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UNIVERSITY OF MINNESOTA
Department of Agriculture
and
UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
and the
County Extension Services of
Blue Earth, Dakota, Dodge, Faribault, Freeborn, Goodhue, Le Sueur, Meeker,
Mower, Nicollet, Olmsted, Rice, Scott, Steele, Wabasha, and Waseca Counties
Cooperating

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Annual Report
of the
Southeastern Minnesota
Farm Management Service
1939

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Cooperator: _____

Mimeographed Report No. 114
Division of Agricultural Economics
University Farm
St. Paul, Minnesota
March 1940

Twelfth Annual Report of the Farm Management Service of
Blue Earth, Dakota, Dodge, Faribault, Freeborn, Goodhue, Le Sueur, Meeker,
Mower, Nicollet, Olmsted, Rice, Scott, Steele, Wabasha and Waseca Counties
for the Year 1939

Prepared by T. R. Nodland 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 the county extension services of Dodge, Freeborn, Goodhue, Rice, Steele and Waseca Counties organized late in 1927 the Farm Management Service Project, to operate in the above named counties, beginning January 1, 1928. Additional counties have since been added. This farm management service is offered to farmers who desire to keep farm records, and to have these records summarized and analyzed in connection with those of other farmers. Each farmer who cooperates in this service pays an annual fee which covers a part of the cost. The following tabulation shows by counties the number of records completed in 1939:

Blue Earth	2	Le Sueur	4	Scott	3
Dakota	3	Meeker	34	Steele	14
Dodge	11	Mower	10	Wabasha	1
Faribault	5	Nicollet	8	Waseca	8
Freeborn	23	Olmsted	9		
Goodhue	13	Rice	8	Total	156

Note: Completion of this project was made possible by workers supplied on Federal Students' Work Project, 1939-40, Projects 70-100 and 833-60, and Official Project No. 65-1-71-140, Sub-project 468, Minnesota Work Projects Administration. Sponsor: University of Minnesota.

General administration of this project, analysis of the records and preparation of the reports is handled by the Division of Agricultural Economics under the direction of G. A. Pond and T. R. Nodland. Field organization is handled by the Agricultural Extension Division with S. B. Cleland and J. B. McNulty in charge of this work. County agricultural extension agents who cooperate in this project include L. E. McMillan, H. Lawrenz, V. Sander, C. G. Gaylord, W. M. Lawson, G. J. Kunau, R. D. Evans, R. Wayne, F. L. Liebenstein, E. Nelson, R. Aune, D. Marti, W. W. Miller, G. A. Strobel, S. B. Simpson and C. F. Murphy.

The Southeast Minnesota Farm Management Association was organized in 1939 by the farmers cooperating in the S. E. Farm Management Service. This association now represents its membership as an additional cooperating agency to determine policies and especially to maintain the field organization and membership. Officers for 1940 are:

President, Stanley Newhall, Owatonna, Steele County;
Vice President, H. B. Hillier, Brownsdale, Mower County;
Secretary-Treasurer, Otto Kajer, New Prague, Le Sueur County.

The board of directors includes these officers and also the following: Charles Flugum, Freeborn County; Wm. H. Fream, Dakota County; John Holmes, Rice County; R. C. Johnson, Nicollet County; Joe Rostad, Goodhue County; Fred Scholljegerdes, Waseca County; John Vaughn, Scott County; and Leslie Wright, Dodge County.

Thirty-four records from a farm accounts project in Meeker County supervised by J. R. Burkholder, assistant county agent, are included in this report. Since the farms supplying these records are similar in type and organization to those in the S. E. Farm Management Service, they were added so as to furnish a larger sample and make comparisons and groupings more significant. The tables on page 4 and succeeding pages show 154 farms, whereas on page one the total number of records is reported as 156. Two farms have been omitted from all of the averages in the tables because they differed so widely in type from the others.

TYPE OF FARMING

The service is restricted to livestock farms on which dairy cattle are the principal source of income. Although some milk and cream are retailed in cities, and some milk is sold for shipment to the Twin Cities, 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, although a seasonal surplus may be sold. Wheat, sweet corn, canning peas, sugar beets, flax and potatoes are grown to a limited extent as cash crops.

This report shows that the receipts from the sales of dairy products constituted about one-fourth, and the receipts from hog sales about one-fifth of the average cash income of 154 cooperators included in this report. These farms are fairly typical of the system of dairy farming prevailing in southeastern Minnesota.

WEATHER, SOIL AND TOPOGRAPHY

Weather conditions were fairly uniform in this area in 1939, although the drouth in the spring was somewhat more severe in the eastern counties than in

those farther west. April was a cold month and May quite dry, so that most crops started slowly. Rainfall in June was fairly heavy but too late for the first cutting of hay, so that hay yields were somewhat below normal. Warm weather from May to September coupled with fairly ample precipitation resulted in an excellent corn crop.

There is some variation in soil conditions and topography among these counties. The soil varies from sandy loam to a rich black clay loam; the latter type predominates in this area. Some of the farms are level, all tillable, and well drained, but most of them are gently rolling with some land too rough or too wet to cultivate. Goodhue County has more rolling land than the other counties. Much of the level land is tilled to make possible its cultivation in wet years. However, on a number of farms, there is considerable land which is poorly drained. In much of Goodhue, Dodge, Mower and Olmsted Counties and in the eastern part of Dakota, Rice and Steele Counties, the soil is 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 apply lime in order to grow these two crops.

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, Glen Myers, who visited each farm in the sixteen 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 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 prices at which feed and farm produce were charged.

At the end of the year, the books were taken to the central office at University Farm, where they were checked for completeness and accuracy. Then the field agent or a representative of the University visited each cooperator and asked for corrections and secured any data which had been omitted. This method of checking insured a high degree of accuracy and completeness in each individual record. For the purpose of comparison, the earnings as shown in this report are computed as if each farm were owned by its operator; however, each tenant is supplied a statement of his earnings on the basis of the rental system under which he is operating.

Summary of Farm Inventories, (Beginning of Year), 1939

Items	Your farm	Average of 154 farms	31 most profitable farms	31 least profitable farms
Size of farm (acres)	_____	225	288	203
Size of business (days of prod.work) (1)	_____	759	1,000	671
Total farm inventory (without house) \$	_____	\$20,034	\$26,465	\$17,859
Land	_____	8,946	12,172	7,307
Farm improvements	_____	4,092	4,729	4,159
Machinery and equipment (total)	_____	2,412	3,326	2,295
General machinery and equipment	_____	1,543	2,079	1,581
Tractor	_____	555	841	489
Truck	_____	88	93	52
Auto (farm share)	_____	176	240	142
Gas engine (farm share)	_____	13	13	12
Electrical equipment (farm share)	_____	37	60	19
Miscellaneous supplies	_____	45	85	30
Feeds and seeds	_____	1,510	2,180	1,197
Horses (total)	_____	491	651	422
Horses	_____	424	574	367
Colts	_____	67	77	55
Productive livestock (total)	_____	2,538	3,322	2,449
Cows	_____	1,063	1,218	1,230
Other cattle	_____	765	1,055	734
Hogs	_____	402	501	326
Sheep	_____	134	186	44
Poultry	_____	174	362	115

(1) Explanation of term: "Days of Productive Work."

The total "Days of Productive Work" for any one farm is 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
Dairy cows	Cow	16.6	Corn for grain (husked)	Acre	2.1
Other dairy 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. produced)	.55	Corn for fodder	"	1.8
Turkeys	(produced)	.8	Sweet corn	"	3.0
Alfalfa	Acre	1.5	Potatoes	"	6.4
Tame and wild hay	"	.6	Sugar beets	"	4.0
Small grain & flax	"	1.0			
Small grain 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, 100 hens, or 1,400 lbs. turkeys produced.

Summary of Farm Inventories (End of Year), 1939

Items	Your farm	Average of 154 farms	31 most profitable farms	31 least profitable farms
Total farm inventory (without house) \$		\$20,925	\$28,335	\$18,146
Land		8,952	12,171	7,332
Farm improvements		4,193	4,966	4,347
Machinery and equipment (total)		2,517	3,496	2,340
General machinery and equipment		1,625	2,245	1,594
Tractor		553	826	458
Truck		107	135	93
Auto (farm share)		184	220	163
Gas engine (farm share)		11	11	12
Electrical equipment (farm share)		37	59	20
Miscellaneous supplies		48	98	34
Feeds and seeds		2,071	3,155	1,307
Horses (total)		457	572	394
Horses		384	481	340
Colts		73	91	54
Productive livestock (total)		2,687	3,877	2,392
Cows		1,104	1,296	1,237
Other cattle		852	1,423	652
Hogs		387	503	330
Sheep		112	166	42
Poultry		232	489	131

Summary of Amount of Livestock

Items	Your farm	Average of 154 farms	31 most profitable farms	31 least profitable farms
AMOUNT OF LIVESTOCK				
No. of horses		4.1	4.5	4.0
No. of colts		1.1	1.5	.8
No. of cows		17.2	20.4	18.0
No. of cows per worker		7.8	7.6	8.9
Head of other cattle		20.9	28.9	18.5
Litters of pigs raised		11.4	12.6	10.6
Pounds of hogs produced		16,014	19,250	13,354
Head of sheep (2 lambs = 1 head)		16.2	23.3	6.7
No. of hens		177	242	146
Total no. of prod. livestock animal units		40.2	52.9	36.7
% of tot. prod. lvst. units that are dairy cows		43.9	38.7	49.7
% of tot. prod. lvst. units that are o. cattle		27.1	27.7	25.7
% of tot. prod. lvst. units that are hogs		17.7	16.8	18.0
% of tot. prod. lvst. units that are sheep		4.7	5.2	2.2
% of tot. prod. lvst. units that are hens		4.6	5.0	4.4
% of tot. prod. lvst. units that are turkeys		2.0	6.6	0
Number of farms with tractors		134	30	25

Summary of Farm Earnings (Cash Statement), 1939

Items	Your farm	Average of 154 farms	31 most profitable farms	31 least profitable farms
CASH EXPENSES				
Tractor (new and expense)	\$ _____	\$249	\$356	\$161
Truck and trailer (new and expense)	_____	85	123	83
Auto (new and expense) (farm share)	_____	146	150	140
Gas engine (new & expense) (farm share)	_____	5	4	10
Electricity (new & exp.) (farm share)	_____	45	54	42
Machinery and equipment (new)	_____	261	443	186
Machinery and equipment (expense)	_____	65	91	63
Buildings, fences, tiling (new)	_____	250	373	397
Buildings, fences, tiling (expense)	_____	69	92	75
Hired labor	_____	340	529	252
Feed for livestock	_____	475	903	304
Other expense for livestock	_____	110	161	91
Horses bought	_____	28	35	35
Cows bought	_____	71	147	61
Other cattle bought	_____	228	542	56
Hogs bought	_____	62	125	54
Sheep bought	_____	98	211	15
Poultry bought	_____	95	217	45
Crop (seed, twine, spray)	_____	235	276	214
Taxes and insurance	_____	285	362	262
General farm	_____	36	47	33
(1) Total cash expense	_____	3,238	5,241	2,579
(2) Decrease in farm inventory	_____	-	-	-
(3) Board for hired labor	_____	128	179	113
(4) Total expense (sum of (1),(2) & (3))	_____	3,366	5,420	2,692
CASH RECEIPTS				
Horses	_____	45	91	34
Cows	_____	262	367	232
Dairy products	_____	1,170	1,607	1,168
Other cattle	_____	551	933	356
Hogs	_____	926	1,255	712
Sheep	_____	216	420	34
Poultry	_____	344	1,085	53
Eggs	_____	301	513	199
Small grain	_____	274	446	154
Corn	_____	142	241	108
Hay	_____	8	9	3
Root crops	_____	6	6	7
Other crops	_____	143	346	76
Miscellaneous	_____	231	391	160
Income from work off the farm	_____	136	191	70
Agricultural Conservation payments	_____	336	464	269
(5) Total cash receipts	_____	5,091	8,365	3,635
(6) Increase in farm inventory	_____	891	1,870	287
(7) Farm produce used in house	_____	260	306	228
(8) Total receipts (sum of (5) & (6))	_____	6,242	10,541	4,150
Total expenses (4)	_____	3,366	5,420	2,692
(9) Ret. to cap. & fam. labor (8) minus (4)	_____	2,876	5,121	1,458
(10) Interest on farm inventory	_____	1,024	1,370	900
(11) Family labor earnings (9) minus (10)	_____	1,852	3,751	558
(12) Unpaid family labor	_____	236	289	237
(13) Oper. labor earnings (11) minus (12)	_____	1,616	3,462	321

Summary of Farm Earnings (Enterprise Statement), 1939 (A)

Items	Your farm	Average of 154 farms	31 most profitable farms	31 least profitable farms
<u>EXPENSES AND NET DECREASES</u>				
Total power	\$ _____	\$623	\$741	\$584
Hired	_____	93	82	89
Tractor	_____	172	228	157
Truck and trailer	_____	58	76	35
Auto (farm share)	_____	94	106	97
Gas engine (farm share)	_____	7	6	10
Electric plant or current (farm share)	_____	43	52	36
Horses	_____	156	191	160
General machinery and equipment	_____	215	278	233
Buildings, fencing, tiling	_____	195	194	212
Productive livestock misc. expense	_____	75	138	55
Crop	_____	167	221	145
Real estate taxes	_____	216	282	197
Personal property tax	_____	28	37	24
Insurance	_____	41	43	41
General farm	_____	36	47	33
Hired labor & board, & unpaid fam. labor	_____	704	997	602
Interest on farm inventory	_____	1,024	1,370	900
(1) Total	_____	3,324	4,348	3,026
<u>RETURNS AND NET INCREASES</u>				
All productive livestock	_____	3,716	5,928	2,782
Cows	_____	1,445	1,980	1,360
Other cattle	_____	641	1,034	450
Hogs	_____	883	1,166	690
Sheep	_____	96	188	18
Chickens	_____	396	549	264
Turkeys	_____	255	1,011	-
Crops, feed, vegetables and fuel	_____	725	1,190	204
Agricultural Conservation payments	_____	336	464	269
Miscellaneous	_____	27	37	22
Income from work off the farm	_____	136	191	70
(2) Total	_____	4,940	7,810	3,347
Total expenses (1)	_____	3,324	4,348	3,026
(3) Oper. labor earnings (2) minus (1)	_____	1,616	3,462	321

(A) Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each item of expense in order to show total receipts and net increases, and total expenses and net decreases. The operator's labor earnings are the same as those on page 6.

ANALYSIS OF THE REASONS FOR DIFFERENCES IN OPERATOR'S EARNINGS

The financial statement on the preceding pages show that there is a wide range in earnings. The average operator's labor earnings for the 31 most profitable farms was \$3,462, and for the 31 least profitable farms \$321. The difference between the averages for these two groups was \$3,141. Some of the causes for these differences in earnings may be beyond the control of the farmer. It is significant, however, that the data in this report and the reports of recent years in this same area indicate that there are several factors which show definite relationships with operator's labor earnings and which suggest opportunities for increased earnings. These factors and their relationship with earnings are presented below.

Table 1. Relation of Dairy Production to Farm Earnings

Group	Pounds butterfat per cow Average	No. of farms	Average operator's labor earnings
Below 200	172	34	\$1,242
200-274	241	78	1,579
275 and above	314	42	1,986

High production per cow tends to lower the cost of producing a pound of butterfat. This is very important on those farms on which butterfat sales are the major source of income.

Table 2. Relation of Returns from Other Productive Livestock to Farm Earnings

Group	Returns above feed cost for productive livestock other than cows per animal unit Average	No. of farms	Average operator's labor earnings
Below \$24	\$13.64	39	\$ 963
\$25-\$49	37.70	78	1,687
\$50 and above	73.17	37	2,153

These farms have, in addition to the dairy herd, quite an investment in other classes of productive livestock, such as young dairy cattle, beef cattle, hogs, sheep or poultry. Most or all of the feed raised is fed on the farm and considerable additional feed is purchased. Feed is the major item of cost in livestock production. Hence, high returns from livestock above the value of feed fed usually accompanies greater profits from the livestock. This means another addition to the farmer's earnings.

Table 3. Relation of Amount of Productive Livestock to Farm Earnings

Group	Productive livestock units per 100 acres Average	No. of farms	Average operator's labor earnings
Below 13.0	10.6	26	\$1,510
13.0-22.9	17.7	96	1,531
23.0 and above	27.6	32	1,954

On some farms the returns from livestock are so low that they do not cover feed and other costs. Such livestock is unprofitable, especially if there is more than enough to utilize what would otherwise be waste feed. If the livestock is yielding a net return, an increased amount of livestock adds to size of business and the opportunity to increase the farm earnings. Livestock produces manure and aids in keeping up the fertility of the land, and utilizes waste products on the farm. Livestock also helps to provide productive employment throughout the year. Any method that aids in utilizing the available resources to full and efficient capacity should add to the farm income.

Table 4. Relation of Crop Yields to Farm Earnings

Per cent crop yields were of the average for all 154 farms		No. of farms	Average operator's labor earnings
Group	Average		
Below 85	72	32	\$1,075
85-114	100	87	1,662
115 and above	125	35	1,995

High production per acre, up to certain limits, tends to lower the cost per bushel of grain or per ton of hay. Any possible method of management that will increase crop yields and therefore lower cost of production more than the extra expense incurred in securing the higher yields should be given consideration.

Table 5. Relation of Choice of Crops to Farm Earnings

Per cent of tillable land in high return crops*		No. of farms	Average operator's labor earnings
Group	Average		
Below 34.0	28.4	28	\$1,398
34.0-45.9	40.3	88	1,540
46.0 and above	50.9	38	1,951

*Crops are marked on page 14 as (A), (B), (C), and (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.

As a rule, on these farms, such crops as alfalfa, clover, canning crops, sugar beets, corn, barley, winter wheat, and flax bring a higher net return per acre than other crops usually grown. Additions can be made to earnings by putting a greater percentage of the tillable land into these higher return crops.

Table 6. Relation of Size of Business (Days of Productive Work) to Farm Earnings

Days of productive work		No. of farms	Average operator's labor earnings
Group	Average		
Below 550	455	35	\$ 921
550-949	729	86	1,568
950 and above	1,158	33	2,474

Average farm earnings tend to increase with an increase in size of business. For farmers operating their farms at a loss, the larger the volume of business, the larger will be the loss, but a farmer who is making a profit could make a

larger profit if he increased his size of business, providing that in so doing he does not lower materially the efficiency in some one or more important branches of his business. Those farmers who have large businesses usually have more flexibility of their organization than does the man with a small business, and can utilize more efficiently and to better advantage available labor, power, machinery and buildings.

Table 7. Relation of Amount of Work Accomplished per Worker to Farm Earnings

Days of productive work per worker	Average	No. of farms	Average operator's labor earnings
Below 300	253	37	\$1,206
300-399	350	86	1,614
400 and above	462	31	2,108

More days of productive work accomplished per worker reduces the labor charge per unit of business. Higher labor accomplishment can be secured in several ways. In the first place, the business must be large enough so that there will be at least sufficient work available for the family labor. The farm should be so organized that the labor requirements are well distributed throughout the year. Handling pastures in such a way that as large a proportion as possible of the year's feed for livestock may be obtained from them helps to reduce labor requirements. Proper planning of the farm work and economical use of labor-saving machinery help to increase the work accomplished per worker.

Table 8. Relation of Power, Machinery and Building Expense to Farm Earnings*

Expense per day of productive work	Average	No. of farms	Average operator's labor earnings
\$1.65 and above	\$2.03	40	\$1,382
\$1.15-\$1.64	1.37	70	1,522
Below \$1.15	.91	44	1,976

*Includes building, fencing, all machinery, horse feed, and miscellaneous horse expense.

The expense factor does not show as high relationship with earnings when prices are high as when they are low. Some farms are under-equipped. On a few farms, excessive expenses constitute the main factor causing earnings to be very low.

Some of the cash expenses can be kept down by careful management. Often-times necessary repairs and improvements can be made by using the available farm labor rather than by hiring extra help. Repairs and overhauling should be done before spring work begins insofar as possible; or on rainy days or in other spare time during the summer. Reducing the number of horses to the minimum required for efficient operation of the farm helps reduce the power expense. In some cases, farmers can offset some or all of the power and machinery expense by using their equipment for outside work.

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. These farmers get medium returns while those who fall down all along the line get the lowest returns, and on the other hand those few who can manage to attain high efficiency in all parts of their organization receive returns well above the average. This is well illustrated in Table 9.

Table 9. Relation of Operator's Labor Earnings to the Number of Factors in which the Farmer is Above 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 labor earnings
Seven or eight	9	_____	XX	\$3,139
Six	15	_____	XX	2,640
Five	32	_____	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1,952
Four	39	_____	XXXXXXXXXXXXXXXXXXXX	1,363
Three	26	_____	XXXXXXXXXXXXXXXXXXXX	1,320
Two	25	_____	XXXXXXXXXXXX	1,110
One or none	8	_____	XXXXXXXX	717

The array in Table 9 indicates that it will be worth while for each cooperator to study carefully his ranking on pages 12 and 13, and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.

Measures of Farm Organization and Management Efficiency, 1939

Measures used in chart on page 13	Your farm	Average of 154 farms	31 most profit- able farms	31 least profit- able farms
Operator's Labor Earnings	\$ _____	\$1,616	\$3,462	\$321
(1) Pounds of butterfat per cow	_____	245	258	225
(2) Return over feed (pr. lvst. other than cows)*	\$ _____	\$40.13	\$56.90	\$23.39
(3) Productive livestock units per 100 acres	_____	18.5	19.1	18.6
(4) Crop yields**	_____	100	108	93
(5) % of tillable land in high return crops***	_____	40.8	44.0	38.2
(6) Size of business---days of productive work	_____	759	1,000	671
(7) Days of productive work per worker	_____	349	386	339
(8) Power and eq. exp. per day of prod. work	_____	\$1.41	\$1.25	\$1.60

Measures and items related to some of the above measures:

(2) Return over feed per head other dairy cattle	\$ _____	\$11.60	\$12.82	\$8.16
Return over feed per 100 lbs. hogs prod.	_____	1.82	2.09	1.15
Return over feed per hen	_____	.97	1.11	.62
Return over feed per head sheep	_____	3.18	1.50	.70
(6) Days of productive work on crops	_____	210	283	173
Days of productive work on prod. livestock	_____	502	647	475
Days of other productive work	_____	47	70	23
(7) Total number of workers	_____	2.2	2.6	2.0
Number of family workers	_____	1.4	1.5	1.4
Number of hired workers	_____	.8	1.1	.6
(8) Power expense per day of productive work	\$ _____	\$.85	\$.77	\$.90
Mach. & equip. exp. per day of prod. work	_____	.29	.29	.36
Bldg. & fencing exp. per day of prod. work	_____	.27	.19	.34

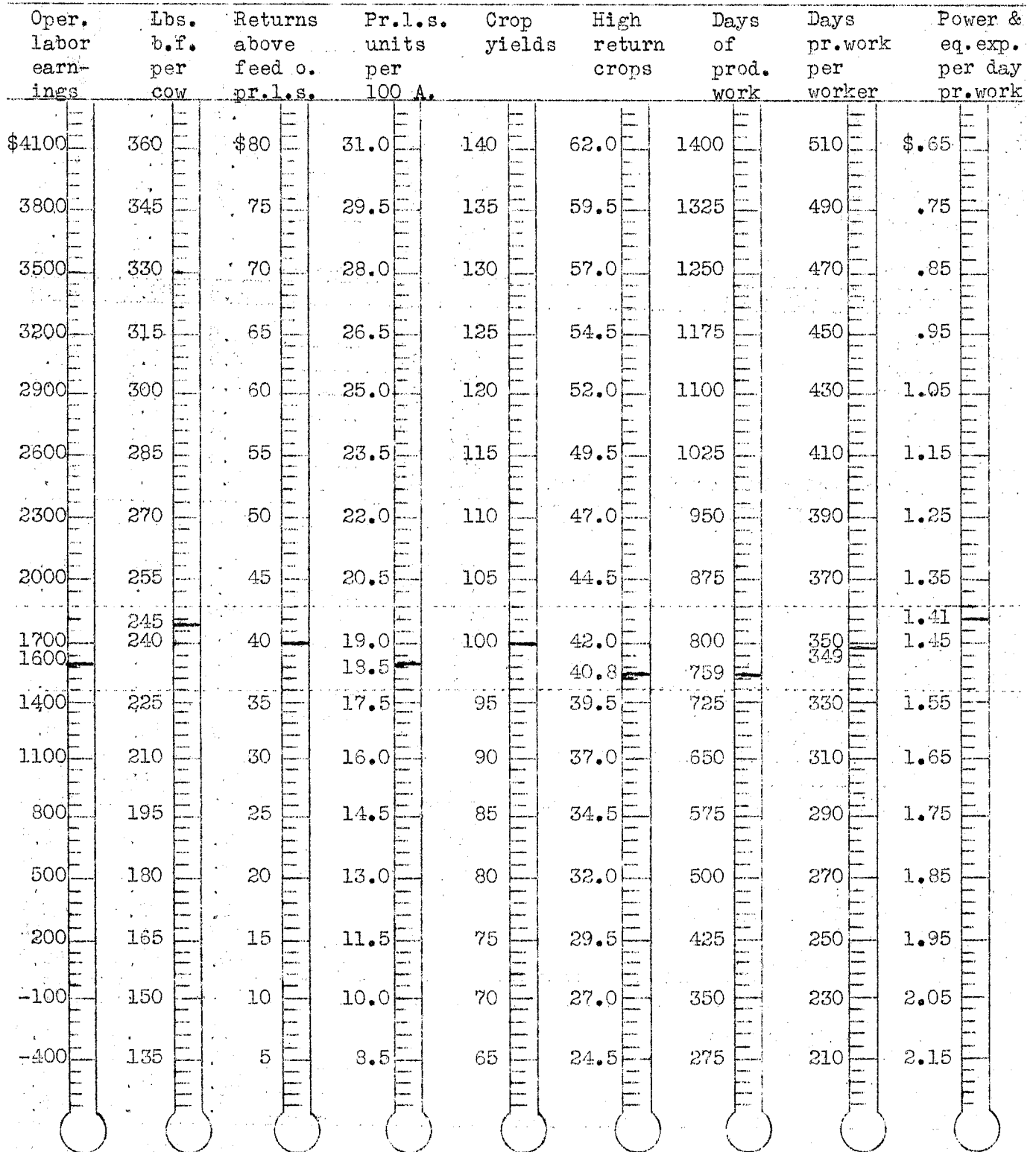
*Given as returns over feed cost per animal unit of productive livestock other than cows.

**Given as a percentage of the average.

***Crops are marked on page 14 as (A), (B), (C) and (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.

Thermometer Chart

Using your figures from page 12 locate your standing with respect to the various measures of farm organization and management efficiency. The averages for 154 farms included in this summary are located between the dotted lines across the center of this page.



Distribution of Acres in Farm, 1939

Crop (A), (B), (C) and (D) refer to ranking used in calculating % of tillable land in High Return Crops (see page 12)	No. of farms growing this crop	Your farm	Aver-	31	31
			age of 154 farms	most profit- able farms	least profit- able farms
Winter wheat	(B) 29	_____	2.4	6.1	.6
Spring wheat	(C) 80	_____	4.5	5.5	3.7
Oats	(D) 96	_____	14.7	17.1	12.3
Barley	(B) 103	_____	16.2	20.7	11.6
Rye	(D) 14	_____	1.6	2.1	1.1
Flax	(B) 71	_____	5.9	9.8	4.4
Wheat and oats	(C) 27	_____	2.9	4.4	1.6
Oats and barley	(C) 73	_____	14.2	21.2	12.0
Flax and wheat	(B) 2	_____	.1	.6	0
Canning peas	(A) 8	_____	.6	.9	.3
Soybeans	(C) 22	_____	1.1	.7	.8
Miscellaneous	(D) 4	_____	.3	.1	.6
Total grain and peas			64.5	89.2	49.0
Corn, grain	(B) 153	_____	33.5	41.4	26.7
Corn, silage	(C) 134	_____	8.6	9.9	9.5
Corn, fodder	(D) 40	_____	1.1	1.2	1.2
Sweet corn	(B) 13	_____	1.1	1.5	0
Sugar beets	(A) 3	_____	.4	1.5	0
Potatoes	(A) 41	_____	.3	.4	.3
Misc. (hybrid seed corn, truck cr., etc.)	(A) 35	_____	1.5	4.3	.7
Total cultivated crops			46.5	60.2	38.4
Alfalfa	(A) 138	_____	15.6	19.7	12.6
Red clover	(B) 19	_____	1.6	2.0	.7
Other legumes & mix.	(C) 91	_____	8.6	11.1	8.4
Timothy	(D) 25	_____	1.4	.6	1.9
Annual hay (millet, sudan gr., sm. grain, etc.)	(D) 30	_____	1.1	.9	1.3
Miscellaneous hays and seed crops	(C) 14	_____	.9	.9	1.2
Phalaris (non-tillable land)	18	_____	1.2	.7	.8
Wild hay (non-tillable land)	56	_____	5.7	5.8	5.6
Total hay			36.1	41.7	32.5
Total crop acreage			147.1	191.1	119.9
Alfalfa	(A) 40	_____	2.0	3.5	1.5
Sweet clover	(B) 55	_____	5.5	9.4	3.9
Red clover or rape pasture (hogs)	(B) 26	_____	.8	.5	.8
Miscellaneous legume pasture	(C) 38	_____	6.2	8.9	2.7
Other tillable pasture	(D) 64	_____	6.3	2.4	8.4
Non-tillable pasture	129	_____	30.4	36.0	40.0
Total pasture			51.2	60.7	57.3
Tillable land not cropped	41	_____	3.2	5.0	5.0
Timber (not pastured)	55	_____	5.6	8.6	4.9
Roads and waste		_____	10.8	14.9	9.7
Farmstead		_____	6.7	8.0	6.4
Total acres in farm			224.6	288.3	203.2
% of land tillable			73.5	75.7	67.7
% of tillable land in high return crops			40.8	43.0	38.2

Yield of Crops and Feed Costs per Horse and Other Power Expense, 1939

Yield of crops per acre	Your farm	Average 154 farms	31 most profitable farms	31 least profitable farms
Winter wheat, bu.	_____	21.8	22.8	30.8
Spring wheat, bu.	_____	13.5	16.1	13.6
Oats, bu.	_____	48.5	50.9	46.5
Barley, bu.	_____	33.5	38.7	28.5
Rye, bu.	_____	16.7	16.1	17.5
Flax, bu.	_____	10.8	12.5	8.0
Wheat and oats, bu.	_____	36.6	37.3	29.8
Oats and barley, bu.	_____	44.1	46.3	39.0
Flax and wheat, bu.	_____	13.3	15.3	-
Canning peas, value above seed cost	\$ _____	\$24.92	\$23.36	\$29.89
Soybeans, bu.	_____	19.0	14.2	18.7
<hr/>				
Corn, grain, bu.	_____	59.0	63.3	55.0
Corn, silage, tons	_____	9.3	10.4	9.1
Corn, fodder, tons	_____	3.2	3.3	3.8
Sweet corn, tons	_____	4.3	4.1	-
Sugar beets, tons	_____	9.6	11.6	-
Potatoes, bu.	_____	92.1	97.8	87.8
<hr/>				
Alfalfa, tons	_____	2.2	2.1	2.3
Red clover, tons	_____	2.0	2.5	1.8
Misc. legumes and mixtures	_____	1.6	1.8	1.7
Timothy hay, tons	_____	1.6	2.1	1.7
Annual hay, tons	_____	1.2	.9	1.3
Phalaris hay, tons	_____	2.0	2.3	1.9
Wild hay, tons	_____	1.1	1.2	1.2
<hr/>				
Horses, Feed Costs and Other Power Expense Items				
<hr/>				
Feed per horse,* lbs.:				
Grain	_____	2,113	2,582	1,964
Tame hay and alfalfa	_____	2,664	2,405	2,976
Wild hay and fodder	_____	1,939	2,116	2,133
<hr/>				
Feed costs per horse:				
Grain	\$ _____	\$14.10	\$17.35	\$12.80
Roughage	_____	10.45	10.24	11.72
Pasture	_____	3.06	2.99	3.50
Total	\$ _____	\$27.61	\$30.58	\$28.02
<hr/>				
Number of work horses	_____	4.1	4.5	4.0
Number of colts	_____	1.1	1.5	.8
<hr/>				
Total acres in farm	_____	225	288	203
Crop acres per horse	_____	40	45	34
<hr/>				
Tractor and horse exp. per crop acre	\$ _____	\$2.30	\$2.15	\$2.64
Farm power expense per day of prod. work	_____	.85	.76	.90

*Two colts equal one horse.

Factors of Cost and Returns in Dairy Production, 1939

Items	Your farm	Average 154 farms	31 farms	31 farms
			highest in B.F. per cow	lowest in B. F. per cow
Pounds of butterfat per cow	_____	245	325	169
Feeds per cow, lbs.:				
Corn	_____	753	817	454
Small grain	_____	1,129	1,614	638
Com. feeds - under 25% protein	_____	80	160	28
Com. feeds - over 25% protein	_____	66	105	19
Tame hay	_____	920	539	948
Alfalfa	_____	2,763	3,701	2,180
Wild hay	_____	150	165	364
Corn fodder	_____	520	294	935
Silage	_____	6,263	7,352	5,863
Total concentrates	_____	2,028	2,696	1,139
Total dry roughage	_____	4,353	4,699	4,426
Total digestible nutrients	_____	4,789	5,660	4,011
Total digest. nutrients per lb. B.F.*	_____	20.1	17.8	24.2
% protein in ration	_____	13.6	14.1	12.8
% cows fresh - Sept. to Dec., inclusive	_____	53.2	60.0	37.0
Feed cost per cow:				
Concentrates	\$ _____	\$14.29	\$19.33	\$7.68
Roughages	_____	19.21	22.33	17.54
Pasture	_____	5.17	5.11	5.34
TOTAL FEED COSTS	\$ _____	\$38.67	\$46.77	\$30.56
Value of produce per cow:				
B. F. sales	\$ _____	\$65.54	\$96.36	\$41.38
Dairy produce used in house	_____	4.46	4.73	3.86
Milk to other livestock	_____	11.67	12.33	9.23
Appreciation or depreciation	_____	2.05	-.20	2.18
TOTAL VALUE OF PRODUCT	\$ _____	\$83.72	\$113.22	\$56.65
RETURNS ABOVE FEED COST PER COW	\$ _____	45.05	66.45	26.09
Price received per lb. B.F. sold:				
As manufacturing cream (cents)	_____	27.7	27.6	27.8
As market milk & cream & cheese milk(cts.)	_____	43.9	45.5	38.4
Feed cost per lb. B.F. (cents)	_____	16.1	14.4	18.4
Number of cows**	_____	16.9	17.9	16.0

*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 Dairy Cattle and Feeder Cattle, 1939

Items	Your farm	Average of all farms	Farms highest in returns above feed per head	Farms lowest in returns above feed per head
Other dairy cattle: no. of farms		141	28	28
Feeds used per head, lbs.:				
Concentrates		393	358	355
Hay and fodder		1,602	1,688	1,784
Silage		1,981	1,895	2,080
Whole milk		484	524	608
Skim milk		1,376	1,156	1,194
Feed cost per head:				
Concentrates	\$	\$2.74	\$2.64	\$2.55
Roughages		6.36	6.27	7.16
Milk		7.75	8.05	9.40
Pasture		1.90	1.98	1.93
TOTAL	\$	\$18.75	\$18.94	\$21.04
RETURNS PER HEAD	\$	\$30.27	\$46.15	\$17.78
RETURNS ABOVE FEED COST PER HEAD	\$	\$11.52	\$27.21	-\$3.26
Number of head of young cattle		16.8	16.8	17.2
Feeder cattle: no of farms				
		27	9	9
Feeds used per head, lbs.				
Concentrates		3,589	3,870	4,142
Hay and fodder		2,822	1,900	4,823
Silage		2,859	2,233	4,247
Whole milk		36	0	109
Skim milk		101	0	304
Feed cost per head:				
Concentrates	\$	\$22.74	\$24.88	\$25.92
Roughages		8.67	7.19	12.60
Milk		.64	0	1.93
Pasture		1.08	.67	.93
TOTAL	\$	\$33.13	\$32.74	\$41.38
RETURNS PER HEAD	\$	\$48.94	\$70.44	35.34
RETURNS ABOVE COST	\$	\$15.81	\$37.70	-\$6.04
Number of head of feeder cattle		14.6	12.6	13.6

Feed Costs and Returns for Hogs and Sheep, 1939

Items	Your farm	Average of all farms	Farms highest in returns above feed	Farms lowest in returns above feed
Hogs; no. of farms:		147	29	29
Lbs. of feed per 100 lbs. hogs produced:				
Corn	_____	303	242	393
Small grain	_____	115	77	150
Commercial grain feeds	_____	8	7	5
Total grain and commercial feeds	_____	426	326	548
Tankage	_____	3	3	3
Skimmilk	_____	346	267	435
Cost of feed per 100 lbs. hogs produced:				
Grain and commercial feeds	\$ _____	\$2.74	\$2.08	\$3.51
Tankage and skimmilk	_____	.61	.49	.77
Pasture	_____	.16	.15	.20
Total Feed Cost per 100 lbs. Hogs Prod.	\$ _____	\$3.51	\$2.72	\$4.48
RETURNS PER 100 LBS. HOGS PRODUCED	\$ _____	\$5.33	\$6.05	\$4.61
RET. ABOVE FEED COST PER 100# HOGS PROD.	\$ _____	\$1.82	\$3.33	\$1.13
Price received per 100 lbs. hogs sold	\$ _____	\$6.17	\$6.76	\$5.83
Total no. of litters	_____	12.0	12.7	10.8
Total no. of pigs weaned per litter	_____	6.3	6.8	6.0
% of two-litter system	_____	45.2	55.4	33.3
Pounds of hogs produced	_____	17,207	19,022	13,748

Sheep; no. of farms:		62	12	12
Feeds used per head,* lbs.:				
Concentrates	_____	114	107	130
Tame hay	_____	50	14	30
Alfalfa	_____	151	130	178
Corn fodder and wild hay	_____	37	72	44
Silage	_____	94	44	11
Feed cost per head:				
Concentrates	\$ _____	\$.76	\$.68	\$.98
Roughages	_____	.80	.63	.78
Pasture	_____	.77	.54	.75
TOTAL	\$ \$ _____	\$2.33	\$1.85	\$2.51
Value of production per head:				
Wool	\$ _____	\$1.84	\$1.30	\$1.90
Mutton	_____	3.67	7.65	-.68
TOTAL	\$ _____	\$5.51	\$8.95	\$1.22
RETURNS ABOVE FEED COST PER HEAD	\$ _____	\$3.18	\$7.10	\$-1.29
Price per lb. wool sold (cents)	_____	25.7	26.0	26.3
Value per lamb sold	\$ _____	\$6.48	\$7.25	\$5.22
% lamb crop	_____	100.5	107.3	90.7
% death loss	_____	15.8	9.3	29.5
No. of head of sheep*	_____	39.9	32.1	30.8

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

Feed Costs and Returns for Chickens and Turkeys, 1939

Items	Your farm	Average of all farms	Farms highest in returns above feed	Farms lowest in returns above feed
Chickens; no. of farms		148	30	30
Lbs. of feed per hen:				
Concentrates	_____	119	153	118
Skimmilk	_____	39	57	33
Cost of feed per hen:				
Concentrates	\$ _____	\$1.17	\$1.48	\$1.13
Skimmilk	_____	.06	.08	.05
TOTAL	\$ _____	\$1.23	\$1.56	\$1.18
Value of product per hen:				
Eggs sold and used in house	\$ _____	\$1.64	\$2.45	\$1.06
Poultry sold and used in house plus appreciation or less depreciation	_____	.56	1.57	.06
TOTAL	\$ _____	\$2.20	\$4.02	\$1.12
RETURNS ABOVE FEED COST PER HEN	\$ _____	\$.97	\$2.46	\$-.06
Price received per dozen eggs sold(cts.)	_____	14.6	14.6	13.3
Eggs laid per hen	_____	126	165	87
No. of hens	_____	184	173	146
% of hens that are pullets	_____	70	80	63
<hr/>				
Turkeys; no. of farms:		11	5	5
Lbs. of feed per 100 lbs. turkeys produced:				
Grain	_____	407	469	389
Grain by-products	_____	25	47	9
Tankage and meat scraps	_____	25	45	12
Other commercial feeds	_____	135	60	175
Total concentrates	_____	594	621	585
Skimmilk	_____	56	86	37
COST OF FEED PER 100 LBS. TURKEYS PRODUCED	\$ _____	\$7.09	\$6.81	\$7.34
Value of product per 100 lbs. turkeys prod.:				
Eggs and poults	\$ _____	\$1.64	\$3.54	0
Turkeys	_____	13.72	14.99	12.08
TOTAL	\$ _____	\$15.36	\$18.53	\$12.08
RETURNS ABOVE FEED COST PER 100 LBS. TURKEYS PRODUCED	\$ _____	\$8.27	\$11.72	\$4.74
Price received per lb. turkey sold, cts.	_____	17.0	17.6	16.6
Pounds of turkeys produced	_____	20,179	29,544	12,865

Distribution of Farm Produce Used in House, 1939

	Quantities				Value			
	Your farm	Average 154 farms	31 most profitable	31 least profitable	Your farm	Average 154 farms	31 most profitable	31 least profitable
Whole milk	1,364	qts.	1,822	1,292	\$	\$37.04	\$48.73	\$35.43
Skimmilk	59	qts.	109	34		.19	.35	.11
Cream	287	pts.	377	179		26.30	35.29	16.82
Farm made butter	7	lbs.	-	4		2.12	.07	1.26
Eggs	189	doz.	222	199		26.88	31.17	27.07
Poultry	37	head	36	35		15.72	20.44	13.58
Cattle	314	lbs.	420	371		20.27	29.23	21.88
Hogs	510	lbs.	536	432		32.72	34.87	27.38
Sheep	11	lbs.	0	0		.77	0	0
Potatoes	23	bu.	28	21		12.87	15.24	12.46
Vegetables & fruits	-	-	-	-		41.49	45.42	33.33
Farm fuel	8	cds.	8	7		43.14	45.10	38.27
Total					\$	\$259.51	\$305.91	\$227.59
Average value of farm dwelling					\$	\$2024	\$2428	\$1859
Interest and depreciation on farm dwelling						151	172	147

Distribution of Household and Personal Expenses for Those Farms which Kept Complete Accounts of These Expenses, 1939

	Your farm	Average 107 farms	21 most profitable	21 least profitable
Number of persons - family		4.6	5.2	4.6
Number of persons,) Family		3.5	4.0	3.4
adult equivalent) Other*		.6	1.0	.6
Food and meals	\$	\$277.26	\$373.68	\$265.50
Operating and supplies		123.88	191.91	86.11
House rep., furnishing and equipment		117.78	267.03	115.64
Clothing and materials		100.55	147.15	78.69
Health		75.75	116.06	35.07
Development and recreation		52.70	91.73	33.47
Personal care and pers. spending		43.13	68.10	34.83
New housing, life ins. and savings		118.96	199.79	94.59
Personal share of auto expense		74.10	104.94	53.24
Church, welfare and gifts		55.54	98.90	30.88
Occasional events		15.05	3.34	41.76
Total Household & Personal Cash Exp.	\$	\$1,054.70	\$1,662.63	\$869.78
Food furnished by the farm		221.26	274.86	194.42
Fuel furnished by the farm		42.20	45.53	38.38
Interest & deprec. on farm dwelling		153.82	187.53	133.47
Interest & deprec. on misc. items**		70.34	83.26	74.76
Total Household & Personal Expenses	\$	\$1,542.32	\$2,253.81	\$1,310.81

*Hired help or others boarded.

**Personal share of auto, gas engine, electric plant, and household goods.

Miscellaneous Information - Averaged by Counties, 1939

Item	Dodge, Mower, Olmsted and Wabasha	Free- born	Good- hue	Meeker	Rice, Dakota and Scott	Steele	Waseca, Le Sueur, Fari- bault, Blue Earth and Nicollet
Operator's labor earnings	\$1,578	\$1,461	\$1,395	\$1,649	\$1,810	\$1,797	\$1,660
Average farm inventory (without house)	20,960	21,673	21,679	15,081	24,548	20,574	23,086
Total acres in farm	237	235	210	197	247	236	227
Total crop acres	154	154	137	133	157	146	152
% of land tillable	80	72	79	67	70	69	76
Animal units of productive livestock	43.9	49.9	40.1	29.4	40.0	43.5	39.9
% of animal units that are dairy cows	42.1	39.0	50.2	51.8	41.5	41.7	39.1
% of animal units that are other cattle	28.8	30.0	22.9	27.0	27.4	23.6	26.4
% of animal units that are hogs	15.9	20.2	13.1	12.3	15.0	26.1	24.0
% of animal units that are sheep	8.0	6.2	6.7	2.2	3.6	3.6	3.2
% of animal units that are hens	3.6	4.6	5.4	4.4	4.3	5.0	5.8
% of animal units that are turkeys	1.6	0	1.7	2.3	8.2	0	1.5
Pounds B.F. per cow	236	218	272	250	279	245	243
Returns above feed (P.L.S. other than cows)	\$35	\$27	\$42	\$45	\$55	\$40	\$43
Productive livestock units per 100 acres	18.8	22.3	19.6	15.7	17.3	19.3	18.4
Crop yields, per cent of average	90	89	91	106	102	105	114
% tillable land in high return crops	34.9	39.7	47.3	39.9	44.6	43.4	42.8
Days of productive work	791	862	791	617	781	801	764
Days of productive work per worker	372	410	347	313	284	345	354
Power and equip. exp. per day productive work	\$1.47	\$1.28	\$1.31	\$1.14	\$1.59	\$1.54	\$1.68
Yield per acre, corn, bu.	57.2	58.4	63.7	56.6	55.6	58.2	64.3
Yield per acre, barley, bu.	29.2	31.2	30.1	35.2	34.0	34.8	37.9
Yield per acre, oats, bu.	41.2	47.5	43.3	51.7	54.8	48.6	54.0
Yield per acre, alfalfa, tons	1.5	1.6	2.0	2.3	2.8	2.6	2.8
Price received per pound butterfat sold (manufact.)	\$.28	\$.28	\$.28	\$.27	\$.28	\$.29	\$.28
Price received per cwt. hogs sold	6.30	6.13	5.81	6.10	6.48	6.30	6.10
Price received per dozen eggs sold	.15	.15	.15	.15	.17	.16	.15

Summary by Years

	Average 1928-29	Average 1930-32	1933	1934	1935	1936	1937	1938	1939
Number of farms	148	157	108	120	150	152	166	122	154
Acres in farm	170	194	202	209	202	207	213	241	225
Crop acres in farm	116	134	141	137	141	138	143	164	147
Farm inventory (not including house)	\$24,574	\$21,767	\$16,522	\$17,431	\$17,182	\$20,343	\$20,723	\$22,704	\$20,480

Farm Earnings (see page 25)

CASH EXPENSES

Tractor (new & expense)	\$172	\$158	\$94	\$132	\$209	\$273	\$325	\$302	\$249
Truck (new and expense)	47	52	44	56	49	100	106	96	85
Auto (new & expense) (farm share)	136	88	66	102	126	160	180	127	146
Gas engine (new & expense) (farm share)	16	12	9	14	11	15	12	11	5
Electricity (new & exp.) (farm share)	28	30	33	38	42	49	31	42	45
Machinery and equipment (new)	190	132	98	114	204	276	335	330	261
Machinery and equipment (expense)	72	57	48	57	59	60	72	78	65
Buildings, fences, tiling (new)	130	98	51	62	184	263	246	282	250
Buildings, fences, tiling (expense)	52	29	26	44	52	63	96	114	69
Hired labor	272	252	208	252	322	374	433	519	340
Feed for livestock	440	324	200	392	438	534	627	603	475
Other expense for livestock	66	72	49	52	64	83	83	130	110
Horses bought	36	32	33	34	50	54	48	36	28
Cows bought	60	27	15	29	91	63	81	51	71
Other cattle bought	81	52	52	81	94	119	100	166	228
Hogs bought	85	69	27	27	93	62	77	65	62
Sheep bought	6	10	8	34	154	69	39	110	98
Poultry bought	37	39	42	46	60	73	71	100	95
Crop (seed, twine, spray)	186	177	107	161	195	187	215	278	235
Taxes and insurance	298	338	275	275	258	268	274	322	285
General farm	30	31	25	25	30	28	41	40	36
1) Total cash expense	2,440	2,079	1,510	2,027	2,785	3,173	3,492	3,802	3,238
2) Decrease in farm inventory	-	755	-	-	-	-	-	22	-
3) Board for hired labor	102	93	71	82	121	153	149	174	128
4) Total exp. (sum of (1), (2) & (3))	2,542	2,927	1,581	2,109	2,906	3,326	3,641	3,998	3,366

Summary by Years (Continued)

CASH RECEIPTS

Horses	30	30	17	29	50	55	75	51	45
Cows	352	194	100	147	316	200	311	260	262
Dairy products	1,662	1,209	1,064	1,249	1,307	1,669	1,598	1,509	1,170
Other cattle	401	273	204	304	298	345	443	578	551
Hogs	1,164	950	510	603	793	1,198	1,204	1,248	926
Sheep	52	39	62	121	192	231	147	217	216
Poultry	140	139	147	263	254	364	424	520	344
Eggs	275	232	229	289	398	405	377	378	301
Small grain	241	140	211	256	349	543	378	244	274
Corn	37	39	44	151	92	177	166	190	142
Hay	24	19	17	25	33	29	53	19	8
Root crops	29	43	53	24	21	15	10	4	6
Other crops	110	108	70	79	142	110	114	162	143
Miscellaneous	134	151	112	121	172	226	292	314	231
Income from work off the farm	102	112	96	160	141	140	203	219	136
A.A.A. adjustment payments	0	0	0	371	241	182	169	223	336
(5) Total cash receipts	4,753	3,678	2,936	4,192	4,799	5,889	5,964	6,136	5,091
(6) Increase in farm inventory	617	-	505	611	294	1,316	139	-	891
(7) Farm produce used in house	325	248	193	223	265	299	290	252	260
(8) Tot. receipts (sum of (5),(6),&(7))	5,695	3,926	3,634	5,026	5,358	7,504	6,393	6,388	6,242
Total expenses (4)	2,542	2,927	1,581	2,109	2,906	3,326	3,641	3,998	3,366
(9) Return to cap.& fam. labor (8)-(4)	3,153	999	2,053	2,917	2,452	4,178	2,752	2,390	2,876
(10) Interest on farm inventory	1,228	1,089	826	872	859	1,017	1,036	1,135	1,024
(11) Family labor (9) - (10)	1,925	-90	1,227	2,045	1,593	3,161	1,716	1,255	1,852
(12) Unpaid family labor	358	292	241	190	229	247	254	231	236
(13) Operator's labor earnings (11)-(12)	1,567	-382	986	1,855	1,364	2,914	1,462	1,024	1,616

MISCELLANEOUS ITEMS

Yield per acre, corn (bu.)	44.8	43.5	54.7	31.8	47.1	34.4	43.8	51.7	59.0
Yield per acre, barley (bu.)	36.0	30.1	23.6	16.9	30.1	21.5	30.0	28.2	33.5
Yield per acre, oats (bu.)	46.0	48.1	35.7	20.0	48.7	36.0	48.1	35.9	48.5
Yield per acre, alfalfa (tons)	3.0	2.6	2.5	1.1	3.2	1.9	2.1	2.1	2.2
% of till. land in high return crops	31.9	34.1	40.5	36.0	40.4	41.7	40.9	41.3	40.8
Productive livestock units per 100 A.	19.2	20.7	20.9	20.1	18.6	20.1	19.6	19.7	18.5
No. of days of productive work	599	729	768	783	716	763	783	866	759
Days of prod. work per worker	310	339	331	339	314	341	339	360	349
Power & eq. exp. per day prod. work	\$1.76	\$1.34	\$1.10	\$1.18	\$1.25	\$1.31	\$1.44	\$1.44	\$1.41
No. of farms with tractors	80	101	72	82	117	122	142	114	134

Summary by Years (Continued)

Miscellaneous items (continued)	Average 1928-29	Average 1930-32	1933	1934	1935	1936	1937	1938	1939
No. of work horses	5.4	5.4	5.4	5.3	4.9	4.8	4.5	4.4	4.1
No. of colts	.8	.8	.6	.7	1.1	1.2	1.3	1.3	1.1
No. of cows	14.2	17.1	18.7	19.1	17.6	18.0	17.6	18.6	17.2
No. of head of other cattle	14.8	19.2	19.8	19.6	17.6	19.8	21.3	23.0	20.9
No. of litters of spring pigs	6.1	7.6	6.9	5.1	4.4	5.9	5.9	7.3	7.9
No. of litters of fall pigs	3.2	4.1	4.9	2.1	2.7	3.3	2.8	3.8	3.6
Pounds of hogs produced	12,706	16,219	15,094	12,013	9,672	12,786	12,770	15,948	16,014
No. of head of sheep	7.0	11.5	14.5	18.6	19.1	19.2	16.3	23.3	16.2
No. of hens	136	156	187	190	171	183	192	187	177
Pounds of B.F. per cow	244.0	241.0	242.5	235.9	228.1	243.2	231.6	239.8	245.0
No. of pigs per litter	6.3	6.2	5.8	6.1	6.3	6.4	6.3	6.7	6.3
No. of eggs laid per hen	94.6	111.7	118.0	118.0	131.0	131.0	130.0	135.0	126.0
Price received per pounds B.F. sold	\$.52	\$.30	\$.22	\$.28	\$.33	\$.37	\$.39	\$.31	\$.28
Price received per cwt. hogs sold	8.92	5.82	3.42	4.01	8.73	9.26	9.47	7.69	6.17
Amount received per lamb sold	9.78	4.64	4.73	5.04	6.89	6.95	7.38	6.04	6.48
Price received per pound wool sold	.36	.13	.23	.19	.20	.29	.32	.18	.26
Price received per dozen eggs sold	.28	.17	.12	.15	.22	.20	.19	.18	.15
Price received per lb. turkeys sold	-	-	.14	.20	.25	.18	.21	.20	.17
Ret. above feed cost per cow	\$76.50	\$28.16	\$26.46	\$29.82	\$41.99	\$62.25	\$52.56	\$47.89	\$45.05
Ret. above feed per hd. o. dairy cattle	18.14	-2.31	-.58	-4.14	8.83	6.69	10.03	13.48	11.52
Ret. above feed per cwt. hogs pr.*	1.50	.30	.53	.96	3.98	3.17	2.48	3.47	1.82
Ret. above feed cost per hd. sheep	5.50	-.07	2.36	1.90	2.47	3.54	3.63	1.28	3.18
Ret. above feed cost per hen	1.82	1.13	.75	.81	1.59	1.07	.83	1.12	.97
Ret. above feed per cwt. turkeys prod.	-	-	7.59	11.94	15.23	5.66	12.53	12.38	8.27
Feed cost per cow	\$69.50	\$52.27	\$34.47	\$45.21	\$50.43	\$43.70	\$51.29	\$40.55	\$38.67
Feed cost per head other cattle	33.01	23.56	16.51	22.14	23.04	22.52	22.70	17.85	18.75
Feed cost per cwt. hogs produced	7.66	4.50	2.83	4.71	5.55	6.27	6.33	3.86	3.51
Feed cost per head sheep	2.82	2.26	1.91	2.45	3.40	2.46	2.53	2.37	2.33
Feed cost per hen	1.62	1.09	.93	1.46	1.69	1.83	1.82	1.30	1.23
Feed cost per cwt. turkeys produced	-	-	5.38	8.52	9.21	10.00	8.32	7.75	7.09
Feed cost per horse	55.09	36.13	27.98	41.59	42.99	38.60	40.95	29.94	27.61
Price of feed, sh. corn (per bu.)	\$.70	\$.49	\$.27	\$.52	\$.64	\$.72	\$.78	\$.43	\$.36
Price of feed, barley (per bu.)	.60	.36	.35	.65	.58	.60	.60	.39	.30
Price of feed, oats (per bu.)	.48	.25	.19	.36	.32	.30	.35	.22	.23
Price of feed, bran (per cwt.)	1.70	1.00	.77	1.15	1.23	1.28	1.45	1.03	1.10
Price of feed, oil meal (per cwt.)	3.00	2.00	1.60	2.13	1.88	2.13	2.13	2.30	2.15
Price of feed, alfalfa (per ton)	14.75	12.00	7.50	12.00	13.00	8.00	11.00	7.50	7.00

*See footnote on page 25.

Footnote for pages 22, 23 and 24.

The values of farm real estate in 1931 were reduced approximately 25 per cent from 1928-1930 values. The values in 1932 were reduced about 29 per cent from the 1931 values. Only land was affected by the reduction in 1931, but in 1932 buildings and improvements were cut 25 per cent. In 1936 the values of farm real estate were adjusted upward 10 per cent, only land being affected by the increase. The value of dairy cows was also adjusted downward in 1932 and upward in 1936. These capital losses were not included in the inventory decreases in the financial statement but the changes in valuation resulted in variations in the interest charge. No changes in the basis of inventory valuations were made in the years 1933 to 1935 and 1937 to 1939.

The financial statements differ also in that the unpaid family labor rate was \$60 per month for the 1928 to 1930 period, \$40 in 1931, \$30 in 1932, 1933 and 1934, \$40 in 1935, \$43 in 1936, and \$45 in 1937, 1938 and 1939; and the board for hired labor was figured at \$20 per month in 1928, 1929 and 1930, \$15 per month in 1931, \$10 per month in 1932, 1933 and 1934, \$15 per month in 1935, and \$18 per month in the years 1936 to 1939.

These adjustments to meet changes in the price level should be considered in comparing 1939 results with previous years.

None of the wheat adjustment payments received under A.A.A. contracts were included in farm receipts for 1933. The wheat payments represent remuneration to the producer for adjustments made in 1934 and 1935 and are, therefore, credited in these years. One-half of the total amount that is due for the full period of the contract was credited as income in 1934 and the remaining one-half in 1935. All of the money received or due under the 1934 corn-hog and sugar-beet contracts was credited as income in 1934 even though final payments for 1934 were not made till 1935. Likewise, all of the money received or due under the 1935 corn-hog and sugar-beet contracts was credited as income in 1935, and all the money due as agricultural conservation payments for the years 1936 to 1939 was credited as income in 1936, 1937, 1938 and 1939, respectively. The amount due for 1939 is an estimate supplied by the county agricultural agents.

The calculation of the per cent of tillable land in high return crops was changed slightly in 1933; barley was moved from the (C) group to the (B) group (see page 9 for explanation of method of calculation), and was kept in (B) group in the years 1934 to 1939.

The returns above feed cost per cwt. hogs produced, as shown on page 24, do not include the A.A.A. hog adjustment payments. These payments averaged \$1.76 per cwt. hogs produced in 1934, and \$.83 per cwt. in 1935.