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

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THIRD ANNUAL REPORT
of the
Better Farming Club
of
Dodge and Goodhue Counties

By

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Mimeographed Report No. 45
Division of Agricultural Economics
University Farm
St. Paul, Minn.
March, 1931.

Third Annual Report of the Better Farming Clubs of Dodge and Goodhue Counties for the Year 1931

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

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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 a group of farmers in Dodge and Goodhue Counties, Minnesota, have been cooperating during the years 1928, 1929, and 1930 in a farm account project, known as the Better Farming Clubs of Dodge and Goodhue Counties. The work was started January 1, 1928, along with similar clubs in nearby counties, viz., Freeborn, Rice, Steele 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 25.

The project has been under the direction of G. A. Pond and W. P. Ranney of the Division of Agricultural Economics, University of Minnesota, with the assistance of other members of the same department, G. A. Salee, S. A. Eugene, and Wm. H. Dankers, who aided in closing the books at the end of the year 1930, M. L. Armour and M. A. Thorfinnson, County Agricultural Agents of Dodge and Goodhue Counties, respectively.

Type of Farming in Dodge and Goodhue Counties

The farms selected for the study are livestock farms on which dairy cattle are the principal source of income. Although some milk is sold for manufacture into cheese, 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, and canning peas are grown to a limited extent as a cash crop. 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-fourth of the average cash income for 51 cooperators in Dodge and Goodhue Counties. 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 was 209 acres. The average farm inventory was $25,706. This does not include the value of the house in which the operator lived. In 1930, fifty-six per cent of the average farm inventory consisted of land; fifteen per cent of permanent improvements; seven per cent of feeds and supplies; eight per cent of machinery and equipment; and

fourteen per cent of livestock, of which almost one-half or an average of $1,500 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 51 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 $4146. In addition farm produce to the value of $308 was consumed by the farm family. The total average receipts per farm is the sum of those two items $4,454. The average total expense per farm $2,770, includes $2,391 cash expense, an estimated allowance of $106 for board of hired labor, and an average inventory decrease of $273 per farm. The difference between the total income and total expense figure is $1684. 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, $1285, for the services of capital, there remains $399 for the servies of the farmer and his family. The average value of family labor used, if computed at hired man's wages, was $349. The average operator's labor earning is the family earnings less their allowance of $349, or $50. 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 25.

Summary of Farm Inventories--1930

Items	Your Farm	Average	Range Highest	Range Lowest
Size of Farm (acres)		209.	680.	80.
Size of Business (days of prod. work) (1)		617.	1612.	288.
Average farm inventory (without house)		$25706	$76403	$10248
Land		14287	40475	4000
Farm improvements		3946	11146	1530
Machinery & equipment (total)		2075	8880	644
Gen. Machinery & equipment		1359	7078	446
Tractor		375	2138	-
Truck		92	650	-
Auto (farm share)		174	550	-
Gas engine (farm share)		37	300	-
Electrical Equip. (farm share)		38	510	-
Feeds & Seeds		1801	5434	664
Misc. supplies		26	236	-
Horses (total)		531	1318	185
Horses		475	1098	185
Colts		56	380	-
Productive livestock (total)		3040	9500	1241
Cows		1500	3358	368
Other cattle		896	3865	50
Hogs		401	2524	-
Sheep		107	1127	-
Poultry		136	312	-

(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. & Shred.)	"	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	Acre	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

CASH EXPENSES Items	Your Farm	Average	Range Highest	Lowest
Tractor (new and exp.)		$ 255	$1354	-
Truck (new and exp.)		52	646	-
Auto (new and exp.) (farm share)		101	572	-
Gas engine (new and exp.) (Farm share)		19	149	-
Electricity (new and exp.) (farm share)		8	106	-
Machinery and equipment (new)		141	463	8
Machinery and equipment (exp.)		68	415	-
Bldgs., fences, tiling (new)		142	2577	-
Bldgs., fences, tiling (exp.)		19	98	-
Hired Labor		244	913	-
Feed for livestock		232	862	13
Other expense for livestock		88	313	1
Horses bought		60	875	-
Cows bought		53	1022	-
Other cattle bought		142	3824	-
Hogs bought		137	2883	-
Sheep bought		6	140	-
Poultry bought		36	115	-
Crop (seed, twine, spray)		257	1032	59
Taxes and insurance		328	755	109
General farm		23	57	-
(1) Total cash expense		2391	8266	971
(2) Decrease in farm inventory		273	3068	-
(3) Board for hired labor		106	480	-
(4) Total expense (sum of 1, 2 & 3)		2770	10356	1115
CASH RECEIPTS		*		
Horses		74	700	-
Cows		248	1194	-
Dairy products		1282	3299	481
Other Cattle		279	1266	-
Sheep		45	352	-
Hogs		1069	7097	-
Poultry		120	635	-
Eggs		195	568	-
Small grain		269	1888	-
Corn		29	612	-
Hay		23	210	-
Root crops		9	83	-
Other crops		195	2921	-
Miscellaneous		190	2433	-
Income from work off farm		119	1163	-
(5) Total cash receipts		4146	15282	1849
(6) Increase in farm inventory		-	4423	-
(7) Farm produce used in house		308	547	131
(8) Total receipts (sum 5, 6 & 7)		4454	15652	2105
Total Expenses (4)		2770	10356	1115
(9) Returns to cap. & fam. labor (8 minus 4)		1684	5297	-309
(10) Interest on farm inventory		1285	3820	512
(11) Family labor earnings (9 minus 10)		399	2447	-2326
(12) Unpaid family labor		349	1440	-
(13) Operators labor earnings (11 minus 12)		50	1967	-2326

Summary of Farm Earnings, 1930 (A)

EXPENSES AND NET DECREASES Items	Your Farm	Average	Range Highest	Range Lowest
Total power machinery & equipment		$ 318	$1455	$ -48
Tractor		147	949	-61
Truck		43	279	-125
Auto (farm share)		100	242	-
Gas engine (farm share)		19	149	-23
Elec. plant or current (farm share)		9	133	-86
Gen. machinery and equipment		174	442	-2
Bldgs., fencing, tiling		132	728	-393
Hired labor		244	913	-
Prod. livestock misc. expense		87	313	1
Misc. horse expense		1	10	-
Crop		237	1032	65
Taxes and insurance		328	755	109
General farm		23	57	-
Decrease in Crops & feeds		-	1042	-
Decrease in horses		7	155	-
Board for hired labor		106	480	-
Interest on farm inventory		1285	3820	512
Unpaid family labor		349	1440	-
(1) Total expenses		3291	8211	1584
RETURNS AND NET INCREASES Items				
Increase in crops and feeds		135	2517	-
Gross returns from all prod. livestock		3322	8475	1717
Cows (including milk to other livestock)		1542	3265	322
Other cattle		468	1878	63
Hogs		944	4360	-
Sheep		38	386	-65
Poultry		330	948	-
Outside and misc. receipts		165	1566	-
Increase in horses		-	95	-
(2) Total returns and net increases		3622	10046	2057
(3) Milk produced and fed on farm		281	621	37
(4) Gross returns (2 minus 3)		3341	9447	1906
Total expenses (1)		3291	8211	1584
(5) Operators labor earnings (4minus 1)		50	1967	-2326
Gross returns per $100 expense		106	184	59

(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 days 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 seven farmers who excelled in six or more factors had average earnings of $2158 above the average of two farmers who did not excel in more than one factor.

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	0	Average operator's labor earnings
Six or more	7			xxxxxxxxxxxxxxx	$ 968
Four or five	18			xx	143
Two or three	24		xxx		-183
One or none	2		xxxxxxxxxxxxxxxxxx		-1190

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. per Cow	Index of Crop Yields	Index of Sel-ection of High Return Crops	Prod. Live-stock units per 100 Acres	Size of Business No. of days of prod. Work	Days of Prod. Work per Worker	Farm Power Mach. & Eq., Bldg. & Fenc. Exp. per day of Prod. Work
1051	$1967	$ 76	245	94	38.2	9.1	645	373	$ .89
1194	1947	38	147	160	68.0	18.7	368	329	1.55
1191	1616	104	421	120	40.8	18.0	377	184	1.04
1197	1270	89	248	81	25.7	15.9	669	356	1.60
1193	1263	12	202	120	31.1	23.1	1612	653	.89
1082	1246	78	261	97	18.9	15.7	466	440	1.47
1282	1201	54	219	93	21.8	17.6	352	259	1.62
1052	1003	17	174	134	42.5	19.1	531	425	.75
1011	839	33	191	97	26.9	15.3	657	424	1.50
1131	724	79	310	109	31.4	25.0	387	328	1.49
1912	700	62	236	122	29.1	30.8	796	363	1.42
1122	592	64	252	98	27.5	20.5	388	246	1.36
1101	500	72	215	107	29.0	14.7	397	191	1.07
1072	489	39	208	85	32.7	13.1	604	371	1.60
1234	482	64	252	95	23.2	7.4	612	303	.84
1231	460	61	302	132	24.3	21.4	453	209	1.42
1073	431	42	203	109	22.2	14.9	473	348	1.99
1232	284	44	197	80	26.5	14.6	772	327	1.00
1196	273	44	282	114	26.0	23.0	691	313	1.44
1021	242	30	186	86	26.5	13.2	868	474	1.62
1293	233	52	238	127	24.5	17.4	802	344	1.40
1023	162	24	174	81	41.0	14.1	541	220	.93
1401	155	55	254	113	34.6	27.7	345	240	1.82
1025	153	32	259	90	22.9	14.1	554	338	1.66
1201	44	47	259	89	21.9	21.3	452	407	1.80
1136	2	36	204	109	30.1	13.0	412	202	1.19
1911	-1	54	234	95	33.5	15.5	733	303	2.04
1235	-30	54	270	119	16.1	19.0	288	236	1.94
1112	-78	56	220	82	21.2	9.6	1437	456	1.62
1811	-85	33	205	111	28.7	20.8	411	361	1.04
1381	-116	14	240	146	26.3	18.4	393	273	1.20
1382	-123	30	225	102	21.1	19.3	491	236	.82
1291	-149	41	289	82	23.7	11.3	603	290	1.45
1233	-259	26	167	118	33.2	12.1	632	205	.54
1361	-399	51	268	111	33.2	17.0	471	188	2.10
1111	-426	43	204	90	30.5	23.8	538	266	1.24
1292	-455	32	147	90	29.0	12.9	841	273	1.52
1412	-522	24	183	82	25.5	15.9	917	394	.87
1031	-528	22	260	92	42.2	12.9	583	326	1.73
1221	-634	45	258	115	26.0	23.9	543	346	3.21
1121	-681	20	206	92	33.3	12.0	427	216	2.40
1024	-686	2	220	98	24.9	17.7	667	346	1.21
1202	-713	42	214	77	31.6	25.3	812	421	.90
1032	-714	58	240	88	22.1	21.0	586	292	1.51
1402	-779	32	240	115	28.3	19.2	648	277	1.38
1802	-792	33	249	116	26.5	15.4	468	208	1.59
1801	-814	37	220	86	26.9	14.8	727	385	2.24
1135	-973	15	205	97	22.5	16.5	646	345	.89
1195	-1700	16	176	61	28.1	7.3	560	280	2.24
1601	-1714	29	184	96	26.6	12.5	814	305	1.38
1411	-2326	25	216	101	24.0	17.5	994	361	1.70
Aver.	50	43	229	102	28.9	17.1	617	319	1.45
High	1967	104	421	160	68.0	30.8	1612	653	.54
Low	-2326	2	147	61	16.1	7.3	285	184	3.21

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 51 farms included in this summary are located between the two lines across the center of the page:

Oper. Labor Earn.	Returns above Feed Cost per Head of Livestock	Lbs. B. F. per Cow	Index of Crop Yields	Index of Selection of High Return Crops	Prod. Livestock Units per 100 A.	Size of Business No. of Days of Prod. Work	Days of Prod. Work per Worker	Farm Power, Mach.& Eq., Bldg.&Fenc. Ex. per Day of Prod. Work
$1967	$104	421	160	68.0	30.8	1612	653	$ .54
1550	78	304	132	41.4	24.6	917	419	.70
1250	71	289	126	38.9	23.1	857	399	.85
950	64	274	120	36.4	21.6	797	379	1.00
650	57	259	114	33.9	20.1	737	359	1.15
350	50	244	108	31.4	18.6	677	339	1.30
50	43	229	102	28.9	17.1	617	319	1.45
-250	36	214	96	26.4	15.6	567	299	1.60
-550	29	199	90	23.9	14.1	507	279	1.75
-850	22	184	84	21.4	12.6	447	259	1.90
-1150	15	169	78	18.9	11.1	387	239	2.05
-1450	8	154	72	16.4	9.6	327	219	2.20
-2326	2	147	61	16.1	7.3	288	184	3.21

Utilization of Land - 1930

Crop (A)(B)(C)(D) refer to ranking used in calculating Index of Selection of High Return Crops, as explained on Page 7.		18 farms above 220 acres				18 farms from 150 to 220 A.			
		No. of farms growing this crop	Acres per farm			No. of farms growing this crop	Acres per farm		
			Your farm	Aver-age	Aver. for those growing crop		Your farm	Aver-age	Aver. for those growing crop
Winter wheat	(B)	9		6.8	13.5	3		3.0	18.0
Spring wheat	(C)	1		.1	3.0	-		-	-
Oats	(D)	15		35.1	42.2	14		12.6	16.3
Barley	(C)	15		29.3	35.2	13		11.9	16.5
Rye	(D)	4		5.5	24.8	1		.5	9.0
Flax	(B)	11		16.8	27.5	8		6.8	15.3
Wheat & Oats	(C)	5		4.1	14.6	3		1.5	9.0
Oats & Barley	(C)	12		17.1	25.6	14		18.7	24.1
Flax & Wheat	(B)	6		8.6	25.8	3		2.2	13.2
Canning Peas	(A)	1		2.8	50.0	2		2.5	22.3
Other mixtures	(C)	4		3.9	17.8	3		1.8	10.5
Total grain				130.1				61.5	
Corn, grain	(B)	17		28.5	30.0	17		20.9	22.1
Corn, silage	(C)	14		15.5	20.0	17		14.4	15.2
Corn, fodder	(D)	5		2.8	10.2	5		.9	3.4
Sweet corn	(C)	4		2.6	11.8	5		2.5	9.0
Potatoes	(A)	8		.4	.8	13		.5	.7
Truck Crops		2		.2	2.0	1		.3	5.0
Summer fallow		3		1.8	10.7	1		.7	12.0
Total cultivated crops				51.8				40.2	
Alfalfa	(A)	15		6.4	7.7	9		3.6	7.2
Red clover	(B)	5		6.6	23.8	4		2.8	12.5
Other leg. & mixtures	(C)	12		17.5	26.2	11		9.0	14.7
Timothy	(D)	9		8.1	16.2	6		6.8	20.5
Wild hay (till. land)	(D)	-		-	-	1		.1	2.0
Hay (Non-till. land)		4		4.0	18.3	7		2.5	6.5
Total hay				42.6				24.8	
Total crop acreage				224.5				126.5	
Sweet Clover pasture	(B)	2		.4	4.0	4		2.3	10.3
Alfalfa pasture	(A)	-		-	-	2		.3	3.0
Red clov.or rape past.(hogs)	(B)	1		.2	3.0	2		.3	3.0
Misc. legume pasture	(C)	7		10.1	26.0	9		7.8	15.6
Other tillable pasture	(D)	14		25.1	32.2	14		9.7	12.4
Non-till. pasture		14		36.8	47.4	12		19.5	29.2
Total pasture				72.6				39.9	
Timber (not pastured)		6		5.4	16.3	4		1.8	8.3
Roads & waste				9.7				5.3	
Farmstead				8.1				5.1	
Total acres in farm				320.3				178.6	
% land tillable				78.0				82.0	
Index of tillable land in high return crops				27.2				29.0	

Utilization of Land and Yield of Crops - 1930

Crop (A)(B)(C)(D) refer to ranking used in calculating Index of Selection of High Return Crops, as explained on Page 7.		15 farms from 80 to 150 A. No. of farms growing this crop	Acres per farm: Your farm	Acres per farm: Aver-age	Acres per farm: Aver. for those growing crop	Yield per acre: Your farm	Yield per acre: Aver-age	Yield per acre: High-est	Yield per acre: Low-est
Winter wheat	(B)	1		.5	8.0		17.3	30.5	6.1
Spring wheat	(C)	-		-	-		11.7	11.7	11.7
Oats	(D)	13		11.5	13.2		47.3	76.0	26.5
Barley	(C)	12		8.2	10.3		30.4	50.0	18.6
Rye	(D)	-		-	-		15.8	23.0	11.0
Flax	(B)	2		.6	4.5		10.6	18.3	3.7
Wheat & Oats	(C)	-		-	-		31.7	50.0	12.0
Oats & Barley	(C)	6		7.3	18.1		39.2	51.5	23.4
Flax & Wheat	(B)	2		1.5	11.5		14.2	22.9	3.3
Canning peas	(A)	1		2.3	35.0		$26.02	$43.00	$ 8.17
Other mixtures	(C)	2		.7	5.0				
Total grain				32.6					
Corn, grain	(B)	15		12.7	12.7		44.1	70.0	27.0
Corn, silage	(C)	11		7.0	9.5		6.7	9.4	2.9
Corn, fodder	(D)	5		1.1	3.3		3.0	4.5	2.0
Sweet Corn	(C)	4		2.1	7.8		2.3	3.2	.6
Potatoes	(A)	8		.3	.6		50.0	127.0	10.0
Summer fallow		1		.3	5.0		-	-	-
Total cultivated crops				23.5					
Alfalfa	(A)	9		4.5	7.4		2.4	4.5	1.0
Red clover	(B)	1		.5	8.0		1.4	2.0	.7
Other leg. & mixtures	(C)	10		7.4	11.1		1.5	2.6	.4
Timothy	(D)	4		1.1	4.3		1.3	2.2	.4
Wild hay (till. land)	(D)	-		-	-		1.1	1.1	1.1
Wild hay (non-till.land)		-		-	-		1.1	1.7	.3
Total hay				13.5					
Total crop acreage				69.6					
Sweet clover pasture	(B)	3		1.7	8.7				
Alfalfa pasture	(A)	1		.2	2.5				
Red clov.or rape past.hogs	(B)	2		.3	2.0				
Misc. legume pasture	(C)	2		1.1	8.5				
Other tillable pasture	(D)	10		9.0	13.6				
Non-tillable pasture		11		18.3	25.0				
Total pasture				30.6					
Timber (not pastured)		6		3.1	7.7				
Roads and waste		-		4.4	-				
Farmstead		-		4.8	-				
Total acres in farm				112.5					
% land tillable				74.0					
Index of tillable land in high return crops				30.7					

Some methods farmers use to increase their crop yields

1. Tile if necessary.
2. Plow under legumes--grow sweet clov. in small grains.
3. Try commercial fertilizers.
4. Utilize manure effectively.
5. Use rotated legume pastures.
6. Raise & feed hogs on these pastures & hog down corn.
7. Keep plenty of livestock.
8. Grow recommended varieties of crops.
9. Use best tested seed available.
10. Thorough & timely seedbed preporation--keep weeds under control.

	Your Farm	Average	Range Highest	Range Lowest
18 Large Farms; Above 220 Acres				
Number of horses (with tractor) (16 farms)		6.5	10.9	4.0
Number of horses (without tractors) (2 farms)		6.8	7.5	6.0
Number of colts		1.6	5.8	-
Number of cows		20.2	33.4	8.3
Number of cows per worker		8.7	12.7	3.9
Head of other cattle		26.6	57.8	6.0
Litters of pigs raised		8.0	18.	-
Pounds of pork produced		14645.0	53702.0	1202.0
Head of sheep (2 lambs equal 1 head)		16.8	118.7	-
Number of hens		89.0	181.0	-
Total number of Prod. livestock units		43.4	103.8	23.7
Number of workers		2.3	3.2	1.7
Number of hired workers		.8	2.0	-
18 Medium-sized Farms; 150 to 220 Acres				
Number of horses (with tractors) (13 farms)		4.6	7.0	2.2
Number of horses (without tractors) (5 farms)		6.5	10.8	5.0
Number of colts		1.0	3.0	-
Number of cows		14.9	29.2	8.0
Number of cows per worker		8.1	15.1	4.1
Head of other cattle		15.0	27.9	7.0
Litters of pigs raised		8.4	16.0	-
Pounds of pork produced		11067.0	23352.0	-
Head of sheep (2 lambs equal 1 head)		11.0	50.2	-
Number of hens		121.0	220.	41.
Total number of prod. livestock units		31.0	49.3	19.2
Number of workers		1.9	2.5	1.1
Number of hired workers		.5	1.0	-
15 Small Farms; 80 to 150 Acres				
Number of horses (with tractors) (6 farms)		3.8	4.0	3.0
Number of horses (without tractors) (9 farms)		4.2	5.0	3.8
Number of colts		.4	1.6	-
Number of cows		11.4	16.7	5.0
Number of cows per worker		7.4	11.8	4.5
Head of other cattle		10.3	15.4	1.1
Litters of pigs raised		5.6	13.	1.
Pounds of pork produced		8594.3	16795.0	1331.0
Head of sheep (2 lambs equal 1 head)		6.8	40.5	-
Number of hens		126.0	237.0	45.0
Total number of prod. livestock units		22.7	28.7	15.2
Number of workers		1.6	2.5	1.1
Number of hired workers		.1	1.0	-

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

Farm No.	B. F. per Cow	Feed Per Cow - Lbs.											Total Digest Nutrients	Total Digest Nutrients per lb. B.F.	% Protein in Ration	% Cows Fresh Sept. to Dec. inclusive
		Corn	Small Grain	Com. Feeds under 25% Protein	Com. Feeds over 25% Protein	Tame Hay	Alfalfa Hay	Wild Hay	Corn Fodder	Silage	Total Concen.	Total Dry Roughage				
1301	220	149	944	-	-	417	1417	333	-	6977	1093	2167	3087	14.0	11.4	33
1024	220	222	2601	-	96	1189	453	-	1245	10867	2919	2887	5321	24.2	10.5	57
1112	220	652	1590	100	145	612	1359	593	-	10027	2487	2564	4817	21.9	11.8	72
1282	219	1472	1054	20	114	2282	-	-	496	12004	2660	2778	5333	24.4	10.8	64
1411	216	-	2052	76	51	2037	779	-	659	9228	2181	3475	4754	22.0	11.9	48
1101	215	78	148	88	-	1293	831	-	1016	7664	314	3140	2986	13.9	10.1	60
1202	214	96	1438	51	199	1164	1301	-	137	8902	1784	2602	4093	19.1	13.3	82
1072	208	265	1417	127	177	1247	-	-	3387	9033	1986	4634	4949	23.8	9.7	47
1121	206	-	1338	178	25	500	2000	-	250	9125	1541	2750	4086	19.8	12.5	75
1135	205	869	1811	34	-	2618	-	-	2133	-	2714	4751	4238	20.7	10.0	37
1811	205	246	1072	41	47	596	2832	-	2310	-	1406	5738	3913	19.1	14.5	36
1111	204	-	307	-	-	2040	-	-	3540	-	307	5580	2623	12.9	8.4	0
1136	204	199	1473	-	30	1968	1893	-	2271	-	1702	6132	4062	19.9	12.2	33
1073	203	223	1913	90	50	2042	-	-	-	10558	2276	2042	4423	21.8	10.2	62
1193	202	643	967	54	-	831	2959	-	352	8437	1664	4142	4705	23.3	13.4	32
1232	197	480	1356	-	-	1664	-	-	908	10590	1836	2572	4349	22.1	9.9	57
1011	191	152	605	60	-	665	-	-	967	7860	817	1632	2611	13.7	9.1	19
1021	186	-	1710	104	90	2836	735	-	893	6302	1904	4464	4670	25.1	12.0	40
1601	184	323	1024	167	-	2070	2026	-	881	8807	1514	4977	5093	27.7	12.2	70
1412	183	664	490	20	24	1688	-	-	884	4985	1198	2572	2956	16.2	9.2	30
1195	176	305	1629	12	111	5939	-	-	6302	-	2057	12241	7191	40.9	8.8	55
1023	174	43	1085	11	17	1522	676	-	270	8453	1156	2468	3446	19.8	11.6	70
1052	174	117	855	-	-	2306	-	105	1153	6237	972	3564	3455	19.9	10.0	50
1233	167	-	1301	-	-	1987	-	-	248	6541	1301	2235	3161	18.9	9.6	83
1292	147	-	884	-	33	754	1792	-	283	7167	917	2829	3325	22.6	12.5	47
1194	147	784	19	-	-	400	-	-	100	15600	803	500	3373	22.9	8.8	25
Aver-age	229	226	1433	72	86	1544	1048	113	809	7614	1817	3514	4287	19.1	11.7	52

(Continued on next page)

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

Farm No.	B. F. per Cow	Feed Per Cow - Lbs.											Total Digest Nutrients	Total Digest Nutrients per lb.B.F.	% Protein in Ration	% Cows Fresh Sept. to Dec. inclusive
		Corn	Small Grain	Com. Feeds under 25% Protein	Com. Feeds over 25% Protein	Tame Hay	Alfalfa	Wild Hay	Corn Fodder	Silage	Total Concen.	Total Dry Roughage				
1191	421	-	3640	10	415	436	3677	687	-	9055	4065	4800	7049	16.7	14.2	0
1131	310	-	2379	272	347	2343	1265	-	1125	7123	3298	4733	5908	19.1	13.5	75
1231	302	252	1081	352	151	2785	-	-	1163	7002	1836	3948	4453	14.7	12.2	73
1291	289	171	1947	-	214	814	4883	-	-	-	2332	5697	4571	15.8	16.0	15
1196	282	315	2691	-	-	1105	789	-	1788	7473	3006	3682	5173	18.3	11.0	43
1235	270	248	2055	16	289	4496	-	189	-	505	2608	4685	4393	16.3	14.8	88
1361	263	45	767	-	34	-	2029	-	541	9196	846	2570	3495	13.1	12.5	40
1082	261	-	1601	-	210	2517	-	-	-	9900	1811	2517	4226	16.2	10.1	88
1031	260	734	2735	168	174	655	893	-	191	12154	3811	1739	5810	22.3	11.3	63
1025	259	-	2843	-	268	1768	-	261	373	13642	3111	2422	6281	24.3	10.5	62
1201	259	59	908	-	44	349	873	-	1396	6283	1011	2318	2995	11.6	11.2	0
1221	258	-	1243	-	-	691	1383	-	661	13589	1243	2735	3590	13.9	12.9	53
1401	254	-	1517	596	-	-	3250	-	-	7457	2113	3250	4432	17.4	14.6	56
1122	252	134	1170	38	328	2151	-	478	1147	7266	1670	3776	4202	16.7	10.5	62
1234	252	-	1608	25	195	3202	-	276	-	4968	1828	3478	3924	15.6	11.9	85
1802	249	428	2228	-	-	2067	494	494	-	12399	2656	3055	5536	22.2	11.4	18
1197	248	-	1306	-	35	2739	-	-	-	6329	1341	2739	3432	13.8	11.3	57
1051	245	-	1059	-	-	1291	1215	-	-	8352	1059	2506	3360	13.7	11.8	56
1032	240	401	1209	269	193	764	872	-	716	10149	2072	2352	3884	16.2	13.1	53
1381	240	667	596	27	64	-	2106	2106	-	11905	1354	4212	5135	21.4	10.8	75
1402	240	-	2087	149	73	238	1783	238	-	9270	2309	2259	4374	18.2	12.7	75
1293	238	-	910	-	39	2285	788	-	315	4728	949	3388	3145	13.2	12.3	22
1912	236	-	1385	256	38	195	2506	-	-	8619	1679	2701	3717	15.8	14.0	54
1911	234	76	1112	275	81	-	2702	-	-	7204	1544	2702	3731	16.0	14.4	88
1382	225	-	1629	-	5	3159	903	-	1173	7220	1634	5235	4805	21.4	12.4	56
Average	229	226	1433	72	86	1544	1048	113	809	7614	1817	3514	4287	19.1	11.7	52

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

Farm No.	B.F. per Cow	Feed per Cow				Feed Cost per Lb. 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. used in House	Milk to other Live- stock	Apprec. or Deprec.	Total Value of Prod.		Sold as Manufactur- ing Cream	Sold as Milk, Cheese, or Retail Cream
1191	421	$43.07	$46.03	$6.26	$95.36	22.7	$151.66	$10.60	$37.36	$-15.82	$183.80	$88.44	$ .40	-
1131	310	38.40	37.98	5.88	82.26	26.5	111.56	4.15	25.48	- 4.16	137.03	54.77	.38	$ .70
1231	302	22.11	31.19	7.25	60.55	20.0	103.52	13.45	20.39	3.65	141.01	80.46	.40	-
1291	289	25.71	35.40	6.19	67.30	23.3	96.98	7.64	32.98	-.45	137.15	69.85	.39	-
1196	282	28.04	29.84	6.43	64.31	22.8	100.19	4.71	23.03	-1.62	126.31	62.00	-	.41
1235	270	29.99	25.05	5.38	60.42	22.4	94.75	12.51	19.15	-13.13	113.28	52.86	.40	-
1361	268	9.92	33.74	6.85	50.51	18.8	96.53	10.19	9.37	-.06	116.03	65.52	.38	.44
1082	261	20.86	29.62	5.81	56.29	21.6	91.84	7.19	28.43	4.61	132.07	75.78	.40	1.37
1031	260	38.97	33.35	5.61	77.93	29.9	88.89	7.66	24.25	-28.40	92.40	14.47	.40	-
1025	259	33.43	43.26	5.53	82.22	31.7	86.52	9.17	25.41	-6.83	114.27	32.05	.38	-
1201	259	10.65	23.12	7.90	41.67	16.1	89.25	4.12	16.38	-12.23	97.52	55.85	.40	.41
1221	258	12.34	40.48	5.01	57.83	22.3	95.36	7.59	16.18	1.39	120.52	62.69	.41	-
1401	254	22.01	36.04	7.19	65.24	25.7	93.43	4.80	11.97	-16.26	93.94	28.70	.39	-
1122	252	21.27	26.77	7.01	55.05	21.8	93.64	6.73	24.35	-7.65	117.07	62.02	.41	-
1234	252	20.39	26.00	6.96	53.35	21.2	90.43	8.95	17.28	-7.66	109.00	55.65	.40	-
1802	249	25.65	39.29	6.03	70.97	28.5	94.90	5.79	24.65	-27.09	98.25	27.28	.42	-
1197	248	13.46	25.77	7.48	46.71	18.8	87.83	7.08	18.37	-1.69	111.59	64.88	.40	-
1051	245	10.83	29.30	7.15	47.28	19.3	88.26	6.20	23.21	-4.87	112.80	65.52	.40	-
1032	240	24.53	31.34	5.75	61.62	25.7	85.13	5.22	25.21	-1.19	114.37	52.75	.40	-
1381	240	14.04	43.82	5.33	63.19	26.3	93.40	8.15	11.37	-17.72	95.20	32.01	.41	.46
1402	240	23.75	31.91	6.13	61.79	25.7	81.09	6.44	16.89	-.65	103.77	41.98	.38	-
1293	238	10.13	26.63	7.30	44.06	18.5	90.55	3.15	14.22	-2.48	105.44	61.38	-	.43
1912	236	17.76	30.21	7.10	55.07	23.3	90.57	3.21	13.56	-11.04	96.30	41.23	.40	.83
1911	234	17.42	31.97	7.21	56.60	24.2	84.25	2.35	25.65	3.72	115.97	59.37	.38	-
1382	225	14.97	39.39	7.07	61.43	27.3	80.79	5.68	18.38	-5.70	99.15	37.72	.40	-
1801	220	10.33	25.50	7.08	42.91	19.5	80.92	4.37	13.11	-20.31	78.09	35.18	-	.42
(Continued on next page)														
Aver.	229	19.20	31.32	6.55	57.07	25.3	81.46	6.62	18.67	-7.88	98.87	41.80	.40	.57

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

Farm No.	B.F. per Cow	Feed per Cow				Feed Cost per Lb. B.F. (Cents)	Value of Produce per Cow					Returns above Feed Cost per Cow	Price Rec'd per Lb. B. F. Sold	
		Con-cen.	Rough.	Pasture	Total Cost		B.F. Sales	Dairy Prod. used in House	Milk to other Live-stock	Apprec. or Deprec.	Total Value of Prod.		Sold as Manufac-turing Cream.	Sold as Milk, Cheese, or Retail Cream
1024	220	$28.85	$32.91	$5.80	$67.56	30.7	$79.10	$ 2.72	$19.27	$-33.65	$67.44	$ -.12	$ .39	$ -
1112	220	27.14	33.42	5.84	66.40	30.2	77.54	3.17	23.76	-.09	104.38	37.98	.39	-
1282	219	27.78	36.56	6.25	70.59	32.2	82.81	2.45	18.51	-13.89	89.88	19.29	.38	.50
1411	216	23.35	35.47	5.44	64.26	29.8	92.01	2.98	5.56	-2.72	97.83	33.57	-	.47
1101	215	2.99	28.99	5.89	37.87	17.6	73.58	11.43	15.15	8.13	108.29	70.42	.41	-
1202	214	20.39	32.32	7.24	59.95	28.0	112.95	.89	3.55	-13.19	104.20	44.25	-	.55
1072	208	22.80	30.94	6.48	60.22	29.0	77.57	3.05	19.38	-5.65	94.35	34.13	.40	-
1121	206	16.40	34.40	6.33	57.13	27.7	63.76	17.48	22.58	-21.88	81.94	24.81	.40	-
1135	205	23.58	15.15	7.03	45.76	22.3	59.24	4.76	27.78	-21.42	70.36	24.60	.39	.72
1811	205	14.83	30.93	5.12	50.88	24.8	68.80	9.90	14.37	-9.69	83.38	32.50	.40	.43
1111	204	2.84	17.85	8.66	29.35	14.4	78.60	2.20	2.98	-23.88	59.90	30.55	-	.41
1136	204	17.20	24.00	7.65	48.85	23.9	65.53	4.83	25.56	-1.51	94.41	45.56	.39	-
1073	203	23.69	30.70	6.65	61.04	30.1	63.15	9.94	23.44	-24.90	71.63	10.59	.38	-
1193	202	18.01	41.31	6.63	65.95	32.3	76.26	2.95	19.13	-17.74	80.60	14.65	-	.45
1232	197	17.73	32.00	6.62	56.35	28.6	65.29	4.83	21.45	19.92	111.49	55.14	.40	-
1011	191	8.12	21.31	7.15	36.58	19.2	67.71	5.78	6.74	-14.00	66.23	29.65	-	.41
1021	186	19.75	33.99	7.19	60.93	32.8	65.21	5.04	16.34	-7.09	79.50	18.57	.40	-
1601	184	14.94	44.63	6.47	66.04	35.9	64.04	5.18	17.92	16.45	103.59	37.55	.40	-
1412	183	12.73	19.50	7.67	39.90	21.8	59.17	9.17	18.59	-1.01	85.92	46.02	.41	1.04
1195	176	22.58	32.89	6.79	62.26	35.4	58.31	7.26	15.74	-3.94	77.37	15.11	.40	-
1023	174	12.58	26.57	6.26	45.41	26.1	53.48	12.94	15.61	-6.34	75.69	30.28	.40	-
1052	174	9.31	24.13	5.58	39.02	22.4	59.90	7.30	17.58	-23.79	60.99	21.97	.40	-
1233	167	13.29	22.52	6.00	41.81	25.1	53.38	6.46	19.91	-11.06	68.69	26.88	.39	-
1292	147	9.19	30.51	7.37	47.07	31.5	48.54	5.12	17.43	6.13	77.22	30.15	.40	-
1194	147	8.86	31.25	7.16	47.27	32.2	45.62	12.75	7.35	-1.33	64.39	17.12	.36	.44
Aver-age	229	19.20	31.32	6.55	57.07	25.3	81.46	6.62	18.67	-7.88	98.87	41.80	.40	.57

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			
1111	-	910	-	2958	-	-	$ 1.36	$45.21	-	$46.57	$119.06	$72.49	-
1131	406	1436	1782	161	1865	$ 3.89	7.19	10.03	$2.11	23.22	69.80	46.58	10
1282	261	597	2389	508	635	2.61	7.28	9.56	1.67	21.12	61.01	39.89	-
1401	426	412	1031	52	1083	4.28	4.54	3.83	1.77	14.42	53.04	38.62	-
1051	150	842	2106	537	2893	1.45	8.71	16.09	2.35	28.60	58.37	29.77	11
1191	465	1892	2432	529	1336	3.98	16.28	11.64	.86	32.76	56.76	24.00	9
1082	102	545	5273	393	1912	.94	11.10	12.45	2.22	26.71	47.64	20.93	-
1912	294	1270	2422	138	2738	2.73	12.09	9.11	1.20	25.13	41.01	15.88	31
1072	645	1488	3637	273	1564	5.95	11.41	8.41	1.61	27.38	40.85	13.47	8
1101	-	1111	2222	244	1633	-	8.75	8.11	2.76	19.62	31.82	12.20	19
1032	603	676	4205	443	2421	6.42	12.39	13.19	.74	32.74	44.50	11.76	6
1021	203	1349	2303	232	1392	1.72	10.42	7.30	2.17	21.61	33.31	11.70	10
1112	860	709	1453	191	1730	8.02	6.20	7.24	2.85	24.31	32.49	8.18	7
1195	380	7502	-	439	1646	4.06	18.84	11.53	2.76	37.19	45.33	8.14	-
1194	137	464	3712	82	545	1.88	8.63	2.66	3.06	16.23	24.22	7.99	-
1122	156	1828	1936	312	1579	1.44	10.32	8.85	3.15	23.76	30.71	6.95	11
1235	657	2295	-	171	2288	6.21	10.93	8.95	1.35	27.44	33.40	5.96	29
1023	408	1745	2830	384	2650	4.43	10.64	13.11	2.29	30.47	36.24	5.77	9
1234	323	1148	2169	86	2167	3.07	9.51	7.02	2.34	21.94	27.40	5.46	6
1197	460	1252	1530	169	1003	4.36	9.35	5.69	3.22	22.62	25.86	3.24	3
1202	276	538	1004	231	-	2.51	4.62	3.72	2.96	13.81	16.60	2.79	25
1801	168	970	2239	995	-	1.66	8.96	15.63	3.42	29.67	29.99	.32	15
1052	322	686	915	105	1644	2.96	4.05	6.25	2.52	15.78	15.53	-.25	20
1402	453	421	1158	260	1006	4.27	4.63	8.16	2.66	19.72	18.14	-1.58	-
1073	396	1214	3592	413	1638	3.68	13.13	10.74	3.00	30.55	28.80	-1.75	29
Aver-age	391	1528	2740	430	1407	3.88	11.80	10.74	2.22	28.64	30.72	2.08	12

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Feed Costs and Returns for Young Cattle - 1930 - continued

Farm No.	Feed 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			
1911	321	1358	5062	255	932	$3.85	$17.59	$6.43	$3.14	$31.01	$28.39	$-2.62	31
1025	244	1380	5399	215	1140	2.27	16.29	6.39	2.45	27.40	24.31	-3.09	31
1031	691	1460	3763	399	1355	6.31	14.47	9.66	2.32	32.76	29.59	-3.17	19
1233	477	1864	3475	229	7	4.97	11.48	4.07	3.56	24.08	20.31	-3.77	13
1292	202	2450	980	616	2480	1.99	12.15	16.36	2.77	33.27	29.30	-3.97	7
1802	522	1250	6375	181	4015	4.71	18.44	13.03	2.08	38.26	32.48	-5.78	19
1121	589	1697	5715	204	1782	6.79	20.83	7.81	1.55	36.98	31.11	-5.87	9
1601	415	1979	1847	222	2317	3.79	15.16	9.37	2.26	30.58	23.22	-7.36	3
1291	1063	1719	-	216	857	11.05	8.15	6.05	1.07	26.32	18.44	-7.88	7
1411	594	1727	4676	405	-	8.35	17.34	6.68	3.03	35.40	27.45	-7.95	25
1135	1090	1554	-	840	2490	9.65	4.46	21.77	1.90	37.78	29.52	-8.26	4
1293	112	1805	3008	519	-	1.19	15.27	8.56	3.10	28.12	19.85	-8.27	4
1382	25	2344	2422	225	1193	.27	15.16	7.15	1.98	24.56	16.25	-8.31	8
1221	511	1307	5682	406	2653	5.66	16.68	15.29	.89	38.52	29.11	-9.41	34
1193	239	1165	5322	465	-	2.38	15.94	7.31	3.25	28.88	18.66	-10.22	14
1361	149	2041	4354	183	632	1.38	20.00	5.41	1.94	28.73	17.99	-10.74	-
1011	-	1429	5975	922	-	-	16.63	14.48	3.39	34.50	23.34	-11.16	13
1201	514	1622	2703	692	-	4.84	13.06	13.91	1.33	33.14	19.57	-13.57	9
1231	342	1812	2630	195	1789	3.80	13.32	8.70	2.25	28.07	13.81	-14.26	-
1412	523	1506	1667	394	1273	5.45	9.18	9.52	2.95	27.10	12.50	-14.60	10
1136	887	2286	-	1157	2915	8.89	8.50	27.31	1.90	46.60	31.12	-15.48	71
1232	557	1688	1941	531	1626	5.43	9.75	13.25	1.55	29.98	13.09	-16.89	4
1811	411	1786	-	250	1720	4.22	9.64	8.33	.87	23.06	4.51	-18.55	7
1196	435	1918	3562	1261	-	4.42	15.69	18.28	2.39	40.78	21.59	-19.19	7
1024	273	1576	5272	257	2202	2.54	15.30	9.74	1.80	29.38	3.80	-25.58	16
1381	114	1892	5541	377	987	1.16	19.93	8.39	2.50	31.98	5.51	-26.47	-
Average	391	1528	2740	430	1407	3.88	11.80	10.74	2.22	28.64	30.72	2.08	12

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 Litters	Aver. No. of pigs per Litter	Lbs. of Pork Prod.
	Corn	Small Grain	Com. Feeds	Total Grain & Com. Feeds	Tank.	Skim-milk	Grain & Com. Feeds	Tank. & Skim-milk	Pasture	Total					
1201	184	138	10	332	7	113	$3.38	$.53	$ .25	$4.16	$4.70	$9.38	5	7.6	10474
1101	83	324	-	407	-	356	3.72	.89	-	4.61	4.39	9.35	4	7.0	7105
1073	132	255	3	390	3	380	3.77	.92	.14	4.83	4.02	9.42	8	6.9	15095
1111	184	175	6	365	4	315	3.63	.58	.26	4.47	3.93	9.19	13	6.7	16795
1194	317	127	-	444	-	15	4.41	.04	.11	4.56	3.84	9.52	8	7.8	10675
1282	103	133	-	236	1	668	2.42	1.71	-	4.13	3.67	8.38	7	4.9	7343
1231	187	135	2	324	-	363	3.19	.91	.26	4.36	3.62	8.16	6	6.7	9387
1122	150	196	-	346	-	666	3.26	1.67	.09	5.02	3.60	9.07	5	7.0	8920
1197	171	215	-	386	-	648	3.75	1.62	.10	5.47	3.49	10.65	-	-	6379
1191	176	154	-	330	-	693	3.30	1.73	.13	5.16	3.41	9.43	6	6.8	10360
1024	307	137	-	444	1	403	4.43	1.03	.18	5.64	3.00	9.21	13	6.1	15737
1011	324	145	4	473	-	-	4.76	-	.23	4.99	2.97	8.58	15	6.1	18015
1235	154	251	7	412	1	446	3.88	1.14	.07	5.09	2.75	9.43	5	6.0	7447
1232	312	156	9	477	-	252	4.91	.63	.22	5.76	2.74	9.30	18	4.5	16739
1912	477	97	-	574	-	148	5.92	.37	.23	6.52	2.57	10.09	12	5.2	14126
1131	210	165	5	380	-	582	3.95	1.45	.14	5.54	2.54	8.69	8	7.4	12671
1196	330	108	-	438	6	609	4.27	.95	.28	5.50	2.52	8.39	16	6.2	23352
1051	363	68	-	431	-	542	4.49	1.35	.08	5.92	2.48	8.85	5	5.8	10600
1031	215	206	9	430	2	460	4.22	1.22	.27	5.71	2.35	9.25	10	5.6	11620
1292	273	154	-	427	-	173	3.96	.43	.28	4.67	2.28	7.81	17	5.8	24307
1025	212	270	1	483	-	603	4.64	1.51	.16	6.31	2.26	9.02	13	4.8	15038
1221	282	172	-	454	-	352	4.33	.88	.15	5.36	2.18	8.55	8	7.8	13760
1291	184	214	-	398	-	748	3.93	1.87	.16	5.96	2.12	9.24	8	6.0	10231
1293	300	174	-	474	-	1137	4.58	1.36	-	5.94	2.12	8.89	7	6.0	9763
1234	276	181	-	457	1	552	4.31	1.43	.24	5.98	2.07	8.66	5	8.4	7149

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Aver-age	304	211	3	518	1	457	5.13	1.09	.17	6.39	1.62	8.97	8	6.1	11895

Factors of Cost in Pork Production - 1930 - continued

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 Litters	Aver. No. of Pigs per Litter	Lbs. of Pork Prod.
	Corn	Small Grain	Com. Feeds	Total Grain & Com. Feeds	Tank.	Skim-milk	Grain & Com. Feeds	Tank. & Skim-milk	Pasture	Total					
1801	278	177	-	455	1	556	$4.45	$.69	$ .17	$5.31	$2.04	$8.63	6	7.0	15792
1193	336	211	16	563	-	296	5.62	.36	.20	6.18	1.95	9.05	15	6.5	53702
1811	300	159	-	459	2	212	4.50	.59	.17	5.26	1.82	9.58	2	2.0	5875
1021	248	232	-	480	-	432	4.74	1.08	.17	5.99	1.60	8.33	12	4.8	15695
1911	182	171	9	362	3	1090	3.68	2.84	.18	6.70	1.55	8.70	9	6.3	16607
1233	313	207	3	523	2	354	5.13	.96	.20	6.29	1.51	8.46	9	6.3	14823
1112	389	175	20	584	2	293	6.19	.79	-	6.98	1.39	8.92	4	11.0	25470
1402	82	594	8	684	1	275	6.52	.73	.24	7.49	1.08	9.25	13	6.5	16031
1072	474	111	6	591	-	454	5.96	1.14	.15	7.25	1.06	8.84	5	8.4	12616
1032	276	106	9	391	-	899	4.06	2.25	.16	6.47	.98	8.42	5	3.6	8030
1136	240	230	-	470	-	818	4.57	2.04	-	6.61	.95	8.97	4	8.8	6875
1382	381	163	-	544	-	593	5.29	1.48	.13	6.90	.90	8.85	8	5.5	7379
1052	638	120	1	759	-	143	7.84	.36	.13	8.33	.79	9.44	12	5.0	12164
1082	244	190	7	441	-	860	4.30	2.15	.34	6.79	.73	8.30	6	5.8	8859
1121	403	234	3	640	1	336	6.59	.89	-	7.48	.38	8.94	2	6.0	7522
1411	383	307	4	694	-	-	6.44	-	-	6.44	.37	10.70	8	7.1	10886
1412	516	82	-	598	-	678	5.90	1.69	.37	7.96	.08	9.56	12	4.7	9080
1135	75	839	28	942	-	378	7.69	.95	.33	8.97	- .03	9.27	1	9.0	2527
1023	538	217	3	758	-	169	7.65	.42	.44	8.51	- .37	9.26	10	6.4	9131
1195	449	264	-	713	2	192	7.26	.53	.41	8.20	- .55	8.47	7	8.0	12660
1381	665	135	-	800	-	-	8.37	-	-	8.37	- .56	9.44	1	4.0	1331
1401	524	251	-	775	-	618	7.66	1.55	.21	9.42	-1.57	9.90	2	7.5	4854
1361	339	192	-	531	-	808	5.38	2.02	.20	7.60	-1.59	8.00	4	1.3	1918
1601	233	606	-	839	-	129	7.86	.32	.35	8.53	-3.42	5.44	1	8.0	1202
1802	796	235	-	1031	-	1020	11.36	2.55	-	13.91	-5.47	9.13	0	-	612
Aver-age	304	211	3	518	1	457	5.13	1.09	.17	6.39	1.62	8.97	8	6.1	11895

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 and Used in House	Poultry Sold & Used in House; Plus Apprec. or Less Deprec.	Total			
1197	195	89	$2.14	$.23	$2.37	$3.74	$6.00	$9.74	$7.37	216	$.21
1135	136	23	1.63	.06	1.69	2.94	3.25	6.19	4.50	166	.21
1401	96	55	1.24	.14	1.38	1.99	3.70	5.69	4.31	116	.20
1191	111	171	1.57	.43	2.00	3.51	2.78	6.29	4.29	193	.23
1112	105	52	2.66	.13	2.79	2.55	4.52	7.07	4.28	135	.23
1811	92	166	1.39	.42	1.81	2.75	2.45	5.20	3.39	150	.22
1802	110	146	1.22	.37	1.59	3.60	1.24	4.84	3.25	188	.23
1911	93	30	1.29	.08	1.37	2.40	1.58	3.98	2.61	138	.21
1601	197	278	2.13	.69	2.82	1.36	4.02	5.38	2.56	70	.25
1032	132	31	1.90	.08	1.98	3.76	.69	4.45	2.47	196	.22
1232	111	37	1.47	.09	1.56	1.82	2.21	4.03	2.47	101	.21
1051	60	67	.74	.17	.91	1.97	1.33	3.30	2.39	97	.28
1082	98	98	1.45	.24	1.69	2.13	1.92	4.05	2.36	119	.22
1131	145	114	2.83	.29	3.12	3.02	2.33	5.35	2.23	166	.22
1361	70	72	.75	.18	.93	2.94	-.09	2.85	1.92	173	.20
1073	80	63	.99	.16	1.15	2.53	.41	2.94	1.79	140	.23
1136	139	36	1.42	.09	1.51	1.98	1.32	3.30	1.79	113	.21
1293	59	-	.63	-	.63	1.43	.98	2,41	1.78	90	.19
1231	127	62	1.33	.15	1.48	2.30	.92	3.22	1.74	128	.22
1072	103	232	1.27	.58	1.85	1.60	1.82	3.42	1.57	94	.21
1381	85	-	1.12	-	1.12	2.59	-.09	2.50	1.38	145	.22
1235	179	39	1.86	.10	1.96	1.75	1.58	3.33	1.37	111	.20
1121	95	148	1.23	.37	1.60	2.32	.43	2.75	1.15	130	.23
1233	63	29	.88	.07	.95	2.12	-.05	2.07	1.12	118	.22
1201	52	-	.58	-	.58	1.70	-.06	1.64	1.06	102	.20
1011	44	-	.50	-	.50	1.22	.32	1.54	1.04	71	.20

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Aver-age	109	61	1.33	.15	1.48	2.06	1.05	3.11	1.63	116	.22

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

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 and Used in House	Poultry Sold and Used in House; Plus Apprec. or Less Deprec.	Total			
1102	46	48	$ .56	$.12	$ .68	$1.35	$.36	$1.71	$1.03	77	$.21
1193	119	-	1.23	-	1.23	1.35	.88	2.23	1.00	86	.19
1402	129	50	1.60	.13	1.73	2.42	.30	2.72	.99	138	.21
1912	182	231	2.46	.58	3.04	3.56	.42	3.98	.94	207	.21
1196	75	-	1.05	-	1.05	2.10	-.16	1.94	.89	128	.19
1411	72	-	.65	-	.65	1.55	-.03	1.52	.87	82	.28
1282	117	-	1.17	-	1.17	1.17	.80	1.97	.80	75	.20
1031	115	20	1.67	.05	1.72	2.69	-.21	2.48	.76	145	.22
1382	63	8	.60	.02	.62	1.23	.12	1.35	.73	74	.20
1291	70	20	.91	.05	.96	2.22	-.56	1.66	.70	129	.21
1122	173	95	2.30	.24	2.54	2.12	1.09	3.21	.67	112	.23
1023	135	48	1.37	.12	1.49	1.55	.50	2.05	.56	84	.23
1292	136	90	1.33	.23	1.56	2.33	-.28	2.05	.49	145	.19
1412	47	50	.45	.13	.58	.87	.20	1.07	.49	52	.20
1052	127	52	1.47	.13	1.60	1.30	.72	2.02	.42	75	.21
1194	87	15	.95	.04	.99	1.36	.02	1.38	.39	80	.21
1025	153	54	2.05	.13	2.18	1.50	.84	2.34	.16	88	.19
1024	70	28	.93	.07	1.00	1.95	-.81	1.14	.14	106	.22
1111	48	-	.54	-	.54	.96	-.28	.68	.14	57	.20
1221	152	41	1.73	.11	1.84	1.90	.03	1.93	.09	109	.22
1202	200	-	1.99	-	1.99	.51	1.47	1.98	-.01	28	.21
1021	67	53	.65	.14	.79	.81	-.22	.59	-.20	44	.23
Average	109	61	1.33	.15	1.48	2.06	1.05	3.11	1.63	116	.22

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

Farm No.	% Colts Are of Horses	Feed per Horse--Lbs. Grain	Tame Hay & Alfalfa	Wild Hay & Fodder	Feed Costs per Horse Grain	Rough	Pasture	Total	Crop Acres per Horse	Tractor & Horse, Exp. per Crop Acre	Tractor & Horse, Exp. per Day of Prod. Work	Total Farm Power Exp. per day of Prod. Work	Farms with Truck ½ T. or larger	Size of Farms
1112	-	616	-	3215	$6.49	$6.43	$5.48	$18.40	91	$2.16	$.76	$1.12	Yes	Large
1221	-	688	1500	500	6.56	7.50	5.67	19.73	20	3.01	.43	1.05	Yes	Small
1073	-	339	2647	-	3.14	12.59	6.76	22.49	36	3.56	.93	1.40	Yes	Medium
1202	7.0	848	2330	-	7.52	11.86	3.28	22.66	29	2.50	.35	.75	Yes	Medium
1052	-	327	4318	1136	3.00	18.41	4.74	26.15	58	3.17	.76	1.04	No	Medium
1801	21.0	1410	1739	1956	13.99	11.59	5.56	31.14	14	6.68	1.39	1.85	Yes	Large
1382	-	1483	3334	-	13.19	15.00	3.33	31.52	20	1.31	.33	.60	No	Medium
1197	20.0	1480	2426	-	14.52	12.68	6.97	34.17	28	2.96	.75	1.03	No	Large
1021	-	2946	833	1111	26.53	7.36	1.06	34.95	32	3.64	.97	1.15	No	Large
1032	8.6	2042	776	4482	20.35	11.98	3.43	35.76	20	3.30	.60	.88	No	Medium
1082	-	2435	2400	1600	22.78	11.60	1.00	35.38	21	3.06	.69	1.03	No	Medium
1201	-	1640	3000	2000	15.10	19.50	2.76	37.36	19	4.35	.73	1.05	No	Small
1232	23.3	2024	3562	548	19.27	14.66	3.63	37.56	31	2.17	.49	.57	No	Large
1233	-	2358	1000	5250	22.35	13.00	2.37	37.72	39	2.60	.65	.90	Yes	Large
1051	18.4	1832	3553	263	17.76	15.60	4.41	37.77	32	1.02	.31	.59	No	Large
1234	5.4	1355	5060	119	13.58	20.09	4.35	38.02	47	.83	.34	.44	Yes	Large
1291	13.5	1687	3853	-	16.13	17.33	5.42	38.88	43	2.27	.85	1.10	Yes	Large
1292	15.2	2181	3636	-	20.28	16.36	3.61	40.25	37	3.30	.81	.93	No	Large
1412	10.6	902	6061	-	8.56	27.27	5.31	41.14	43	1.80	.49	.53	Yes	Large
1072	19.7	2406	-	6317	22.32	16.19	3.10	41.61	28	2.22	.62	.85	No	Medium
1024	16.7	2487	2667	3167	23.77	16.25	2.60	42.62	30	2.37	.52	.80	No	Medium
1802	-	2567	2917	695	25.18	15.21	2.31	42.70	32	2.71	.66	1.01	No	Medium
1912	-	3219	800	1600	31.49	10.75	2.42	44.66	23	4.81	.70	1.10	Yes	Medium
1601	5.3	2721	1264	4001	25.92	16.43	2.62	44.97	26	2.09	.60	.63	No	Large
1025	11.1	1858	4666	2111	16.65	24.33	4.04	45.02	37	2.64	.70	.97	No	Medium
1193	12.0	3063	3847	220	28.15	14.89	2.48	45.52	40	1.11	.22	.38	Yes	Large
1411	-	2614	4334	-	24.62	21.66	-	46.28	37	2.86	.63	1.18	Yes	Large
Average	8.1	2106	3123	1527	20.05	17.55	3.39	40.99	32	3.17	.72	1.00		

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

Farm No.	%Colts Are of Horses	Feed per Horse--Lbs. Grain	Tame Hay & Alfalfa	Wild Hay & Fodder	Feed Costs per Horse Grain	Rough	Pasture	Total	Crop Acres per Horse	Tractor & Horse Exp. per Crop Acre	per Day of Prod. Work	Total Farm Power Exp. per Day of Prod. Work	Farms with Truck ½ T. or larger	Size of Farms
1195	-	2574	3501	4334	$24.84	$20.28	$3.54	$48.66	50	$2.56	$1.36	$1.44	No	Large
1111	-	3200	5000	-	29.28	22.50	-	51.78	17	5.24	.67	.96	No	Small
1121	20.5	2640	5455	-	24.87	23.46	4.84	53.17	36	4.08	1.20	1.68	No	Medium
1811	21.0	2590	5790	-	25.50	31.84	-	57.34	20	3.41	.49	.61	No.	Small
1911	19.6	2546	5294	1569	25.12	33.24	1.49	59.85	17	4.53	.88	1.30	Yes	Large
1031	15.7	4468	740	4258	43.88	12.79	5.07	61.74	21	3.82	.96	1.21	No	Medium
1361	-	2780	7000	-	26.86	35.00	-	61.86	26	5.42	1.18	1.58	No	Small
1401	-	3384	4000	3000	32.26	28.50	5.12	65.88	13	7.37	1.13	1.31	No	Small
Aver-age	8.1	2106	3123	1527	20.05	17.55	3.39	40.99	32	3.17	.72	1.00		
Farms Without Tractors														
1282	14.6	1380	1666	-	13.39	9.17	4.28	26.84	13	2.45	.37	.94	No	Small
1101	-	1616	1830	122	15.04	8.72	5.89	29.65	19	1.69	.33	.60	No	Small
1023	9.2	1257	3656	2084	11.79	16.17	5.37	33.33	13	2.82	.71	.85	No	Medium
1122	10.9	1673	2500	1739	15.76	15.65	3.76	35.17	18	2.72	.52	.77	No	Small
1136	16.7	2002	2334	2000	20.35	13.00	4.35	37.70	19	1.57	.36	.78	No	Medium
1135	-	2467	1500	3001	21.24	11.59	5.72	38.55	24	1.76	.40	.52	No	Large
1191	-	2909	760	3640	26.69	10.86	6.38	43.93	15	2.86	.55	.42	Yes	Small
1231	3.8	1323	6346	558	12.42	29.44	2.77	44.63	14	3.32	.52	.74	No	Small
1194	-	2198	5250	-	20.16	23.63	2.07	45.86	17	3.07	.58	1.05	No	Small
1381	-	2876	4250	250	27.76	18.87	1.42	48.05	18	2.82	.50	.82	No	Small
1196	1.9	2742	2963	2222	25.79	19.26	4.86	49.91	18	3.21	.45	.82	No	Medium
1131	-	2642	3125	2500	24.48	23.52	3.83	51.83	16	3.98	.66	.93	No	Small
1011	3.1	2590	5158	1329	24.98	25.48	2.12	52.58	24	2.58	.58	.89	No	Medium
1402	8.8	2252	6318	-	21.96	27.72	3.94	53.62	27	2.49	.53	.89	Yes	Medium
1293	-	2984	3999	1333	29.19	22.66	2.19	54.04	20	3.68	.70	.95	No	Large
1235	2.6	2872	6551	1667	26.42	34.54	2.88	63.84	14	4.41	.83	1.28	No	Small
Aver-age	4.5	2236	3638	1403	21.09	19.39	3.85	44.35	18	2.84	.54	.83		

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

Items	1928 21 Farms	1929 44 Farms	1930 51 Farms
Total Cash receipts	$4593	$5055	$4146
Increase in inventory	189	909	-
Farm produce used in house	344	332	308
Total receipts	5126	6296	4454
Total cash expenses	2283	2939	2391
Decrease in inventory	-	-	273
Board for hired labor	115	127	106
Total expenses	2398	3066	2770
Returns to capital & family labor	2728	3230	1684
Interest on farm inventory	1184	1381	1285
Family labor earnings	1544	1849	399
Unpaid family labor	392	378	349
Operator's Labor Earnings	1152	1471	50
Average farm inventory	$23721	$27614	$25706
Acres in farm	181.8	210.7	209.0
Percent land tillable	79	78	78
Crop acres in farm	125.6	144.8	144.3
Number of cows	13.82	15.38	15.75
Head of young cattle	11.55	16.49	17.70
Litters of spring pigs	4.8	4.9	5.3
" " fall pigs	2.7	3.0	2.2
Pounds of pork produced	10,822	10,327	11,602
Head of sheep	10.0	12.6	11.8
Number of hens	138	103	111
Total No. of Prod. livestock units	27.93	31.67	32.93
Lbs. of B. F. per cow	254	239	229
Index of high return crops	25.2	28.8	28.9
Prod. livestock units per 100A.	16.5	16.2	17.1
Number of days of prod. work	539	594	617
No. days prod. work per worker	271	297	318
Pow.-Mach.-Bldg.Exp.per day P.Wk	$1.97	$1.62	$1.45

Items	1928 21 Farms	1929 44 Farms	1930 51 Farms
Increase in crops and feeds	$384	$791	$135
Gross returns from cows	$2140	$2088	$1542
" " " other cattle	522	780	468
" " " hogs	942	1034	944
" " " sheep	87	99	38
" " " poultry	446	393	330
Returns above feed per cow	$89	$74	$42
" " " " head other cattle	-5	21	2
" " " " 100# pork	.51	1.82	1.62
" " " " hen	2.15	1.92	1.63
Feed cost per cow	$69	$64	$65
" " " head other cattle	35	31	29
" " " 100# pork	7.63	8.07	6.39
" " " hen	1.56	1.97	1.48
" " " horse	55	53	42
Price rec'd per lb. B. F. (manf'g. cream)	$.53	$.50	$.40
" " " 100# pork	8.34	9.73	8.97
" " " dozen eggs	.27	.28	.22
Number of pigs per litter	6.4	6.2	6.1
" " eggs " hen	97	103	116
Yield of corn per acre, bu.	37.0	44.6	44.1
" " oats " " "	39.5	43.0	47.3
" " barley per acre, bu.	34.2	29.1	30.4
" " wheat " " "	18.0	22.6	16.9
" " alfalfa " " tons	2.5	2.9	2.4
No. of work horses	5.6	5.7	5.3
" " colts	1.2	1.4	1.0
" " horse units (2 colts = 1 horse)	6.2	6.4	5.8