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

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Annual Report of the Southeastern Minnesota Farm Management Service 1943

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Cooperator: _____

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Sixteenth Annual Report of the Farm Management Service of Dakota, Dodge, Freeborn, Goodhue, Le Sueur, Mower, Nicollet, Olmsted, Rice, Scott, Steele, Wabasha, Waseca and Winona Counties for the Year 1943.

Prepared by T. R. Nodland and G. A. Pond

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 balance of the cost is defrayed by the 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. Glen Myers is the field agent for this project. At the end of the year G. E. Toben and S. Sinclair of the Division of Agricultural Economics aided in closing the records. County agricultural extension agents who cooperate in this project include H. Lawrenz, V. Sander, W. M. Lawson, G. J. Kunau, R. D. Evans, F. L. Liebenstein, E. Nelson, F. E. Wetherill, R. Aune, D. Marti, C. Graham, J. R. Gute, O. Nelson, C. F. Murphy, D. Williams and Geo. Chambers.

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 1943 were:

President, Arthur Bohnsack, Prior Lake, Scott County;
Vice-President, Glen Keller, Kasson, Dodge County;
Secretary-Treasurer, Sarah Howland, Northfield, Dakota County.

The board of directors included these officers and also the following: Henry Opdahl, Freeborn County; C. H. Kunde, Goodhue County; Albert Von Lehe, Le Sueur County; Carl Kehret, Mower County; Carl Schattschneider, Olmsted County; B. B. Witte, Rice County; Hiram Johnson, Steele County; Harvey Carlton, Wabasha County; C. L. Sauffeur, Waseca County; and Elmer Wirt, Winona County.

In addition to records kept by members of the S. E. Minn. Farm Mgt. Service, 24 records from farmers in a 3-year detailed accounting study in Nicollet County are included. Some of these farmers were in the S. E. Service in 1940 and earlier years and are returning to it in 1944. Since these farms are in the same area and of the same type as the others and since the same type of records are available they have been combined with those of the regular service to increase the size of the sample and make the comparison more significant. These records have been kept under the general direction of S. A. Engene of the Div. of Agr. Econ. and serviced by F. E. Wetherill, C. J. Hemming and V. G. Dose.

The following tabulation shows by counties the number of records submitted in 1943:

Dakota	5	Mower	10	Steele	16
Dodge	12	Nicollet	28	Wabasha	7
Freeborn	19	Olmsted	13	Waseca	21
Goodhue	18	Rice	6	Winona	11
LeSueur	5	Scott	11	Total	182

The table on page 4 and succeeding pages show 177 farms. Five farms have been omitted from all the averages in the tables because they differed so widely in type from the others or the records were not sufficiently complete for a full analysis.

TYPE OF FARMING

Most of the farms are livestock farms on which dairy cattle, hogs and poultry are the principal sources of income. Although some milk and cream are retailed in cities, and some milk is sold for shipment to the Twin Cities, most of the dairy products are sold to creameries and cheese factories. 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, flax and seed crops are grown to a limited extent as cash crops.

WEATHER, SOIL AND TOPOGRAPHY

The spring of 1943, as a whole, was considerably cooler and somewhat wetter than usual. The growth of vegetation was retarded and the planting of corn and other late crops was delayed. Frequent heavy to excessive rains during the first half of June delayed haying, corn cultivation and damaged growing crops in lowlands. Weather conditions in July were mostly favorable for small grains, hay and corn. However, excessively heavy rains on July 5 at Albert Lea, St. Peter and Winona caused much damage to property and growing crops in those areas. Frequent showers in August delayed haying, harvesting and threshing and resulted in some damage to grain in shocks.

The fall of 1943 was somewhat cooler and drier than usual. It was rather dry for pastures, plowing and fall-sown grains and grass. Slight to moderate frost damage occurred during September. An unusually heavy snow storm during the period of November 6 to 8 resulted in a delay in the harvesting of some corn and soybeans. Only a trace of precipitation was reported during the remainder of the year.

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, Wabasha and Winona Counties have more rolling land than the other counties. Much of the level land is tiled 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, Olmsted and Winona 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.

Table 1. Monthly and Annual Precipitation

	Rochester		Albert Lea		Faribault		St. Peter	
	Precip-itation	Departure from normal	Precip-itation	Departure from normal	Precip-itation	Departure from normal	Precip-itation	Departure from normal
	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
January	1.10	0.00	0.36	-0.45	0.46	-0.10	1.23	+0.35
February	0.21	-0.61	0.35	-0.56	0.50	-0.16	0.87	+0.17
March	1.86	+0.54	1.30	+0.07	0.81	-0.22	0.95	-0.11
April	0.69	-1.98	0.45	-1.95	0.56	-1.32	0.80	-1.17
May	2.30	-1.68	4.76	+0.52	4.88	+1.66	7.84	+4.43
June	5.10	+0.51	6.54	+1.96	5.99	+1.62	4.79	+0.08
July	2.85	+0.07	13.52	+10.04	7.40	+4.05	9.52	+6.18
August	4.19	+0.89	6.19	+2.54	3.03	-0.38	3.61	+0.15
September	2.30	-0.67	2.31	-1.66	2.10	-1.35	1.93	-1.71
October	1.48	-0.62	1.00	-1.13	0.42	-1.66	1.28	-0.91
November	1.42	-0.19	1.00	-0.47	1.97	+0.83	2.44	+1.15
December	T	-0.92	T	-0.95	T	-0.63	T	-0.71
1943 Total	23.50	-4.56	37.78	+7.96	28.12	+2.34	35.26	+7.81
1942 Total	41.68	+13.52	31.22	+1.40	28.57	+2.79	27.94	+0.49
1941 Total	29.80	+ 1.64	36.35	+6.53	23.08	-2.70	29.95	+2.50
1940 Total	28.87	+ 0.71	27.81	-2.01	23.34	-2.44	38.39	+10.99
1939 Total	21.92	- 6.24	19.74	-10.08	16.28	-9.50	22.49	- 4.96
1938 Total	43.69	+15.53	38.04	+8.22	27.14	+1.36	30.81	+3.36

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 several times during the year. In addition to securing the supplementary information, the field agent's duties included numerous services, such as, 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 produce were charged.

Because the farmers included in this study are, in general, above the average in managerial ability and operate larger and more productive farms, they have returns materially higher than the average for this section of the state. There were, nevertheless, wide variations in the methods and practices followed by these men. It is reasonable to assume that similar variations occur among all farmers in the area. To the extent that this is true, this report should be of value to all farmers and to others interested in agriculture in that it illustrates how farm records may be used as a basis for making an analysis of a farm business and for improving the management of a farm.

Table 2. Summary of Farm Inventories, 1943*

Items	Your farm	Average of 177 farms	35 most profitable farms	35 least profitable farms
Size of farm (acres)	____	224	286	188
Size of business (work units)**	____	671	868	511
Beginning of Year				
Productive livestock (total)	____	$4293	$5462	$3627
Dairy and dual purpose cows	____	1273	1504	934
Other dairy & dual pur. cattle	____	722	957	641
Beef cattle (incl. feeders)	____	427	600	404
Hogs	____	1414	1684	1363
Sheep (including feeders)	____	183	231	101
Poultry (including turkeys)	____	274	486	184
Horses	____	353	407	338
Crop, seed, and feed	____	2808	4115	2043
Mach. & equipment (total)	____	3285	4102	2675
Power mach. (f. share)	____	1181	1413	905
Crop & gen. mach. (f. share)	____	1508	1888	1288
Livestock equip. & supplies	____	596	801	482
Buildings, fences, etc.	____	7054	8707	6035
Land	____	8901	11592	7381
Total farm capital	____	26694	34385	22099
End of Year				
Productive livestock (total)	____	$4406	$5859	$3413
Dairy & dual purpose cows	____	1332	1595	966
Other dairy & dual pur. cattle	____	805	1021	677
Beef cattle (incl. feeders)	____	452	791	300
Hogs	____	1303	1765	1167
Sheep (including feeders)	____	189	229	66
Poultry (including turkeys)	____	325	458	237
Horses	____	331	386	304
Crop, seeds, and feed	____	3849	6150	2245
Mach. & equipment (total)	____	3262	4096	2576
Power mach. (f. share)	____	1102	1346	826
Crop & gen. mach.	____	1494	1860	1203
Livestock equipment & supplies	____	666	890	547
Buildings, fences, etc.	____	7112	8678	5992
Land	____	8901	11592	7381
Total farm capital	____	27861	36761	21911

* For the purpose of comparison the inventories as shown in this table and the earnings as shown elsewhere in this report are presented on a full-owner basis. The assets, expenses and receipts of the landlord were included in the statements for rented farms.

** See page 9 for an explanation of "work units".

Table 3. Net Worth Statement for Those Farmers Who Kept a Complete Record of All Assets and Liabilities

	Your farm	53 owned farms	15 part-owned farms	19 rented farms
January 1, 1943				
Total acres in farm		189.6	205.2	221.5
Owned		189.6	143.5	-
Rented			61.7	221.5
Total farm capital	$	$24251	$18145	$7200
Accounts receivable		49	33	167
Outside Investments		1214	396	1487
Household and personal assets		1377	1093	1290
Total assets		$26891	$19667	$10144
Total liabilities	$	$ 7025	$ 5658	$ 1699
Federal Land Bank		1852	1201	-
Land Bank Commissioner		285	-	-
Other mortg. on land operated		3519	3047	-
Mortg. on other real estate		-	-	207
Production Credit Assoc.		45	-	-
Sealed grain		17	-	-
Other chattel mortgages		289	60	377
Notes payable		871	988	916
Accounts payable		147	362	199
Farmer's net worth	$	$19866	$14009	$8445
December 31, 1943				
Total farm capital	$	$25368	$18881	$8206
Accounts receivable		52	37	208
Outside investments		2163	679	2761
Household and personal assets		1489	1056	1243
Total assets		$29072	$20653	$12418
Total liabilities	$	$ 6658	$ 4477	$ 1807
Federal Land Bank		1776	1045	-
Land Bank Commissioner		212	-	-
Other mortg. on land operated		3384	1953	-
Mortg. on other real estate		89	500	506
Production Credit Assoc.		90	-	-
Other chattel mortgages		264	50	312
Notes payable		694	736	827
Accounts payable		149	193	162
Farmer's net worth	$	$22414	$16176	$10611
Change in net worth	$	$+2548	$+2167	$+2166

Table 4. Summary of Farm Earnings (Cash Statement), 1943

Items	Your farm	Average of 177 farms	35 most profitable farms	35 least profitable farms
FARM EXPENSES				
Dairy and dual-purpose cows bought		$ 100	$ 39	$ 84
Other dairy & dual-purpose cattle"		121	118	112
Beef cattle bot.(incl. feeders)		153	436	19
Hogs bought		205	361	157
Sheep bought (including feeders)		62	22	12
Poultry bought (including turkeys)		167	229	132
Horses bought		34	37	29
Misc. livestock expenses		161	230	134
Misc. crop expenses		364	542	282
Feed bought		1799	2412	1510
Custom work hired		185	186	160
Mech. power mach. (farm share)(new)		127	169	72
Mech. power mach. (farm share)(upkp)		118	145	92
Mech. power (farm share)(gas,oil,etc)		402	468	351
Crop and general mach. (new)		194	203	93
Crop and general mach. (upkeep)		115	144	107
Livestock equipment (new)		154	195	148
Livestock equipment (upkeep)		73	103	74
Buildings and fencing (new)		361	316	231
Buildings and fencing (upkeep)		228	249	202
Hired labor		693	1137	425
Taxes		272	363	201
General farm and insurance		103	135	96
(1) Total farm purchases		$6191	$8239	$4723
(2) Decrease in farm capital		-	-	188
(3) Board furnished hired labor		171	196	148
(4) Interest on farm capital		1364	1779	1100
(5) Unpaid family labor		386	406	345
(6) Total farm exp.(Sum of (1)to(5)		$8112	$10620	$6504
FARM RECEIPTS				
Dairy and dual-purpose cows	$	$ 451	$ 460	$ 376
Dairy products		2475	3093	1482
Other dairy and dual-purpose cattle		385	486	364
Beef cattle (including feeders)		444	854	310
Hogs		3551	4976	2685
Sheep and wool (including feeders)		203	223	125
Poultry (including turkeys)		688	1670	349
Eggs		1040	1525	781
Horses		31	40	30
Corn		137	147	85
Small grain		320	391	252
Other crops		520	1196	250
Machinery & equip. sold		98	75	77
Agricultural adjustment payments		190	264	169
Income from work off the farm		214	263	140
Misc.		48	30	65
(7) Total farm sales		10795	15693	7540
(8) Increase in farm capital		1167	2376	-
(9) Family living from the farm		643	737	594
(10) Total farm receipts(7)+(8)+(9)		12605	18806	8134
(6) Total farm expenses		8112	10620	6504
(11) Operator's labor earnings(10)-(6)		4493	8186	1630
(12) Ret. cap.& fam.lab.(4)+(5)+(11)		6243	10371	3075

Table 5. Summary of Farm Earnings (Enterprise Statement) 1943*

Items	Your farm	Average of 177 farms	35 most profitable farms	35 least profitable farms
EXPENSES AND NET DECREASES				
Total power	$_____	$ 970	$1113	$ 862
Horses	_____	242	274	237
Tractor	_____	315	350	279
Truck	_____	107	169	71
Auto (farm share)	_____	140	138	143
Gas engine (farm share)	_____	4	3	3
Elec. plant or current (farm share)	_____	73	91	58
Hired power	_____	89	88	71
Crop and general machinery	_____	296	355	275
Livestock equipment	_____	147	207	144
Buildings, fencing and tiling	_____	419	469	365
Misc. productive livestock expense	_____	150	225	129
Labor	_____	1302	1784	964
Real estate taxes	_____	232	308	169
Personal property tax	_____	40	55	32
Insurance	_____	40	61	32
General farm	_____	63	74	64
Interest on farm capital	_____	1364	1779	1100
(1) Total expenses & net decreases	_____	5023	6430	4136
RETURNS AND NET INCREASES				
All productive livestock	_____	9137	13203	6243
Dairy and dual purpose cows	_____	2973	3722	1850
Other dairy & dual pur. cattle	_____	677	895	562
Beef breeding herd	_____	165	180	199
Feeder cattle	_____	134	362	14
Hogs	_____	3325	4784	2399
Sheep - farm flock	_____	126	200	78
Sheep - feeders	_____	21	0	0
Turkeys	_____	360	1062	121
Chickens	_____	1356	1998	1020
Crops, seed and feed	_____	-104	831	-909
Income from labor off the farm	_____	146	166	106
Agricultural conservation payments	_____	190	264	169
Miscellaneous	_____	147	152	157
(2) Total returns & net increases	_____	9516	14616	5766
(1) Total expenses & net decreases	_____	5023	6430	4136
(3) Oper. labor earnings (2) - (1)	_____	4493	8186	1630

* 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 in page 6.

Table 6. Family Living From the Farm, 1943

Items	Your farm	Average 177 farms	35 most profitable farms	35 least profitable farms	Your farm	Average 177 farms	35 most profitable farms	35 least profitable farms
No. of persons (Fam.)	____	3.3	3.6	3.1				
adult equiv. (Other*	____	.6	.7	.5				
Wholemilk	____	1288 qts.	1637	1059	$____	$ 64.54	$ 79.20	$ 51.51
Skim milk	____	290 qts.	228	494	____	1.65	1.28	2.89
Cream	____	210 pts.	272	245	____	36.15	44.95	43.61
Farm-made butter	____	2 lbs.	1	1	____	.85	.47	.46
Eggs	____	208 doz.	230	173	____	71.74	78.19	59.88
Cattle	____	363 lbs.	346	349	____	35.61	36.45	35.08
Hogs	____	538 lbs.	645	493	____	73.94	88.40	68.31
Sheep	____	5 lbs.	10	0	____	.49	.97	0
Poultry	____	156 lbs.	209	137	____	32.77	43.90	30.25
Potatoes	____	21 bu.	30	17	____	24.87	33.54	22.00
Vegetables & fruits					____	51.74	56.13	47.83
Farm fuel	____	5 cds.	4	6	____	29.55	26.46	30.34
Rental vl. of house					____	219.01	246.89	202.27
Misc. (wool, honey, etc.)					____	.41	0	0
Total					____	$643.32	$736.83	$594.43

Table 7. Household and Personal Expenses for Those Farms Which Kept Complete Accounts of These Expenses, 1943

Items	Your farm	Average of 107 farms	21 most profitable farms	21 least profitable farms
Number of persons - family	____	4.3	5.2	4.1
Number of persons, (Family	____	3.4	3.9	3.2
adult equivalent (Other*	____	.5	.7	.5
Food and meals bought	$____	$ 414	$ 452	$ 432
Operating and supplies	____	159	193	142
Clothing and clothing materials	____	203	202	197
Personal care, personal spending	____	54	42	65
Furnishings and equipment	____	85	110	56
Education, recreation and development	____	75	96	69
Medical care and health insurance	____	128	160	124
Church, welfare, gifts	____	161	184	113
Personal share of auto expense	____	54	58	54
Household share of elect. & gas eng. exp.	____	44	57	42
H.H.&pers.shr.of new auto,gas eng.&motors bot.	____	8	31	4
Life insurance and other investments	____	767	1093	292
Income tax	____	325	664	84
Total household and personal cash expenses	____	$2477	$3342	$1674
Food furnished by the farm	____	392	438	394
Fuel furnished by the farm	____	30	21	33
House rental	____	212	244	192
Total household and personal expenses	____	$3111	$4045	$2293

* Hired help or others boarded

EXPLANATION OF "WORK UNITS"

The total "work units" for any one farm is a measure of the size of that farm business. A work unit as used in this report is the average accomplishment of a farm worker in a ten hour day working on crops and productive livestock at average efficiency or ten hours of work off the farm for pay. The number of work units for each class of livestock and each acre of crop are presented in Table 8.

Table 8. Number of Work Units for Each Class of Livestock and Each Acre of Crop

Item	No. of work units	Item	No. of work units
Dairy and dual pur. cows	14.5 per cow	Small grain	.8 per acre
Other dairy & du.pur.cattle	4.4 per an.unit*	Sugar beets	3.0 per acre
Beef breeding herd	4.0 per an.unit*	Sweet corn	2.3 per acre
Feeder cattle	.4 per 100 lbs.	Corn, husked	1.3 per acre
Sheep - farm flock	2.0 per an. unit*	Corn, hogged	.7 per acre
Sheep - feeders	.5 per 100 lbs.	Corn, shredded	2.4 per acre
Hogs	.3 per 100 lbs.	Corn silage	1.9 per acre
Turkeys	.7 per 100 lbs.	Corn fodder	1.1 per acre
Hens	28.0 per 100 hens	Alfalfa hay	1.0 per acre
Canning peas	2.0 per acre	Soybean hay	1.4 per acre
Soybeans for grain	1.0 per acre	Other hay crops	.6 per acre

* Animal unit represents one cow, one bull, one feeder steer or heifer, two head of other cattle, seven head of sheep, fourteen lambs, five hogs, ten pigs, 100 hens or 1400 pounds of turkeys produced.

ANALYSIS OF THE REASONS FOR DIFFERENCES IN OPERATOR'S EARNINGS

The operator's labor earnings varied widely among the farmers included in this study. The average labor earnings of those farmers ranking in the upper 20 per cent in the range according to earnings was $8186 and of those in the lower 20 per cent was $1630. This is a range of $6556 between the average earnings of these two groups. Some of the causes for these differences in earnings may be beyond the control of the farmer. However, all of these farmers could make some changes in their farming operations which would increase earnings. A farmer can secure some ideas as to changes that could profitably be made on his farm by studying the facts about his business as presented in this report and comparing his accomplishments with other farmers following the same general type of farming. The more important management factors affecting earnings and their relationships with earnings are presented in the following tables. These factors vary from year to year in their relative influence on earnings. Because of the great importance of size of business in 1943 some of these factors do not show a significant relationship with earnings.

Table 9. Relation of Crop Yields to Farm Earnings

Per cent crop yields were of the average for all 177 farms		No. of farms	Average operator's labor earnings
Group	Average		
Below 85	71	34	$3189
85-114	101	109	4527
115 and above	126	34	5691

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 10. 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 33.0	29.1	27	$3701
33.0 - 48.9	40.8	121	4682
49.0 and above	54.5	29	4445

*Crops are marked on page 16 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 as high a percentage as possible of the tillable land into these higher return crops.

Table 11. Relation of Returns From Productive Livestock to Farm Earnings

Index of returns for $100 feed fed to productive livestock* Group	Average	No. of farms	Average operator's labor earnings
Below 85	78	37	$3145
85 - 114	99	103	4831
115 and above	128	37	4902

*The index is weighted by the number of animal units of each class of livestock.

The majority of these farms maintain dairy cattle. However, in addition to the dairy herd there is quite an investment in other classes of productive livestock such as 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 and livestock constitute the major source of income on these farms. Hence there is some relationship between returns for $100 of feed and operator's labor earnings on these farms. There are a number of reasons for differences among farms in livestock returns. High productivity per animal and economy in the use of feed and labor are important. Other factors of considerable importance are kind of feed used, quality of pastures, balance of ration, degree of sanitation, and kind of shelter and equipment.

Table 12. Relation of Amount of Productive Livestock to Farm Earnings

Productive livestock units per 100 acres* Group	Average	No. of farms	Average operator's labor earnings
Below 19.0	15.9	31	$4005
19.0 - 29.9	24.4	112	4508
30.0 & above	37.3	34	4890

*Acres in timber not pastured, roads, waste and farmstead were not included.

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 13. Relation of Size of Business (Work Units) to Farm Earnings

Days of productive work Group	Average	No. of farms	Average operator labor earnings
Below 500	410	35	$2512
500 - 799	639	100	4335
800 and above	967	42	6523

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 14. Relation of Amount of Work Accomplished per Worker to Farm Earnings

Work units per worker		No. of	Average operator's
Group	Average	farms	labor earnings
Below 250	214	36	$3568
250 - 349	299	99	4240
350 and above	398	42	5885

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 15. Relation of Power, Machinery, Equipment and Building Expense to Farm Earnings*

Expense per work unit		No. of	Average operator's
Group	Average	farms	labor earnings
$3.50 and above	$4.14	35	$3553
$2.25 - $3.24	2.69	108	4637
Below $2.05	1.73	34	5004

* Includes building, fencing, all crop machinery and livestock equipment, power, 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 average. This is well illustrated in Table 16.

Table 16. Relation of Operator's Labor Earnings to the Number of Factors in Which the Farmer Excels

No. of factors in which farmer 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
None or one	20	_____	xxxxxxxxxxxxxx	$3016
Two or three	74	_____	xxxxxxxxxxxxxxxxxx	3843
Four or five	69	_____	xxxxxxxxxxxxxxxxxxxxxxxxxx	5363
Six or seven	14	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxx	5756

The array in Table 16 indicates that it will be worth while for each cooperator to study carefully his ranking on pages 14 and 15, and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.

Table 17. Measures of Farm Organization and Management Efficiency, 1943

Measures used in chart on page 15	Your farm	Average of 177 farms	35 most profitable farms	35 least profitable farms
Operator's Labor Earnings	$_____	$4493	$8186	$1630
(1) Crop yields*	_____	100	109	87
(2) % of tillable land in high ret. crops**	_____	41.1	43.2	40.3
(3) Ret. for $100 feed to prod. livestock***	_____	100	107	91
(4) Prod. livestock units per 100 acres****	_____	25.4	26.1	24.4
(5) Size of business - work units	_____	671	868	511
(6) Work units per worker	_____	305	321	256
(7) Pow., mach., equip., & bldg. exp. per work unit	$_____	$2.79	$2.45	$3.26
Measures and items related to some of the above measures:				
(3) Index of return for $100 feed from -				
Dairy cattle	_____	100	103	87
Dual purpose cattle	_____	100	109	104
Beef breeding herd	_____	100	77	84
Feeder cattle	_____	100	97	-
Hogs	_____	100	116	90
Native sheep	_____	100	86	127
Turkeys	_____	100	107	-
Chickens	_____	100	104	96
(5) Work units on crops	_____	174	241	137
Work units on productive livestock	_____	467	594	354
Other work units	_____	30	33	20
(6) Total number of workers	_____	2.2	2.7	2.0
Number of family workers	_____	1.4	1.4	1.4
Number of hired workers	_____	.8	1.3	.6
(7) Power expense per work unit	$_____	$1.48	$1.29	$1.69
Crop mach. expense per work unit	_____	.45	.40	.54
Livestock equip. exp. per work unit	_____	.22	.24	.28
Bldgs. & fencing exp. per work unit	_____	.64	.52	.75

*Given as a percentage of the average.

**Crops are marked on page 16 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.

***An index weighted by the animal units of livestock.

****Acres in timber not pastured, roads, waste, and farmstead were not included.

Thermometer Chart

Using your figures from page 14 locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the 177 farms included in this summary are located between the dotted lines across the center of this page.

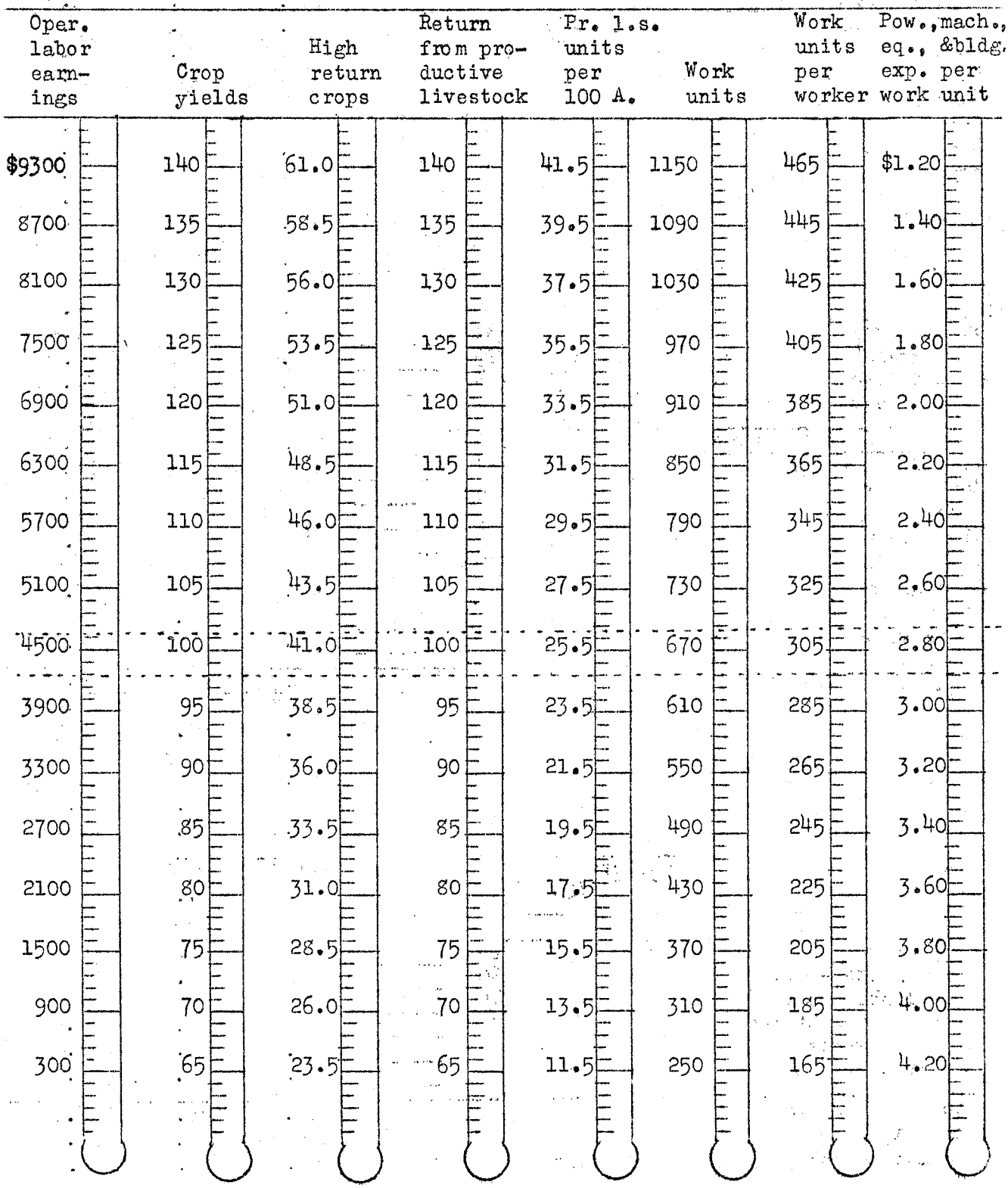

Table 18. Distribution of Acres in Farm, 1943

Crop: (A) (B) (C) and (D) refer to ranking used in calculating % of tillable land in High Return Crops (see page 14)		No. growing this crop	Your farm	Average of 177 farms	35 most profitable farms	35 least profitable farms
Canning peas	(A)	21		1.9	1.0	2.9
Flax	(B)	84		7.7	7.6	8.7
Winter wheat	(B)	45		2.4	3.5	2.5
Spring wheat	(C)	15		.6	1.9	.3
Barley	(C)	63		4.9	5.5	5.2
Oats and barley	(C)	82		13.8	19.0	8.9
Oats and wheat	(C)	33		3.0	4.3	4.2
Oats	(D)	151		18.1	20.5	13.0
Rye	(D)	8		.4	.5	.9
Soybeans for grain	(D)	50		2.5	4.5	.5
Hemp		20		1.4	1.7	1.0
Miscellaneous	(D)	2		.1	-	-
Total small grain and peas		175		56.8	70.0	48.1
Sugar beets, hybrid seed corn, potatoes and truck crops	(A)	94		3.5	8.5	1.4
Sweet corn	(B)	31		2.7	5.3	2.4
Corn grain	(B)	175		40.4	53.2	29.9
Corn silage	(C)	144		9.4	10.4	8.4
Corn fodder	(D)	34		.9	.4	1.9
Total cultivated crops		177		56.9	77.8	44.0
Alfalfa hay	(A)	167		18.0	24.7	12.7
Red clover hay	(B)	46		3.0	2.0	2.3
Soybean hay	(C)	21		.9	.6	.7
Mixed legumes & non-legumes	(C)	47		4.6	8.3	3.1
Legumes for seed	(C)	5		.3	.2	0
Timothy and/or brome	(D)	36		1.7	1.6	2.0
Timothy seed	(D)	5		.2	.3	0
Other annual hay	(D)	10		.2	.2	.1
Total tillable land in hay		176		28.9	37.9	20.9
Alfalfa pasture	(A)	47		1.8	2.0	1.5
Sweet clover pasture	(B)	24		1.7	1.3	1.5
Mixture inc.alf.,sw.clov.,brome	(B)	58		5.8	8.5	2.8
Other legumes and mixtures	(C)	48		5.9	8.0	2.6
Sudan grass or rape pasture	(C)	40		1.3	1.1	1.2
Other tillable pasture	(D)	73		5.2	8.8	2.1
Total tillable land in pasture		150		21.7	29.7	11.7
Tillable land not cropped	(D)	54		3.1	1.7	6.5
Total tillable land				167.4	217.1	131.2
Phalaris hay (non-tillable)		19		1.8	4.2	1.0
Wild hay (non-tillable)		60		3.9	3.5	7.1
Non-tillable pasture		145		27.9	29.7	27.4
Timber (not pastured)		74		6.7	9.9	4.4
Roads and waste				9.7	14.3	11.2
Farmstead				6.9	7.6	5.7
Total acres in farm				224.3	286.3	188.0
% land tillage				74.6	75.8	69.8
% tillable land in high return crops				41.1	43.2	40.3

Table 19. Crop Yields Per Acre, 1943

Crop	Your farm	Average 177 farms	35 most profitable farms	35 least profitable farms
Canning peas, value above seed cost	$_____	$35.74	$62.19	$28.10
Flax, bu.	_____	8.2	9.5	7.0
Winter wheat, bu.	_____	16.3	17.4	13.9
Spring wheat, bu.	_____	12.1	15.5	8.7
Barley, bu.	_____	16.2	18.2	13.3
Oats and barley, bu.	_____	30.5	36.5	22.8
Oats and wheat, bu.	_____	32.6	35.4	24.8
Oats, bu.	_____	42.7	48.7	37.6
Rye, bu.	_____	7.6	8.6	4.2
Soybeans for grain, bu.	_____	11.9	11.1	4.6
Sweet corn, tons	_____	2.5	2.9	1.6
Corn, grain, bu.	_____	51.8	56.7	42.7
Corn and cane silage, tons	_____	8.9	9.5	8.4
Corn and cane fodder, tons	_____	2.6	3.0	2.3
Alfalfa hay, tons	_____	2.4	2.3	2.6
Red clover hay, tons	_____	1.9	1.4	2.1
Soybean hay, tons	_____	1.6	1.2	1.3
Mixed legume & non-legume hay, tons	_____	1.8	2.2	1.4
Legumes for seed, lbs.	_____	104.	-	-
Timothy and/or brome hay, tons	_____	1.5	1.5	2.2
Timothy seed, lbs.	_____	230.	-	-
Other annual hay, tons	_____	1.5	-	-
Phalaris hay or non-tillable land, tons	_____	1.1	.6	.8
Wild hay, tons	_____	.8	.8	.7

Table 20. Average Price of Feeds, 1943

Item	Value	Item	Value
Ear corn, per bu.	$ .89	Alfalfa hay, per ton	$11.00
Oats, per bu.	.62	Red or alsike clov.hay, per ton	9.50
Barley, per bu.	.79	Soybean hay, per ton	9.50
Wheat, per bu.	1.20	Timothy, per ton	6.75
Rye, per bu.	.78	Sweet clover, per ton	6.40
Soybeans, per bu.	1.73	Wild hay, per ton	5.50
Bran, per cwt.	2.10	Corn fodder, per ton	4.95
Linseed oilmeal, per cwt.	2.58	Corn silage, per ton	3.62
Soybean oilmeal, per cwt.	2.70	Pasture, per mo. per an. unit	1.10
Tankage, per cwt.	4.12	Skim milk, per cwt.	.26

Table 21. Summary of Amount of Livestock

Items	Your farm	Average of 177 farms	35 most profitable farms	35 least profitable farms
No. of horses	_____	3.8	4.4	3.5
No. of colts	_____	.7	.7	.8
No. of dairy & dual purpose cows	_____	17.5	21.0	12.8
Head of other dairy & dual pur. cattle	_____	18.0	22.1	15.7
Head of cattle in beef breeding herd	_____	4.3	4.1	4.2
Pounds of feeder cattle produced	_____	752	2140	45
Litters of pigs	_____	18.1	22.0	16.1
Pounds of hogs produced	_____	25149	34530	18579
Head of sheep (2 lambs = 1 head)	_____	15.2	23.0	10.6
No. of hens	_____	246	336	206
Total no.of prod.lvstk.animal units	_____	48.2	61.8	38.2
% of total that are:				
Dairy cows	_____	34.6	32.0	29.7
Other dairy cattle	_____	17.3	16.0	17.6
Dual purpose cows	_____	3.4	4.0	6.0
Other dual purpose cattle	_____	2.7	3.2	4.5
Beef breeding herd	_____	4.1	2.2	4.9
Feeder cattle	_____	2.0	5.2	.1
Hogs	_____	24.6	23.8	27.1
Sheep	_____	4.5	4.9	3.5
Turkeys	_____	1.2	2.9	.6
Hens	_____	5.6	5.8	6.0

Table 22. Feed Costs for Horses and Misc. Power and Machinery Expense, 1943

Items	Your farm	Average of 174 farms*	35 most profit-able farms	33 least profit-able farms*
Feed per horse,** lbs.:				
Grain	_____	1570	1659	1568
Hay	_____	4529	4507	4752
Fodder and stover	_____	316	125	270
Feed costs per horse:				
Grain	$_____	$27.72	$28.41	$27.82
Roughage	_____	19.37	19.29	19.53
Pasture	_____	3.84	4.04	3.92
TOTAL FEED COSTS	$_____	$50.93	$51.74	$51.27
Number of work horses	_____	3.8	4.4	3.7
Number of colts	_____	.8	.7	.8
Crop acres per farm	_____	148.3	193.4	121.1
Tractor and horse exp. per crop acre	$_____	$4.01	$3.31	$4.50
Crop & gen. mach.exp.per crop acres	$_____	$2.11	$1.88	$2.43

*Three farmers did not have horses. The crop acres and expenses per crop acre are averages of 177 farms.

**Two colts equal one horse.

Table 23. Feed Costs and Returns from Hogs, 1943

Items	Your farm	Average of 174 farms	35 farms highest in returns above feed	35 farms lowest in returns above feed
Feed per cwt. hogs produced, lbs.:				
Corn	____	382	283	524
Small grain	____	135	99	178
Com. feeds - under 25% protein	____	8	6	10
Com. feeds - over 25% protein	____	22	18	19
Total concentrates	____	547	406	731
Skim milk, buttermilk and whey	____	168	216	227
Feed cost per cwt. hogs produced:				
Concentrates	$____	$ 9.59	$ 7.13	$12.63
Skim milk, buttermilk and whey	____	.42	.54	.51
Pasture	____	.20	.17	.29
TOTAL FEED COSTS	$____	$10.21	$ 7.84	$13.43
Net increase in value per cwt. hogs prod.	$____	$13.11	$13.87	$12.30
RETURNS ABOVE FEED COST PER CWT.HOGS PROD.	$____	$ 2.90	$ 6.03	$-1.13
RETURNS FOR $100 OF FEED	$____	$135	$180	$94
Price received per cwt. hogs sold	$____	$13.88	$14.05	$13.70
No. of spring litters raised	____	12	12	13
No. of fall litters raised	____	6	6	5
Total no. of litters raised	____	18	18	18
No. of pigs born per litter	____	7.8	8.2	7.4
No. of pigs weaned per litter	____	6.0	6.4	5.7
Pounds of hogs produced	____	25503	29117	20616

High returns are associated with high quality management. The combined effect on return over feed from excelling in a number of hog management factors is shown in Table 24. The factors included are: (1) pounds of concentrates required to produce 100 pounds of hogs, (2) price received for hogs sold, (3) number of pigs born per litter, (4) number of pigs weaned per litter, and (5) sanitation. Seventeen farmers were below the average of the group in all five factors; their average return over feed was $.88 per 100 pounds of hogs. The 9 farmers who were above average in all five factors had an average return over feed of $5.42 per 100 pounds. The difference between the two extremes amounts to $4.54 per 100 pounds or $1158 for the average production of 25,503 pounds of hogs on these farms.

Table 24. Relation of Return Over Feed Per 100 Pounds of Hogs to the Number of Management Factors in Which Farmers Excelled

No. of factors in which farmer excels	No. of farms*	The length of the shaded lines are in proportion to the average return over feed per 100 pounds of hogs	Average return over feed
0	17	xxxxx	$ .88
1	40	xxxxxxxxxxxx	1.98
2	33	xxxxxxxxxxxx	1.96
3	38	xxxxxxxxxxxxxxxxxxxxxxxx	3.70
4	35	xxxxxxxxxxxxxxxxxxxxxxxxxxxx	4.31
5	9	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	5.42

* The data from 2 farmers who purchased feeder pigs were omitted from this table.

Table 25. Factors of Cost and Returns From Dairy Cows, 1943

	Your farm	Average of 152 farms	30 farms highest in butterfat per cow	30 farms lowest in butterfat per cow
Pounds of butterfat per cow	_____	247	323	174
Feeds per cow, lbs.:				
Corn	_____	954	1089	861
Small grain	_____	993	1435	629
Com. feeds - under 25% protein	_____	97	172	42
Com. feeds - over 25% protein	_____	119	219	87
Legume hay	_____	3942	3996	3669
Other hay	_____	386	238	605
Fodder and stover	_____	292	160	381
Total concentrates	_____	2163	2915	1619
Total dry roughage	_____	4620	4394	4655
Silage	_____	6438	6455	7329
Total digestible nutrients*	_____	5073	5615	4801
T. D. N. per lb. B.F.	_____	20.5	17.4	27.6
% T. D. N. that is protein	_____	14.1	14.5	13.4
Feed cost per cow:				
Concentrates	$_____	$38.75	$53.14	$28.04
Roughages	_____	33.14	33.59	33.03
Pasture	_____	5.72	5.51	5.73
TOTAL FEED COSTS	_____	$77.61	$92.24	$66.80
Value of produce per cow:				
B. F. Sales	$_____	$140.60	$193.00	$91.67
Dairy produce used in house	_____	6.35	6.10	6.40
Milk to livestock	_____	16.31	17.99	12.34
Net increases in value of cows	_____	7.62	6.25	8.86
TOTAL VALUE PRODUCED	_____	$170.88	$223.34	$119.27
RETURNS ABOVE FEED COST PER COW	$_____	$93.27	$131.10	$ 52.47
RETURNS FOR $100 OF FEED	$_____	$228.00	$246.00	$190.00
Price rec. per lb. B.F. sold (cts.)	_____	62.3	64.9	57.9
As manufacturing cream (cents)	_____	55.2	55.0	55.0
Other	_____	74.3	72.9	73.9
Feed cost per lb. B.F. (cents)	_____	31.4	28.6	38.4
% fall freshening	_____	55.2	53.3	58.4
Number of cows**	_____	18.4	18.4	15.9

* Not including nutrients received from pasture.

** All dairy 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 farms.

Table 26. Feed Costs and Returns From Other Dairy Cattle, 1943

Items	Your farm	Average of 151 farms*	30 farms highest in butterfat per cow	30 farms lowest in butterfat per cow
Feeds per head, lbs.:				
Concentrates	_____	571	591	594
Hay and fodder	_____	1811	1909	1778
Silage	_____	2301	2202	2754
Skim milk	_____	925	982	824
Whole milk	_____	386	358	220
Feed cost per head:				
Concentrates	$_____	$10.19	$11.39	$10.33
Roughages	_____	12.42	12.90	12.77
Milk	_____	10.98	10.91	6.88
Pasture	_____	1.99	1.68	2.11
TOTAL FEED COSTS	$_____	$35.58	$36.88	$32.09
Net inc. in value of other dairy cattle	_____	$38.09	$47.71	$32.19
RETURNS ABOVE FEED COST PER HEAD	$_____	$2.51	$10.83	$.10
RETURNS FOR $100 OF FEED	$_____	$116	$140	$100
Number of head of other dairy cattle	_____	17.8	19.3	16.3

Table 27. Feed Costs and Returns From All Dairy Cattle, 1943

Items	Your farm	Average of 152 farms	30 farms highest in butterfat per cow	30 farms lowest in butterfat per cow
Feeds per animal unit, lbs.:				
Concentrates	_____	1789	2282	1394
Hay and fodder	_____	4198	4125	3955
Silage	_____	5702	5609	6489
Feed cost per animal unit:				
Concentrates	$_____	$32.06	$41.96	$24.24
Roughages	_____	29.79	30.09	29.29
Pasture	_____	5.08	4.70	5.15
TOTAL FEED COSTS	$_____	$66.93	$76.75	$58.68
Value of produce per animal unit:				
Dairy products	$_____	$102.53	$133.58	$68.07
Net increase in value of dairy cattle	_____	28.81	35.67	26.52
TOTAL VALUE PRODUCED	$_____	$131.34	$169.25	$94.59
RETURNS ABOVE FEED PER ANIMAL UNIT	$_____	$ 64.41	$ 92.50	$35.91
RETURNS PER $100 OF FEED	$_____	$201	$225	$170
Animal units of dairy cattle	_____	27.4	28.4	24.4

* One farmer having both a dairy and a beef herd used a beef bull and included all the young stock in the beef herd.

Table 28. Factors of Cost and Returns from Dual Purpose Cows, 1943

Items	Your farm	Average of 19 farms	9 farms highest in butterfat per cow	9 farms lowest in butterfat per cow
Pounds of butterfat per cow	_____	182	216	149
Feeds per cow, lbs.:				
Corn	_____	846	1147	576
Small grain	_____	653	976	362
Com. feeds - under 25% protein	_____	24	43	8
Com. feeds - over 25% protein	_____	104	140	77
Legume hay	_____	3271	3033	3396
Other hay	_____	569	572	541
Fodder and stover	_____	262	190	229
Total concentrates	_____	1627	2306	1023
Total dry roughage	_____	4102	3795	4166
Silage	_____	4759	4992	5055
Total digestible nutrients*	_____	4106	4506	3740
T.D.N. per lb. B.F.	_____	22.6	20.9	25.1
% T.D.N. that is protein	_____	13.9	13.6	14.0
Feed cost per cow:				
Concentrates	$_____	$28.95	$41.06	$18.34
Roughages	_____	27.46	26.44	28.54
Pasture	_____	6.49	5.81	7.19
TOTAL FEED COSTS	$_____	$62.90	$73.31	$54.07
Value of produce per cow:				
B. F. sales	$_____	$84.91	$101.61	$68.94
Dairy produce used in house	_____	7.13	7.99	6.16
Milk to livestock	_____	19.94	23.66	15.72
Net increases in value of cows	_____	8.73	9.17	7.99
TOTAL VALUE PRODUCED	$_____	$120.71	$142.43	$98.81
RETURNS ABOVE FEED COST PER COW	$_____	$57.81	$69.12	$44.74
RETURNS FOR $100 OF FEED	$_____	$200.00	$198.00	$195.00
Price received per lb. B.F. sold (cts.)	_____	55.5	55.6	55.3
Feed cost per lb. B. F. (cents)	_____	34.6	33.9	36.3
% fall freshening	_____	49.1	53.0	45.9
Number of cows	_____	16.2	15.4	17.2

* Not including nutrients received from pasture.

Table 29. Feed Costs and Returns From Other Dual Purpose Cattle, 1943

Items	Your farm	Average of 18 farms*	9 farms highest in returns above feed	9 farms lowest in returns above feed
Feeds per head, lbs.:				
Concentrates	_____	611	567	655
Hay and fodder	_____	1554	1457	1650
Silage	_____	1582	1368	1797
Skim milk	_____	964	1100	829
Whole milk	_____	296	292	299
Feed cost per head:				
Concentrates	$_____	$10.55	$9.72	$11.37
Roughages	_____	9.87	8.97	10.78
Milk	_____	9.50	9.62	9.37
Pasture	_____	1.88	2.15	1.62
TOTAL FEED COSTS	$_____	$31.80	$30.46	$33.14
Net increase in value	$_____	$37.73	$45.05	$30.41
RETURNS ABOVE FEED COST PER HEAD	$_____	$ 5.93	$14.59	$-2.73
RETURNS FOR $100 OF FEED	$_____	$121	$152	$91
Number of head	_____	27.2	21.7	32.8

Table 30. Feed Costs and Returns From All Dual Purpose Cattle

Items	Your farm	Average of 19 farms	9 farms highest in returns above feed	9 farms lowest in returns above feed
Pounds of butterfat per cow	_____	182	198	167
Feeds per animal unit, lbs.:				
Concentrates	_____	1477	1496	1547
Hay and fodder	_____	3468	3629	3562
Silage	_____	4120	4377	4322
Feed cost per animal unit:				
Concentrates	$_____	$26.00	$26.09	$27.55
Roughages	_____	23.79	24.06	24.75
Pasture	_____	5.18	5.08	5.06
TOTAL FEED COSTS	$_____	$54.97	$55.23	$57.36
Value of produce per animal unit:				
Dairy products	$_____	$57.16	$72.33	$43.22
Net increase in value	_____	36.04	36.00	37.14
TOTAL VALUE PRODUCED	$_____	$93.20	$108.33	$80.36
RETURNS ABOVE FEED PER ANIMAL UNIT	$_____	$38.23	$53.10	$23.00
RETURNS FOR $100 OF FEED	$_____	$174	$203	$139
Animal units	_____	29.6	25.5	34.2

* One farmer having both a dairy and a beef herd used a beef bull and included all the young stock in the beef herd.

The farmer who excels in all phases of the management of the dairy herd receives a larger return than one who excels in none or only a few of the management factors. The combined effect on return over feed per cow in the dairy herd from excelling in a number of management factors is shown in Table 31. The factors included are (1) pounds of butterfat per cow, (2) total digestible nutrients per pound of butterfat, (3) percentage of protein in the T.D.N., (4) price received for butterfat, (5) feed cost per pound of butterfat, and (6) percentage of fall freshening. Nine farmers were below the average of the group in all six factors; their return over feed amounted to $49.74 per cow. Eight farmers who were above the average of the group in all six factors received a return over feed of $140.77 per cow. The difference between these two extremes amounts to $91.03 per cow or $1675 for the average herd of 18.4 cows.

Table 31. Relation of Return Over Feed per Milk Cow to Number of Management Factors in Which Farmers Excelled

No. of factors in which farmer excels	No. of farms	The length of the shaded lines are in proportion to the average return over feed per milk cow	Average return over feed
0	9	xxxxxxxxxxx	$49.74
1	25	xxxxxxxxxxxxxx	58.70
2	19	xxxxxxxxxxxxxxxx	68.56
3	35	xxxxxxxxxxxxxxxxxxxxxx	93.02
4	33	xxxxxxxxxxxxxxxxxxxxxxxxx	107.88
5	23	xxxxxxxxxxxxxxxxxxxxxxxxxxxxx	131.16
6	8	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	140.77

Table 32. Feed Costs and Returns for Turkeys, 1943

Items	Your farm	Average of 11 farms	5 farms highest in returns above feed	5 farms lowest in returns above feed
Feed per cwt. turkeys produced, lbs.:				
Grain	_____	503	525	510
Com. feeds - under 25% protein	_____	100	81	138
Com. feeds - over 25% protein	_____	155	194	122
Total concentrates	_____	758	800	770
Skim milk	_____	17	20	18
Feed cost per cwt. turkeys produced	$_____	$17.66	$18.70	$17.63
Value of produce per cwt. turkeys prod.				
Eggs and poults	$_____	3.36	7.39	0
Net increases in turkeys	_____	29.19	31.05	27.39
TOTAL VALUE PRODUCED	$_____	$32.55	$38.44	$27.39
RETURNS ABOVE FEED COST PER CWT. TURKEYS PRODUCED	$_____	$14.89	$19.74	$ 9.76
RETURNS FOR $100 FEED	$_____	$190	$214	$158
Price rec'd per lb. turkey sold (cts.)	_____	32.7	32.9	32.4
Pounds of turkeys produced	_____	17316	21439	13728

Table 33. Feed Costs and Returns from Chickens, 1943

Items	Your farm	Average of 167 farms	33 farms highest in return above feed	33 farms lowest in return above feed
Feed per hen, lbs.:				
Grain		106	111	119
Commercial feeds		32	31	33
Total concentrates		138	142	152
Skim milk and buttermilk		15	9	13
Feed cost per hen:				
Concentrates	$	$2.98	$3.01	$3.27
Skim milk		.05	.03	.04
TOTAL FEED COST	$	$3.03	$3.04	$3.31
Value of produce per hen:				
Eggs sold and used in house	$	$4.41	$5.32	$3.32
Net increase in value of chickens		1.17	1.97	.77
TOTAL VALUE PRODUCED	$	$5.58	$7.29	$4.09
RETURNS ABOVE FEED COST PER HEN	$	$2.55	$4.25	.78
RETURNS FOR $100 OF FEED	$	$193	$250	$129
Price rec'd. per doz. eggs sold (cents)		36.2	36.3	36.0
% of eggs sold on grade basis		44	48	38
Eggs laid per hen		147	179	110
Ave. no. of hens on farm during the yr.		260	247	242
% of hens that are pullets		86	89	85

Superior management leads to high returns. The combined effect on return over feed from excelling in a number of poultry management factors is shown in Table 34. The factors included are (1) pounds of concentrates per hen, (2) price received per dozen of eggs sold, (3) per cent of the eggs sold on a grade basis, (4) number of eggs laid per hen, and (5) percentage of the hens that are pullets. Thirty-three farmers were below the average in all the factors or excelled in only one; their average return over feed was $1.90 per head. The 33 farmers who excelled in at least four out of the five factors had an average return over feed of $3.22 per hen. The difference between the two extremes amounts to $1.32 or $343 for the average flock of 260 hens.

Table 34. Relation of Return Over Feed Per Hen to the Number of Management Factors in Which Farmers Excelled

No. of factors in which farmer excels	No. of farms	The length of the shaded lines are in proportion to the average return over feed per hen	Average return over feed per hen
None or one	33	xxxxxxxx	$1.90
2	49	xxxxxxxxxxxxxxx	2.32
3	52	xxxxxxxxxxxxxxxxxxxx	2.76
4 or 5	33	xxxxxxxxxxxxxxxxxxxxxxxxx	3.22

Table 35. Feed Costs and Returns From Beef Cattle, 1943

Items	Your farm	Average of all farms	Farms highest in returns above feed	Farms lowest in returns above feed
Beef breeding herd: no. of farms:		18	9	9
Feeds per animal unit, lbs.:				
Concentrates		1318	1193	1444
Legume hay		1935	1859	2011
Other hay		580	549	611
Fodder and stover		210	379	42
Silage		3398	2483	4311
Skim milk*		111	221	0
Whole milk*		8	4	13
Feed cost per animal unit:				
Concentrates	$	$23.64	$21.37	$25.91
Roughages		16.90	14.82	18.99
Milk*		.47	.67	.26
Pasture		5.47	5.09	5.85
TOTAL FEED COSTS	$	$46.48	$41.95	$51.01
Value of produce per animal unit:				
Dairy products	$	$2.98	$3.51	$2.46
Net increase in value of animals		50.79	58.93	42.64
TOTAL VALUE PRODUCED	$	$53.77	$62.44	$45.10
RETURNS ABOVE FEED COST PER ANIMAL UNIT	$	$7.29	$20.49	$-5.91
RETURNS FOR $100 OF FEED	$	$127	$162	$91
Number of cows and herd bulls		10.2	7.4	13.0
Number of animal units in the herd		25.6	22.1	29.1
Feeder cattle: no. of farms:		22	11	11
Feeds per cwt. beef produced, lbs.:				
Corn		611	501	722
Small grain		68	61	75
Com. feeds - under 25% protein		5	4	5
Com. feeds - over 25% protein		32	26	38
Legume hay		219	207	231
Other hay		99	38	159
Fodder and stover		7	15	0
Total concentrates		716	592	840
Total dry roughages		325	260	390
Silage		359	317	402
Feed cost per cwt. beef produced:				
Concentrates	$	$11.92	$9.75	$14.11
Roughages		2.02	1.69	2.34
Pasture		.47	.67	.26
TOTAL FEED COSTS	$	$14.41	$12.11	$16.71
Net increase in value of feeders	$	$16.58	$17.80	$15.37
RETURNS ABOVE FEED COST PER CWT.BEEF PROD.		2.17	5.69	-1.34
RETURNS FOR $100 OF FEED	$	$124	$155	$93
Price received per cwt.beef sold in 1943	$	$13.84	$13.99	$13.66
Price paid for feeder cattle bought in '43		$12.12	$11.79	$12.53
No. of animal units		10.3	9.0	11.7
Pounds of beef produced		5911	5757	6065

* A few farmers had both dairy or dual-purpose cows and beef cows and fed considerable amounts of milk produced by the milking herd to beef calves.

Table 36. Feed Costs and Returns from a Farm Flock of Sheep, 1943

Items	Your farm	Average of 65 farms	13 farms highest in returns above feed	13 farms lowest in returns above feed
Feeds per head,* lbs.:				
Concentrates	____	97	36	127
Legume hay	____	252	160	318
Other hay	____	25	28	20
Fodder and stover	____	24	36	50
Silage	____	122	30	92
Feed cost per head:				
Concentrates	$____	$1.63	$.41	$2.11
Roughages	____	1.65	1.09	1.93
Pasture	____	1.06	1.13	1.06
TOTAL FEED COSTS	$____	$4.34	$2.63	$5.10
Value of produce per head:				
Wool	$____	$3.21	$4.21	$2.66
Net increase in value of sheep	____	5.64	9.19	2.21
TOTAL VALUE PRODUCED	$____	$8.85	$13.40	$4.87
RETURNS ABOVE FEED COST PER HEAD	$____	$4.51	$10.77	$-.23
RETURNS FOR $100 OF FEED	$____	$261	$589	$97
Price per cwt. of lambs sold	$____	$12.94	$13.07	$12.55
Price per lb. wool sold (cts.)	____	42.1	42.0	41.5
Pounds of wool per sheep sheared	____	8.5	9.9	7.0
Number of ewes kept for lambing	____	28	13	21
% lamb crop**	____	97	111	85
% death loss**	____	9	5	16
No. of head of sheep*	____	41	17	31

* Two lambs under six months of age considered as one head.
** Lambs which die during month of birth are not included.

Superior management in the sheep enterprise results in a comparatively high return over feed just as superior management in the dairy herd or poultry flock resulted in a high return over feed per cow or per hen. The effect on return over feed from excelling in 6 factors is shown in Table 37. The factors included are (1) feed cost per head, (2) price received per 100 lbs. of lambs sold, (3) price received per lb. of wool sold, (4) lbs. of wool per sheep sheared, (5) per cent lamb crop, and (6) per cent death loss. The 6 farmers who were below the average in all factors or above in only one failed to receive a return large enough to cover the cost of feed while 10 farmers who excelled in 5 of the 6 factors received a return of $8.04 per head. The difference between the two extremes is $9.15 or $375 for the average flock of 41 head.

Table 37. Relation of Return Over Feed Per Head of Sheep to Number of Management Factors in Which Farmers Excelled

No. of factors in which farmer excels	No. of farms	Length of shaded lines are in proportion to the average return over feed per head of sheep	Average return over feed
0 or 1	6	xxx	$-1.11
2	14	xxxxxxxxxxx	3.55
3	16	xxxxxxxxxxxxxxx	4.83
4	19	xxxxxxxxxxxxxxx	4.88
5	10	xxxxxxxxxxxxxxxxxxxxxxxxxx	8.04

Table 38. Summary of Farm Earnings by Counties, 1943

	Dodge & Mower	Free-born	Goodhue & Dakota	Nicollet	Olmsted & Wabasha	Rice & Scott	Steele	Waseca & Le Sueur	Winona
FARM EXPENSES									
Cattle bought	$ 575	$ 395	$ 397	$ 222	$ 338	$ 344	$ 510	$ 250	$ 546
Hogs bought	137	255	71	224	275	52	164	78	1082
Sheep bought	446	8	9	22	12	6	5	15	28
Poultry bought	158	117	120	130	160	212	162	202	360
Feed	1946	1721	1309	2015	1953	1657	1772	1776	2222
Other livestock expense	150	164	117	179	113	184	191	194	143
Crop expense	441	314	447	323	299	240	461	389	364
Power mach. and equipment	1381	1095	1043	1164	1350	1114	1567	1228	931
Custom work hired	206	178	235	130	181	295	129	158	178
Buildings	773	555	509	528	616	312	657	690	703
Hired labor	763	692	857	559	566	605	841	813	397
Taxes, insurance and misc.	385	339	451	288	416	353	408	385	379
(1) Total purchases	$7361	$5833	$5565	$5784	$6279	$5374	$6867	$6178	$7333
(2) Decrease in capital	-	-	-	220	-	-	-	-	-
(3) Board to hired labor	130	154	186	206	136	191	145	195	167
(4) Unpaid family labor	368	324	501	437	315	302	389	305	668
(5) Int. on farm capital	1351	1317	1381	1382	1272	1163	1615	1464	1240
(6) Total expenses	$9210	$7628	$7633	$8029	$8002	$7030	$9016	$8142	$9408
FARM RECEIPTS									
Cattle sales	$1357	$1298	$1250	$1414	$1271	$ 934	$1695	$ 993	$1487
Dairy products	3233	2247	2910	1758	3006	3277	2110	1718	2573
Hogs	3746	4222	2373	4634	2794	2030	4295	3870	3524
Sheep and wool	624	151	224	49	156	162	146	215	59
Poultry and eggs	1574	1107	1456	1282	1371	2151	1714	2731	2554
Crops	889	670	1627	748	668	686	1055	1410	801
AAA payment	158	151	129	243	175	267	130	254	139
Income from work off farm	345	177	217	112	268	101	220	267	229
Misc. cash receipts	174	237	129	203	187	215	223	115	90
(7) Total farm sales	$12100	$10260	$10315	$10443	$9896	$9823	$11588	$11573	$11456
(8) Increase in capital	2116	1378	856	-	1662	336	2455	954	2501
(9) Family living from farm	630	580	648	721	553	638	677	623	767
(10) Total receipts	$14846	$12218	$11819	$11164	$12111	$10797	$14720	$13150	$14724
(6) Total expenses	9210	7628	7633	8029	8002	7030	9016	8142	9408
(11) Oper. labor earnings	5636	4590	4186	3135	4109	3767	5704	5008	5316

Table 39. Miscellaneous Information - Averaged by Counties, 1943

	Dodge & Mower	Free-born	Goodhue & Dakota	Nicollet	Olmsted & Wabasha	Rice & Scott	Steele	Waseca & Le Sueur	Winona
FARM INVENTORIES (Beginning of year)									
Productive livestock	$ 4911	$ 4326	$ 3504	$ 4896	$ 4417	$ 3534	$ 5014	$ 4010	$ 3593
Horses	391	322	357	340	320	333	329	403	374
Crop, seed and feed	2749	2825	3462	2766	2265	2304	2878	3157	2467
Mach. and equipment	3377	3065	3561	3203	2882	2687	3615	3646	3509
Buildings	6476	6401	7415	7048	6185	6804	10136	6959	6043
Land	8062	8717	8882	9504	8540	7427	9102	10632	7557
Total farm capital	$25966	$25656	$27181	$27757	$24609	$23089	$31074	$28807	$23543
MEAS. OF FARM ORG. AND MANAGEMENT EFFIC.									
Crop yields - % of ave.	100	101	97	82	102	103	111	106	114
% high return crops	37.1	40.2	39.5	37.5	41.0	42.4	47.3	45.4	40.9
Index ret. from livestock	106	95	113	87	103	109	98	96	106
A. U. livestock per 100 A.	25.1	28.0	23.3	23.7	28.6	25.1	23.7	23.9	31.6
Work units	715	697	671	637	663	583	710	696	675
Work units per worker	328	332	267	290	343	286	298	311	289
Exp. per work unit	$2.61	$2.40	$2.94	$2.66	$2.54	$3.01	$3.10	$3.14	$2.60
DISTRIBUTION OF ACRES IN FARM									
Small grain	60.3	48.4	64.3	69.5	55.3	41.4	57.3	54.2	48.4
Cultivated crops	61.7	67.2	49.3	61.9	46.5	40.3	65.7	66.9	39.0
Tillable hay land	33.3	26.6	38.0	22.3	33.2	28.8	30.4	20.8	33.4
Tillable pasture	30.8	18.4	26.0	16.4	32.3	17.8	21.4	14.6	18.8
Total acres in farm	227.4	221.8	222.7	230.4	221.2	200.9	236.4	238.9	194.5
% land tillable	82.7	75.9	81.1	77.3	75.7	68.7	76.2	69.5	74.9
CROP YIELDS PER ACRE									
Flax, bu.	8.0	6.7	10.2	6.0	6.9	10.6	7.5	10.9	11.6
Barley, bu.	14.6	-	12.4	9.6	16.4	22.1	24.1	16.9	22.7
Oats, bu.	40.8	34.2	41.8	32.0	40.8	48.2	53.8	50.8	49.7
Corn, grain, bu.	53.1	54.2	49.0	41.9	58.0	47.2	58.7	52.6	61.2
Corn silage, tons	9.4	9.8	9.0	7.0	9.6	7.7	10.1	8.5	10.4
Alfalfa hay, tons	2.1	2.4	2.2	2.8	2.2	2.6	2.3	2.3	2.4
AMOUNT OF LIVESTOCK									
Total animal units	51.8	53.1	46.4	46.2	50.7	41.6	47.7	47.9	49.4
% dairy and du. pur. cattle	58.6	55.0	61.9	54.7	59.7	69.0	53.5	51.3	64.9
% in beef breeding herd	4.9	5.5	5.5	4.5	7.4	2.4	1.6	2.6	-
% feeder cattle	2.8	2.2	2.8	1.6	2.1	-	1.2	1.7	5.7
% hogs	20.5	28.1	16.0	32.1	20.3	18.0	31.2	30.3	17.8
% sheep	7.4	4.3	7.7	.8	4.5	3.7	4.7	5.1	2.5
% turkeys	1.1	-	-	-	1.7	2.1	-	3.4	2.7
% hens	4.7	4.9	6.1	6.3	4.3	4.8	7.8	5.6	6.4

Table 40. Summary by Years

	Average 1928-29	Average 1930-32	Average 1933-35	Average 1936-37	1938	1939	1940	1941	1942	1943
Number of farms	148	157	126	159	122	154	148	197	201	177
Acres in farm	170	194	204	210	241	225	225	227	230	224
Crop acres in farm	116	134	140	140	164	147	148	147	150	148
Farm inventory	$24574	$21767	$17045	$20533	$22704	$20480	$24044	$24117	$26038	$27278
Farm Earnings (See page 33)										
FARM EXPENSES										
Horses bought	$ 36	$ 32	$ 39	$ 51	$ 36	$ 28	$ 28	$ 32	$ 34	$ 34
Cattle	141	79	121	182	217	299	607	421	444	374
Hogs bought	85	69	49	70	65	62	60	121	203	205
Sheep bought	6	10	65	54	110	98	82	45	53	62
Poultry bought	37	39	49	72	100	95	100	118	132	167
Misc. crop expenses	186	177	154	201	278	235	182	202	284	364
Feed bought	440	324	343	580	603	475	600	820	1416	1799
Power mach.(new & exp.)(f. share)	399	340	342	625	578	530	604	821	696	647
Custom work hired	-	-	-	-	-	-	123	115	164	185
Mach. and equipment (new)	190	132	139	305	330	261	296	470	464	348
Mach. and equipment (upkeep)	72	57	55	66	78	65	68	90	166	188
Bldgs., fencing, tiling (new)	130	98	99	254	282	250	352	313	245	361
Bldgs., fencing, tiling, (upkeep)	52	29	41	80	114	69	84	164	226	228
Hired labor	272	252	261	404	519	340	404	454	571	693
Taxes and insurance	298	338	269	271	322	285	276	280	313	312
General farm	30	31	26	35	40	36	42	43	46	63
Misc. livestock expense	66	72	55	83	130	110	78	101	123	161
Total farm purchases	$2,440	$2,079	$2,107	$3,333	$3,802	$3,238	$3,986	$4,610	$5,580	$6,191
Decrease in farm capital	-	755	-	-	22	-	-	-	-	-
Board furnished hired labor	102	93	91	151	174	128	141	145	177	171
Interest on farm capital	1,228	1,089	852	1,026	1,135	1,024	1,202	1,206	1,304	1,364
Unpaid family labor	358	292	220	250	231	236	269	278	304	386
Total farm expenses	$4,128	$4,308	$3,270	$4,760	$5,364	$4,626	$5,598	$6,239	$7,365	$8,112

Table 40. Summary by Years (Continued)

	Average 1928-29	Average 1930-32	Average 1933-35	Average 1936-37	1938	1939	1940	1941	1942	1943
FARM RECEIPTS										
Horses	$ 30	$ 30	$ 32	$ 65	$ 51	$ 45	$ 48	$ 31	$ 34	$ 31
Cattle	753	467	457	650	838	813	1176	1215	1514	1280
Dairy products	1662	1209	1207	1633	1509	1170	1454	1720	2078	2475
Hogs	1164	950	635	1201	1248	926	984	1778	3104	3551
Sheep and wool	52	39	125	189	217	216	162	173	177	203
Poultry	140	139	221	394	520	344	339	583	722	688
Eggs	275	232	305	391	378	301	405	523	765	1040
Corn	37	39	96	171	190	142	128	88	111	137
Small grain	241	140	272	460	244	274	235	262	312	320
Other crops	163	170	155	165	185	157	250	287	457	520
Misc.	134	151	135	259	314	231	295	342	269	214
Income from labor off farm	102	112	132	172	219	136	148	146	119	146
Agric. Adjustment payments	0	0	204	176	223	336	324	331	343	190
(7) Total farm sales	$4,753	$3,678	$3,976	$5,926	$6,136	$5,091	$5,948	$7,479	$10,005	$10,795
(8) Increase in farm capital	617	-	470	728	-	891	1,017	1,432	1,498	1,167
(9) Family living from the farm	325	248	227	294	252	260	458	505	576	643
(10) Total farm receipts	5,695	3,926	4,673	6,948	6,388	6,242	7,423	9,416	12,079	12,605
(6) Total farm expenses	4,128	4,308	3,270	4,760	5,364	4,626	5,598	6,239	7,365	8,112
(11) Operator's labor earnings	1,567	- 382	1,403	2,188	1,024	1,616	1,825	3,177	4,714	4,493
MISCELLANEOUS ITEMS										
Yield per acre, corn (bu.)	44.8	43.5	44.5	39.1	51.7	59.0	56.3	57.6	61.2	51.8
Yield per acre, barley (bu.)	36.0	30.1	23.5	25.8	28.2	33.5	41.0	29.0	28.1	16.2
Yield per acre, oats (bu.)	46.0	48.1	34.8	42.0	35.9	48.5	58.2	31.5	49.3	42.7
Yield per acre, alfalfa (tons)	3.0	2.6	2.3	2.0	2.1	2.2	2.3	2.6	2.7	2.4
% high return crops	31.9	34.1	39.0	41.3	41.3	40.8	41.4	41.0	43.5	41.1
A.U. livestock per 100 A.	19.2	20.7	19.9	19.8	19.7	18.5	23.4	24.6	25.2	25.4
No. of work units	599	729	756	773	866	759	658	664	690	671
Work units per worker	310	339	328	340	360	349	292	301	316	305
Expenses per work unit	$1.76	$1.34	$1.18	$1.38	$1.44	$1.41	$1.66	$1.87	$2.23	$2.79
No. of work horses	5.4	5.4	5.2	4.6	4.4	4.1	4.1	4.0	3.9	3.8
No. of colts	.8	.8	.8	1.2	1.3	1.1	1.0	.9	.9	.7
No. of milk cows	14.2	17.1	18.5	17.8	18.6	17.2	17.1	17.4	18.1	17.5

Table 40. Summary by Years (Continued)

Miscellaneous items (Cont.)	Average 1928-29	Average 1930-32	Average 1933-35	Average 1936-37	1938	1939	1940	1941	1942	1943
No. of litters of pigs	9.3	11.7	8.7	9.0	11.1	11.5	12.1	13.8	15.7	18.1
Pounds of hogs produced	12,706	16,219	12,260	12,778	15,948	16,014	17,671	20,330	24,383	25,149
No. of head of sheep	7.0	11.5	17.4	17.8	23.3	16.2	18.6	16.1	16.2	15.2
No. of hens	136	156	183	172	187	177	197	197	219	246
Lbs. of B.F. per dairy cow	244	241	236	238	240	245	260	261	253	247
Lbs. of B.F. per dual pur.cow	-	-	-	-	-	-	181	203	189	182
No. of pigs per litter	6.3	6.2	6.1	6.4	6.7	6.3	6.3	6.3	6.3	6.0
No. of eggs laid per hen	95	112	122	130	135	126	131	142	146	147
PRICE RECEIVED PER:										
Lb. B.F. sold	$ .52	$ .30	$ .28	$ .38	$ .31	$ .28	$ .33	$ .39	$ .45	$ .55
Cwt. hogs sold	8.92	5.82	5.39	9.36	7.69	6.17	5.27	9.20	13.24	13.88
Cwt. feeder cattle sold	-	-	-	-	-	-	8.67	9.72	11.69	13.84
Lamb sold	9.78	4.64	5.55	7.16	6.04	6.48	6.69	8.72	-	-
Lb. wool sold	.36	.13	.21	.30	.18	.26	.31	.40	.41	.42
Doz. eggs sold	.28	.17	.16	.20	.18	.15	.17	.22	.29	.36
Lb. turkey sold	-	-	.20	.20	.20	.17	.16	.21	.29	.33
RETURN ABOVE FEED COST PER:										
Dairy cow	$76.50	$28.16	$32.76	$57.40	$47.89	$45.05	$58.05	$71.65	$84.86	$93.27
Dual purpose cow	-	-	-	-	-	-	31.69	52.01	55.88	57.81
Cwt. hogs prod.	1.50	.30	1.82	2.82	3.47	1.82	1.50	5.41	7.09	2.90
Head of sheep	5.50	-.07	2.24	3.58	1.28	3.18	3.43	5.48	5.77	4.51
Hen	1.82	1.13	1.05	.95	1.12	.97	.92	1.66	2.16	2.55
Cwt. turkeys prod.	-	-	11.59	9.10	12.38	8.27	6.30	10.72	16.56	14.89
FEED COST PER:										
Dairy cow	$69.50	$52.27	$43.37	$47.50	$40.55	$38.67	$43.22	$49.10	$58.29	$77.61
Dual purpose cow	-	-	-	-	-	-	36.29	39.50	50.39	62.90
Cwt. hogs produced	7.66	4.50	4.36	6.30	3.86	3.51	4.11	5.17	7.16	10.21
Head of sheep	2.82	2.26	2.59	2.50	2.37	2.33	2.61	2.57	3.01	4.34
Hen	1.62	1.09	1.36	1.82	1.30	1.23	1.36	1.80	2.27	3.03
Cwt. turkeys prod.	-	-	7.70	9.16	7.75	7.09	9.06	9.33	11.90	17.66
Horse	55.09	36.13	37.52	39.78	29.94	27.61	31.33	35.49	40.25	50.93
PRICE OF FEED:										
Shelled corn (per bu.)	$ .70	$ .49	$ .48	$ .75	$ .43	$ .36	$ .46	$ .52	$ .69	$ .91
Barley (per bu.)	.60	.36	.53	.60	.39	.30	.31	.38	.57	.79
Oats (per bu.)	.48	.25	.29	.32	.22	.23	.26	.32	.44	.62
Bran (per cwt.)	1.70	1.00	1.05	1.38	1.05	1.10	1.20	1.45	1.95	2.10
Oilmeal (per cwt.)	3.00	2.00	1.85	2.15	2.30	2.15	1.75	2.00	2.30	2.55
Alfalfa (per ton)	14.75	12.00	10.80	9.50	7.50	7.00	7.50	8.00	8.00	11.00

Footnote for pages 30, 31 and 32.

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 land were adjusted upward 10 per cent. 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 1943.

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 to 1934, $40 in 1935, $43 in 1936, $45 in 1937 to 1940, $50 in 1941, $60 in 1942, and $75 in 1943; and the board for hired labor was figured at $20 per month in the 1928 to 1930 period, $15 per month in 1931, $10 per month in 1932, 1933 and 1934, $15 per month in 1935, $18 per month in the years 1936 to 1940, $20 in 1941 and $25 in 1942 and 1943.

These adjustments should be considered in comparing 1943 results with previous years.

Several changes were made in the 1940 records. The value of the house which had previously been omitted from the farm business was included and a rental charge equal to 10 per cent of the average value of the house was included with the farm perquisites. The standards used in the calculation of work units were changed in accordance with new information made available. This latter change also affected the work units per worker and the factor of expense per work unit. The acres in protected woodlots, roads, waste and farmstead were omitted from the acreage used in the calculation of amount of livestock per 100 acres. Several new livestock statements were added. Cattle were classified into two groups "specialized dairy cattle" and "dual purpose cattle." Statements for beef breeding cattle, feeder cattle and feeder sheep were also included.