are sheep	2.0	1.6	2.5	4.9
% of tot. prod. livestock units that are hens	1.7	3.4	6.1	7.3

Factors of Cost and Returns in Dairy Production 1931

Counties:	Dodge	Free- born	Good- hue	Le Sueur	Mower	Rice	Steele	Waseca
No. of farms:	17	26	33	12	8	22	18	11
Butterfat per cow	241	228	228	262	240	254	253	225
Feed per cow, lbs.								
Corn	365	375	296	669	265	195	310	613
Small grain	1497	1443	1200	1419	1945	1564	1551	1146
Com.feeds -under 25% prof.	192	250	332	348	181	292	226	255
Com.feeds -over 25% "	149	105	86	89	185	95	118	83
Tame hay	1391	868	1190	285	1221	561	670	559
Alfalfa	778	1692	1427	2208	871	2299	1862	2151
Wild hay	90	162	35	219	118	148	155	483
Corn fodder	1157	693	355	966	688	962	620	546
Silage	7125	7163	6697	5991	7519	7941	7627	7052
Total concentrates	2203	2173	1914	2525	2576	2146	2205	2097
Total dry roughage	3416	3415	3007	3678	2898	3970	3307	3739
Total Digest. nutrients	4438	4402	4019	4522	4571	4765	4420	4511
Tot.digest.nutr. per lb.								
B.F.	18.4	19.3	17.6	17.3	19.0	18.8	16.5	20.0
% protein in ration	11.6	12.4	12.5	13.3	11.9	13.2	12.9	13.0
% cows fresh, Sept.to Dec.	59.	60.	55.	66.	43.	65.	66.	65.
Feed cost per cow								
Concentrates	\$18.50	\$18.23	\$16.09	\$21.65	\$22.06	\$17.77	\$18.62	\$17.12
Roughages	28.15	30.76	28.87	29.76	28.11	36.18	31.53	33.13
Pasture	4.70	5.31	5.02	4.54	5.27	4.40	4.71	5.64
Total feed cost	\$51.35	\$54.30	\$49.98	\$55.95	\$55.44	\$58.35	\$54.86	\$55.89
Feed cost per lb.B.F.(cents)	21.3	23.8	21.9	21.4	23.1	23.0	20.5	24.8
Value of produce per cow								
B.F. sales	\$63.73	\$61.42	\$62.81	\$76.09	\$94.42	\$72.72	\$79.81	\$62.65
Dairy prod.used in house	4.08	3.98	4.37	4.93	2.67	3.36	3.56	3.43
Milk to other livestock	13.21	12.17	11.98	15.31	8.13	13.83	13.40	13.75
Apprec. or deprec.	-11.05	-9.93	-7.93	-10.66	-15.70	-9.93	-11.71	-11.02
Total value of product	\$69.97	\$67.64	\$71.23	\$85.67	\$89.52	\$80.48	\$85.06	\$68.81
Ret.above feed cost per cow	18.62	13.34	21.25	29.72	34.08	22.13	30.20	12.92
Price rec'd per lb.B.F. sold								
Sold as manufacturing cream	\$.29	\$.30	\$.29	\$.28	\$.30	\$.29	\$.30	\$.30
Sold as milk, cheese or retail cream	.35	1.13	.46	.53	.54	.49	.54	.61
Number of cows	17.9	17.5	16.1	15.1	29.7	14.8	19.7	19.4

Feed Costs and Returns for Other Cattle and Sheep 1931

Counties:	Dodge	Free- born	Good- hue	Le Sueur	Mower	Rice	Steele	Waseca
Other cattle; no. of farms:	17	26	33	12	8	22	19	11
Feeds used per head, lbs.								
Concentrates	464	550	442	615	776	422	431	467
Hay and fodder	1358	1404	1313	1523	1352	1496	1500	1474
Silage	2745	2091	2274	2304	1985	2724	2562	2157
Whole milk	348	323	373	551	371	432	354	299
Skimmilk	1213	1614	1228	1290	915	1278	1682	2003
Feed costs per head								
Concentrates	\$3.54	\$4.17	\$3.52	\$4.86	\$6.00	\$3.37	\$3.68	\$5.67
Roughages	10.40	10.04	10.88	10.79	10.51	12.49	11.85	11.04
Milk	5.88	6.38	6.89	8.51	6.34	7.15	6.94	6.58
Pasture	2.05	1.80	1.72	2.13	1.57	1.83	1.52	1.68
Total	\$21.87	\$22.39	\$23.01	\$26.29	\$24.42	\$24.84	\$23.99	\$22.97
Returns per head	\$17.57	\$17.68	\$18.64	\$20.56	\$21.90	\$19.75	\$18.98	\$19.23
Ret. above feed cost pr. head	-4.30	-4.71	-4.37	-5.73	-2.51	-5.09	-5.01	-3.75
% death loss	21	16	18	7	36	9	10	15
No. of head of young cattle	24.0	20.0	17.4	18.5	25.7	16.6	23.3	25.8
Sheep; no. of farms:	7	11	17	3	3	5	3	5
Feeds used per head, * lbs.								
Concentrates	74	85	40	103	113	65	79	35
Tame hay	55	40	49	-	39	56	23	16
Alfalfa	15	66	52	119	167	65	128	102
Corn fodder and wild hay	105	65	39	-	34	32	64	71
Silage	64	70	90	-	-	89	99	92
Feed cost per head								
Concentrates	.54	.64	.33	.79	.82	.56	.62	.26
Roughages	.67	.87	.84	.77	1.30	.98	1.35	1.06
Pasture	.85	.78	.98	.92	.61	.98	.92	.98
Total	2.06	2.29	2.15	2.48	2.73	2.52	2.89	2.30
Value of production per head								
Wool	1.06	.37	.62	.57	.48	.75	1.11	.74
Mutton	1.46	1.89	2.04	1.05	1.96	.55	2.00	1.08
Total	2.52	2.26	2.66	1.62	2.44	1.30	3.11	1.82
Ret. above feed cost per head	.46	-.03	.51	-.86	-.29	-1.22	.22	-.48
Price per lb. wool sold	.14	.11	.13	.11	.12	.13	.13	.14
Value per lamb sold	5.20	4.67	4.29	3.98	3.84	3.85	4.30	4.13
% lamb crop	66	77	97	89	71	87	120	84
% death loss	12	10	5	8	2	6	4	7
No. of head of sheep*	35.6	18.9	37.4	46.5	38.0	23.0	53.8	34.4

*Two lambs under 6 months of age considered as one head.

Feed Costs and Returns for Hogs and Poultry 1931

Counties:	Dodge	Free- born	Good- hue	Le Sueur	Mower	Rice	Steele	Waseca
Hogs; no. of farms:	16	25	32	12	8	21	18	10
Lbs. feed per 100 lbs. pork prod.								
Corn	250	329	182	324	202	248	259	304
Small grain	152	115	203	110	186	159	154	103
Commercial grainsfeeds	19	5	18	12	33	14	14	13
Total gr. and gr. feeds	421	449	403	446	421	421	427	420
Tankage	2	3	4	2	5	2	2	3
Skim milk	458	365	352	446	170	449	534	321
Val. feed per 100 lbs. pork prod.								
Grain & comm. feeds	\$ 3.19	\$ 3.32	\$ 3.06	\$ 3.34	\$ 3.28	\$ 3.19	\$ 3.21	\$ 3.16
Tankage & skim milk	.68	.63	.61	.74	.36	.72	.85	.55
Pasture	.18	.18	.16	.15	.11	.16	.18	.19
Total	\$ 4.05	\$ 4.13	\$ 3.83	\$ 4.23	\$ 3.75	\$ 4.07	\$ 4.25	\$ 3.90
Ret. per 100 lbs. pork prod.	3.85	3.67	3.73	3.87	3.95	3.77	3.93	3.81
Ret. above feed cost per 100 lbs. pork produced	-.20	-.46	-.10	-.36	.20	-.30	-.32	-.09
Price rec. per 100 lbs. pork sold	\$ 5.23	\$ 5.22	\$ 5.09	\$ 5.45	\$ 5.62	\$ 5.42	\$ 5.61	\$ 5.51
Total no. of litters	13	17	11	15	17	13	16	17
Tot. no. of pigs weaned per litter	6.9	6.2	6.7	6.0	6.2	6.5	6.0	6.4
Lbs. of pork prod.	18257	22457	15064	21176	24737	17422	20772	22520
Poultry; no. of farms:	17	24	32	9	7	21	18	11
Lbs. of feed per hen								
Concentrates	111	108	95	118	119	104	87	113
Skim milk	74	46	68	47	34	60	40	29
Cost of feed per hen								
Concentrates	\$ 1.03	\$.96	\$.92	\$ 1.10	\$ 1.06	\$.99	\$.78	\$ 1.04
Skim milk	.11	.07	.10	.07	.05	.09	.06	.04
Total	1.14	1.03	1.02	1.17	1.11	1.08	.84	1.08
Val. of product per hen								
Eggs sold & used in house	\$ 1.54	\$ 1.19	\$ 1.64	\$ 1.63	\$ 1.40	\$ 1.61	\$ 1.53	\$ 1.92
Poultry " " " " "								
plus appr. or less depr.	1.00	.78	.55	1.05	.97	.68	.22	1.08
Total	2.54	1.97	2.19	2.68	2.37	2.29	1.75	3.00
Ret. above feed cost per hen	1.40	.94	1.17	1.51	1.26	1.21	.91	1.92
Price rec. per doz. eggs sold	.15	.15	.16	.17	.16	.17	.16	.16
Eggs laid per hen	123	98	126	124	109	117	117	146
No. of hens	152	170	133	111	109	110	253	316

Feed Costs per Horse and Other Power Expense Items 1931

Counties:	Dodge	Free- born	Good- hue	Le Sueur	Mower	Rice	Steele	Waseca
Farms with tractors; no.	10	15	21	7	5	12	19	9
Feed per horse*, lbs.								
Grain	2880	2374	2067	3565	2878	2089	2410	2480
Tame hay & alfalfa	2636	1867	3593	1356	2786	2473	1726	1225
wild hay & fodder	1219	1749	424	3059	2190	1979	1886	3602
Feed costs per horse								
Grain	\$17.06	\$18.13	\$15.00	\$26.91	\$22.15	\$15.69	\$20.49	\$18.42
Roughage	12.69	12.68	16.35	12.76	20.61	16.66	13.76	15.03
Pasture	3.93	4.00	3.34	1.94	3.49	2.17	2.80	5.63
Total	\$33.68	\$34.81	\$34.69	\$41.61	\$46.25	\$34.52	\$37.05	\$37.08
Number of work horses	5.3	5.9	5.9	5.9	6.0	4.4	5.8	6.8
Number of colts	1.1	.7	1.2	.3	2.3	.5	1.6	1.3
Crop acres per horse	39	29	28	25	34	30	22	24
Trac. & horse exp. per crop A.	\$2.23	\$2.48	\$2.64	\$3.37	\$2.53	\$2.43	\$3.63	\$3.60
Farm pow. exp. per day pr. work	.75	.73	.93	1.10	.79	.78	.90	.97
Farms without tractors; no.	7	11	12	5	3	10	2	2
Feed per horse*, lbs.								
Grain	2150	2539	2639	2926	3512	2621	2798	1530
Tame hay & alfalfa	2693	1502	3216	760	4292	3065	2190	-
wild hay & fodder	1893	1004	260	2820	1415	1751	2466	5520
Feed costs per horse								
Grain	\$16.18	\$18.34	\$19.76	\$21.41	\$26.33	\$19.80	\$21.25	\$17.21
Roughage	15.34	9.46	15.78	11.06	22.67	19.98	17.69	16.16
Pasture	3.48	3.68	2.51	2.99	2.12	2.64	3.06	2.69
Total	\$35.00	\$31.48	\$38.05	\$35.46	\$51.12	\$42.42	\$42.00	\$36.06
Number of work horses	4.6	5.8	5.7	5.6	5.8	4.7	5.8	6.0
Number of colts	.3	.5	.8	.4	.3	.9	.7	.2
Crop acres per horse	19	20	19	19	21	18	16	16
Horse exp. per crop A.	\$2.01	\$2.17	\$2.46	\$2.25	\$2.59	\$2.60	\$3.31	\$2.31
Farm pow. exp. per day pr. work	.77	.71	.91	.96	.90	.88	1.00	.73

* Two colts equal one horse.

Comparisons of Various Items with Previous Years (See page 37)

Items	1928	1929	1930	1931
Number of farms	124	172	180	147
Acres in farm	163	176	183	198
Crop acres in farm	112	121	128	137
Farm inventory (not including house)	\$23,655	\$25,494	\$25,562	\$23,060
No. of work horses	5.5	5.4	5.3	5.6
No. of colts	.7	.8	.7	.9
No. of cows	13.8	14.7	15.15	17.7
No. of head of other cattle	14.2	15.5	16.7	20.3
No. of litters of spring pigs	5.9	6.3	6.8	8.9
No. of litters of fall pigs	3.3	3.2	3.2	5.0
Lbs. of pork produced	12143.0	13270.0	14974.0	18886.0
No. of head of sheep	6.7	7.3	7.8	12.2
No. of hens	139.3	134.0	146.9	157.0
Lbs. of B.F. per cow	241.4	246.7	241.6	241.3
No. of pigs per litter	6.2	6.4	6.3	6.4
No. of eggs laid per hen	92.8	96.5	110.0	119.0
Price rec'd per lb. B.F. sold	\$.53	\$.50	\$.40	\$.29
Price rec'd per cwt. hogs sold	8.23	9.60	8.94	5.33
Am't rec'd per lamb sold	10.02	9.55	5.92	4.36
Price rec'd per lb. wool sold	.42	.30	.18	.13
Price rec'd per doz. eggs sold	.27	.28	.22	.16
Returns above feed cost per cow	\$ 77.43	\$ 75.56	\$ 45.17	\$ 21.54
Ret. above feed cost per head other cattle	15.74	20.55	1.76	-4.57
Ret. above feed cost per cwt. pork prod.	.54	2.46	1.69	-.24
Ret. above feed cost per head sheep	6.72	4.28	-.14	-
Ret. above feed cost per hen	1.86	1.78	1.35	1.22
Feed cost per cow	\$ 70.85	\$ 68.16	\$ 61.38	\$ 53.98
Feed cost per head other cattle	33.92	32.10	29.42	23.50
Feed cost per cwt. pork prod.	7.98	7.34	6.32	4.03
Feed cost per head sheep	2.56	3.07	2.69	2.31
Feed cost per hen	1.55	1.69	1.38	1.04
Feed Cost per horse	57.11	53.07	43.21	36.74
Price of feed, corn (per bu.)	\$.66	\$.73	\$.63	\$.41
Price of feed, barley (per bu.)	.67	.52	.42	.37
Price of feed, oats (per bu.)	.49	.40	.31	.24
Price of feed, bran (per cwt.)	1.80	1.60	1.40	.90
Price of feed, oil meal (per cwt.)	2.90	3.05	2.75	1.85
Price of feed, alfalfa (per ton)	15.00	14.50	13.09	13.00
Yield per acre, corn (bu.)	40.9	48.6	47.1	32.1
Yield per acre, barley (bu.)	36.9	35.1	31.8	24.9
Yield per acre, oats (bu.)	44.6	47.5	50.6	39.0
Yield per acre, alfalfa (tons)	2.9	3.1	2.6	2.3
% of tillable land in high return crops	31.0	32.8	33.4	33.4
Prod. livestock units per 100 Acres	19.4	18.9	19.4	21.7
No. of days of productive work	587	611	653	776
Day of productive work per worker	308	312	327	354
Power & Equip. exp. per day of prod. work	1.82	1.69	1.51	1.37
No. of farms with tractors	59	100	112	96

Summary of Farm Earnings by Years*

Item	1928	1929	1930	1931
<u>CASH EXPENSES</u>				
Tractor (new and exp.)	\$ 94	\$ 249	\$ 224	\$ 151
Truck (new and exp.)	29	65	51	53
Auto (new and exp.) (farm share)	127	144	111	89
Gas engine (new and exp.) (farm share)	14	19	14	13
Electricity (new and exp.) (farm share)	32	24	22	36
Machinery and equipment (new)	151	228	174	134
Machinery and equipment (exp.)	74	70	57	63
Bldgs., fences, tiling (new)	94	167	178	69
Bldgs., fences, tiling (exp.)	54	49	32	37
Hired labor	252	293	262	275
Feed for livestock	504	376	309	380
Other expense for livestock	59	74	80	82
Horses bought	44	28	73	26
Cows bought	79	41	55	18
Other cattle bought	63	99	78	45
Hogs bought	69	101	115	69
Sheep bought	5	8	4	15
Poultry bought	35	39	43	39
Crop (seed, twine, spray)	172	199	202	200
Taxes and insurance	285	312	324	349
General Farm	30	29	26	34
(1) Total cash expense	2,266	2,614	2,390	2,177
(2) Decrease in farm inventory	-	-	375	971
(3) Board for hired labor	95	110	113	100
(4) Total expense (sum of (1)(2) & (3))	2,361	2,724	2,878	3,248
<u>CASH RECEIPTS</u>				
Horses	33	28	40	26
Cows	353	350	281	174
Dairy products	1,649	1,674	1,374	1,276
Other cattle	375	427	319	285
Hogs	1,040	1,287	1,323	1,024
Sheep	45	59	35	46
Poultry	142	138	135	143
Eggs	272	278	272	231
Small grain	214	268	164	145
Corn	29	45	44	43
Hay	28	21	19	13
Root crops	1	57	56	38
Other crops	85	136	150	84
Miscellaneous	81	187	175	135
Income from work off the farm	117	88	89	140
(5) Total cash receipts	4,464	5,043	4,476	3,804
(6) Increase in farm inventory	387	847	-	-
(7) Farm produce used in house	323	326	304	242
(8) Total receipts (sum of (5)(6) & (7))	5,174	6,216	4,780	4,046
Total expenses (4)	2,361	2,724	2,878	3,248
(9) Ret. to cap. & fam. labor (8) minus (4)	2,813	3,492	1,902	798
(10) Interest on farm inventory	1,182	1,274	1,278	1,133
(11) Family labor earnings (9) minus (10)	1,631	2,218	624	-355
(12) Unpaid family labor	354	361	381	257
(13) Oper. labor earnings (11) minus (12)	1,277	1,857	243	-622

*See page 37.

Footnote for pages 35

The value of the farms included in the 1931 report were reduced approximately 25 per cent from the level of 1928-1930 values. This affects the average inventory values as shown on page 35, and the amount of interest on investment in the financial statements. The loss taken in this reduction of values was not included as a decrease in inventory in the year's business.

The financial statements for 1931 differ, also, from previous years in that the unpaid family labor rate was \$40 per month, whereas the previous rate was \$60 per month; and the board for hired labor in 1931 was figured at \$15 per month, whereas the previous rate was \$20 per month.

These adjustments to meet the change in price level, should be considered in comparing 1931 results with previous years.

Suggestions for Improvement