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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  
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  
1948

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Cooperator: \_\_\_\_\_

Mimeographed Report No. 174  
Division of Agricultural Economics  
University Farm  
St. Paul 1, Minnesota  
April 1949

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Twenty-first Annual Report of the Farm Management Service of Dakota, Dodge, Freeborn, Goodhue, LeSueur, Lower, Nicollet, Olmsted, Rice, Scott, Steele, Wabasha, Waseca, and Winona Counties for the year 1948.

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 and the United States Department of Agriculture.

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. Extension work in connection with the project is handled by S. B. Cleland and J. B. McNulty of the Agricultural Extension Division. Glen Myers is the field agent for this project. At the end of the year, S. A. Engene and W. E. McDaniel of the Division of Agricultural Economics aided in closing the records. County agricultural extension agents who cooperate in this project include C. O. Quie, V. Sander, R. E. Jacobs, G. J. Kanau, Russell Miller, F. L. Liebenstein, F. E. Wetherill, Ray Aune, Ed Sletton, C. Graham, J. R. Gute, Herbert Feldman, C. F. Murphy, and Norman Mindrum.

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 1948 were:

President: Vernon Lance, Rochester, Olmsted County;  
Vice President: Wilfred Denisen, Austin, Mower County;  
Secretary-Treasurer: Paul Tuttle, Medford, Steele County.

The board of directors included these officers and also the following: Sarah Holland, Dakota County; Wilbur Hindal, Dodge County; John Jerdee, Freeborn County; Joyce Ericson, Goodhue County; F. J. Gibbs, LeSueur County; Sidney Johnson, Nicollet County; John Holmes, Rice County; Herman Krueger, Scott County; Harvey Carlton, Wabasha County; Alfred Trahms, Waseca County; and George Rowekamp, Winona County.

The following tabulation shows by counties the number of records submitted in 1948:

Dakota	8	Mower	11	Steele	18
Dodge	13	Nicollet	9	Wabasha	14
Freeborn	17	Olmsted	14	Waseca	20
Goodhue	22	Rice	12	Winona	8
LeSueur	5	Scott	7	Total	178

The table on page 4 and succeeding pages show 173 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.

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 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 1. Monthly and Annual Precipitation

	Rochester		Albert Lea		Faribault	
	Precip- itation Inches	Departure from normal Inches	Precip- itation Inches	Departure from normal Inches	Precip- itation Inches	Departure from normal Inches
January	0.20	-0.90	0.07	-0.74	0.10	-0.58
February	2.00	+1.16	1.94	+1.03	2.16	+1.47
March	0.59	-0.73	0.21	-1.02	1.01	-0.10
April	2.55	+0.09	2.85	+0.45	2.52	+0.61
May	1.23	-2.57	2.65	-1.18	1.34	-1.86
June	6.33	+1.74	3.70	-0.88	2.76	-1.61
July	0.51	-2.65	1.76	-1.72	1.67	-1.68
August	4.94	+1.49	4.29	+0.64	8.26	+3.75
September	1.85	-1.63	2.99	-0.74	1.33	-2.02
October	1.00	-1.10	1.80	-0.33	1.30	-0.78
November	2.38	+0.81	3.02	+1.55	2.19	+0.85
December	2.17	+1.25	1.70	+0.75	0.99	+0.31
1948 Total	25.75	-3.04	26.98	-2.19	25.63	-1.64
1947 Total	33.97	+5.20	35.11	+5.94	32.06	+5.79
1946 Total	28.09	-0.68	36.09	+6.92	28.39	+2.12
1945 Total	34.16	+5.39	38.71	+9.54	36.34	+10.07
1944 Total	22.47	-6.30	30.95	+1.78	31.84	+5.57
1943 Total	23.50	-5.27	37.78	+8.61	28.12	+1.85
1942 Total	41.68	+12.91	31.22	+2.05	28.57	+2.30
1941 Total	29.80	+1.03	36.35	+7.18	23.08	-3.19

The spring season temperatures were somewhat above normal with weather conditions favorable for the seeding of small grains. The growth of vegetation was retarded by unusually dry weather in May although it facilitated the planting of corn and soybeans. Rain interfered with haying during the latter part of June. Meadows and pastures suffered from lack of moisture in July. High temperatures advanced growing crops rapidly, especially corn. Early sown small grains filled out well during the latter part of June and were not affected to any great extent by heat and dry weather in July. Excessively heavy rains occurred on August 9 and 10 in south central Minnesota. The months of September and October were very dry. Fall pastures were short and fall plowing was delayed. A hard freeze on October 16 ended the growing season. The damage was slight as most crops were matured and harvested.

Table 2. Summary of Farm Inventories, 1948\*

Items	Your farm		Average of 173 farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)			225	
Size of business (work units)**			577	
Dairy and dual purpose cows			\$1660	\$1798
Other dairy & dual purpose cattle			1020	1144
Beef cattle (incl. feeders)			474	621
Hogs			1700	1561
Sheep (including feeders)			211	129
Poultry (including turkeys)			354	296
Productive livestock (total)			5419	5549
Horses			142	125
Crop, seed, and feed			5754	5033
Power mach. (farm share)			1287	1908
Crop & general mach. (farm share)			2070	2809
Livestock equipment & supplies			607	622
Mach. & equipment (total)			3964	5339
Misc.			17	11
Buildings, fences, etc.			8270	9029
Land			9547	9547
Total farm capital			33113	34633

Items	35 most profitable farms		35 least profitable farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)	280		214	
Size of business (work units)**	727		505	
Dairy & dual purpose cows	\$1828	\$2204	\$1446	\$1480
Other dairy & dual purpose cattle	1261	1384	916	1033
Beef cattle (inc. feeders)	1115	1681	174	93
Hogs	2445	2168	1844	1535
Sheep (including feeders)	136	110	452	157
Poultry (including turkeys)	582	376	227	231
Productive livestock (total)	7367	7923	5059	4529
Horses	148	126	166	152
Crop, seed, and feed	7265	6692	6066	4527
Power mach. (farm share)	1351	2043	1224	2033
Crop & general mach.	2343	3352	2188	2965
Livestock equipment & supplies	604	597	578	569
Mach. & equipment (total)	4298	5992	3990	5567
Misc.	-	-	-	-
Buildings, fences, etc.	9772	10771	7181	8183
Land	12672	12672	8735	8735
Total farm capital	41522	44176	31197	31693

\*For the purpose of comparison, all the data shown in this report with the exception of Tables 5 and 6 are presented on a full-owner basis. The assets, expenses and receipts of the landlord were included in the records from rented farms.

\*\*See page 24 for an explanation of "work units."

Table 3. Summary of Farm Earnings (Cash Statement), 1948

Items	Your farm	Average of 173 farms	35 most profitable farms	35 least profitable farms
<b>FARM RECEIPTS</b>				
Dairy and dual-purpose cows		\$ 957	\$1132	\$ 654
Dairy products		4811	5234	3712
Other dairy & dual-purpose cattle		797	1019	594
Beef cattle (including feeders)		686	1605	280
Hogs		4222	6685	4000
Sheep and wool (including feeders)		299	155	705
Poultry (including turkeys)		596	1504	246
Eggs		1402	1690	1117
Horses		15	12	13
Corn		316	509	162
Small grain		1264	2328	1588
Other crops		911	1422	953
Machinery & equip. sold		360	542	358
Agricultural adjustment payments		76	62	74
Income from work off the farm		386	581	374
Miscellaneous		90	124	25
(1) Total farm sales		17188	24604	14855
(2) Increase in farm capital		1520	2654	496
(3) Family living from the farm		791	882	751
(4) Total farm receipts (1)+(2)+(3)		19499	28140	16102
<b>FARM EXPENSES</b>				
Dairy and dual-purpose cows bought		\$ 143	\$ 192	\$ 117
Other dairy & dual-pur.cattle bot.		201	259	148
Beef cattle bot (incl. feeders)		302	928	54
Hogs bought		199	241	191
Sheep bought (including feeders)		45	7	181
Poultry bought (including turkeys)		145	257	112
Horses bought		11	13	9
Misc. livestock expenses		257	348	191
Misc. crop expenses		933	1042	1109
Feed bought		2090	2832	1931
Custom work hired		507	636	351
Mech.pow.mach.(farm share)(new)		1021	1176	1207
Mech.pow.mach.(farm share)(upk.)		338	348	385
Mech.pow.(farm share)(gas,oil,etc.)		819	1004	827
Crop and general mach.(new)		1244	1598	1374
Crop and general mach.(upkeep)		229	258	237
Livestock equipment (new)		128	126	102
Livestock equipment (upkeep)		89	85	97
Buildings and fencing (new)		1205	1562	1408
Buildings and fencing (upkeep)		383	501	375
Hired labor		957	1271	1101
Taxes		465	593	425
General farm and insurance		164	211	165
(5) Total farm purchases		11875	15488	12097
(6) Decrease in farm capital		-	-	-
(7) Interest on farm capital		1694	2142	1572
(8) Unpaid family labor		544	651	578
(9) Board furnished hired labor		209	236	203
(10) Total farm.exp.(Sum of (5)to(9))		14322	18517	14450
(11) Operator's labor earnings(4)-(10)		5177	9623	1652

Table 4. Summary of Farm Earnings (Enterprise Statement) 1948\*

Items	Your farm	Average of 173 farms	35 most profitable farms	35 least profitable farms
<u>RETURNS AND NET INCREASES</u>				
Dairy and dual purpose cows		\$ 5716	\$ 6441	\$ 4295
Other dairy & dual pur. cattle		1264	1583	1008
Beef breeding herd		247	358	-
Feeder cattle		260	910	116
Hogs		4016	6286	3611
Sheep - farm flock		159	123	162
Sheep - feeders		12	-	59
Turkeys		241	911	49
Chickens		1670	1954	1320
All productive livestock		13585	18566	10620
Crops, seed and feed		-1333	-327	-1901
Agricultural conservation payments		76	62	74
Income from labor off the farm		225	377	171
Miscellaneous		200	214	166
(1) Total returns & net increases		12753	18892	9130
<u>EXPENSES AND NET DECREASES</u>				
Horses		\$ 108	\$ 116	\$ 109
Tractor		669	713	718
Truck		218	264	235
Auto. (farm share)		274	335	267
Gas engine and elect.exp.(F.share)		133	153	139
Hired power		231	297	159
Total power		1633	1878	1627
Crop and general machinery		619	657	622
Livestock equipment		189	186	199
Buildings, fencing and tiling		705	904	694
Misc. productive livestock expense		249	347	191
Labor		1858	2351	1983
Real estate taxes		376	485	343
Personal property tax		89	108	82
Insurance		60	84	64
General farm		104	127	101
Interest on farm capital		1694	2142	1572
(2) Total expenses & net decreases		7576	9269	7478
(3) Oper. labor earnings (1) -(2)		5177	9623	1652

\*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 4.



Table 5. Net Worth Statement for Those Farmers Who Kept a Complete Record of All Assets and Liabilities, 1948 (Operator's Share)

	Your Farm		43 Owners	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total acres in farm			177.7	
Owned			177.7	
Rented			-	
Total farm capital			\$28562	\$30578
Accounts receivable			199	82
Stocks and bonds			3552	3986
Life insurance			1078	1168
Outside real estate			692	776
Other outside investments			552	451
Total outside investments			5874	6381
Cash on hand and in bank			1653	1481
Other household & personal assets			1279	1566
Total cash, household & personal assets			2932	3047
TOTAL ASSETS			37567	40088
Federal Land Bank Mortgage			414	424
Other mortgages on land operated			3169	3135
Mortgages on other real estate			265	214
Production Credit Association			134	205
Sealed Grain			-	37
Other chattel mortgages			429	201
Notes payable			896	1218
Accounts payable			171	303
TOTAL LIABILITIES			5478	5737
Farmer's net worth			32089	34351
Gain in net worth				+2262

  

	19 part-owners*		25 Renters**	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total acres in farm	256.0		195.5	
Owned	150.5		-	
Rented	105.5		195.5	
Total farm capital	\$27364	\$28885	\$10737	\$11807
Accounts receivable	226	229	360	356
Stocks and bonds	1498	1675	1162	1665
Life insurance	333	374	687	773
Outside real estate	-	-	624	624
Other outside investments	443	505	76	89
Total outside investments	2274	2554	2549	3151
Cash on hand and in bank	1303	1612	1118	1147
Other household & personal assets	1519	1749	1658	1746
Total cash, household & personal assets	2822	3361	2776	2893
TOTAL ASSETS	32686	35029	16422	18207
Federal Land Bank Mortgage	535	525	-	-
Other mortgages on land operated	3014	2756	-	-
Mortgages on other real estate	-	-	157	157
Production Credit Association	234	362	-	-
Sealed Grain	-	112	-	58
Other chattel mortgages	454	550	571	498
Notes payable	2074	1770	631	653
Accounts payable	197	210	903	783
TOTAL LIABILITIES	6508	6285	2262	2149
Farmer's net worth	26178	28744	14160	16058
Gain in net worth		+2566		+1898

\* 12 rented for cash, 3 cash and crop share and 4 crop share

\*\*13 rented for cash, 2 cash and crop share, and 10 livestock share.

Table 6. Summary of Farm Earnings by Tenure, 1948 (Operator's Share)

	Your farm	43 Owners	19 part- owners	25 renters
<b>FARM RECEIPTS</b>				
Dairy and dual purpose cows		\$ 827	\$ 926	\$ 545
Dairy products		4464	4073	3527
Other dairy and dual purpose cattle		750	682	539
Beef cattle (including feeders)		705	1038	125
Hogs		3519	4626	3281
Sheep and wool (including feeders)		565	157	89
Poultry (including turkeys)		667	230	441
Eggs		1520	1054	1141
Horses		16	16	14
Corn		228	147	193
Small grain		1080	1382	752
Other crops		890	796	257
Machinery & equipment sold		240	435	195
Agricultural adjustment payments		76	88	56
Income from work off the farm		388	439	311
Misc.		51	79	12
(1) Total farm sales		\$15986	\$16168	\$11478
(2) Increase in farm capital		2016	1521	1070
(3) Family living from the farm		840	730	727
(4) Total farm rec. (1)+(2)+(3)		\$18842	\$18419	\$13275
<b>FARM EXPENSES</b>				
Dairy and dual purpose cows bot.		\$ 72	\$ 219	\$ 60
Other dairy & dual pur. cattle bot.		132	228	130
Beef cattle bot. (including feeders)		58	371	12
Hogs bot.		139	248	256
Sheep bot (including feeders)		150	6	4
Poultry bot (including turkeys)		152	81	122
Horses bot		19	2	-
Misc. livestock expenses		255	218	175
Misc. crop expenses		946	949	581
Feed bot		1978	1842	1808
Custom work hired		493	527	387
Mech. power mach. (farm share) (new)		1085	938	514
Mech. power mach. (farm share) (upkeep)		330	387	261
Mech. power (farm share) (gas, oil, etc.)		696	937	600
Crop and general mach. (new)		1088	1395	945
Crop and general mach. (upkeep)		193	250	179
Livestock equipment (new)		93	165	132
Livestock equipment (upkeep)		103	66	93
Land, buildings & fencing (new)		2485	742	102
Buildings and fencing (upkeep)		355	332	130
Hired labor		784	1082	527
Taxes (real estate & pers. property)		368	312	81
General farm and insurance		163	161	101
Cash rent		-	619	879
Interest paid		218	206	82
(5) Total farm purchases		\$12355	\$12283	\$ 8161
(6) Decrease in farm capital		-	-	-
(7) Interest on farm capital		1261	1200	482
(8) Unpaid family labor		353	282	281
(9) Board furnished hired labor		167	272	170
(10) Total farm exp. (Sum of (5) to (9))		\$14136	\$14037	\$ 9094
(11) Operator's labor earn. (4) - (10)		4706	4382	4181
(12) Ret. cap. & family lab. (7)+(8)+(11)		6320	5864	4944

Table 7. Household and Personal Expenses for  
Those Farms Which Kept Complete Accounts of These Expenses, 1948

Items	Your farm	Average of 93 farms	19 most profit-able farms	19 least profit-able farms
Number of persons - family		4.1	4.1	4.0
Number of adult equiv. - family		3.1	3.1	3.1
others*		.6	.8	.4
Food and meals bought		\$658	\$726	\$583
Operating and supplies		283	350	239
Clothing and clothing materials		308	320	258
Personal care, personal spending		78	79	48
Furnishings and equipment		333	395	200
Education, recreation and development		168	94	235
Medical care and health insurance		219	310	170
Church, welfare, gifts		261	410	265
Personal share of auto expense		131	118	119
Household share of elect. & gas eng. exp.		62	72	64
H.H.&pers. shr. of new auto, gas eng. & motors bot		165	87	243
<b>Total cash living expenses</b>		<b>\$2666</b>	<b>\$2961</b>	<b>\$2424</b>
State and federal income taxes		501	763	381
Insurance		214	204	192
<b>Total household and personal cash exp.</b>		<b>\$3381</b>	<b>\$3928</b>	<b>\$2997</b>
Food furnished by the farm		532	591	520
Fuel furnished by the farm		19	39	11
House rental		234	267	171
<b>Total cash expenses &amp; perquisites</b>		<b>\$4166</b>	<b>\$4825</b>	<b>\$3699</b>
Investments and savings		\$511	\$669	\$566
Receipts:				
Sale of investments		\$ 20		\$100
Misc. income		294	263	314

\*Hired help or others boarded.

Table 8. Family Living From the Farm, 1948

Items	Your farm	35 most profit-able		35 least profit-able		Average 173 farms	35 most profit-able	35 least profit-able
		Average 173 farms	profit-able farms	profit-able farms	Your farm			
Adult equiv.- family	_____	3.1	3.3	3.0	_____			
- others	_____	.6	.7	.8	_____			
Whole milk	_____	1265 qts.	1364	1170	_____	\$99.52	\$115.02	\$94.32
Skim milk	_____	130 qts.	183	93	_____	1.69	3.54	2.05
Cream	_____	89 pts.	122	106	_____	23.75	33.13	29.34
Farm made butter	_____	1 lb.	5	2	_____	1.10	4.36	1.06
Beef	_____	508 lbs.	576	525	_____	101.48	126.69	100.10
Hogs	_____	463 lbs.	533	485	_____	104.72	119.46	111.55
Sheep	_____	- lbs.	-	-	_____	.09	-	-
Poultry	_____	135 lbs.	177	125	_____	33.13	39.63	32.33
Eggs	_____	207 doz.	231	185	_____	81.54	93.30	72.37
Potatoes	_____	7 bu.	6	7	_____	10.43	10.24	9.52
Vegetables & fruits	_____				_____	67.24	60.29	57.77
Farm fuel	_____	3 cds.	3	1	_____	18.99	26.06	10.77
Rental vl. of house	_____				_____	246.86	250.22	229.36
Total	_____				_____	790.54	881.94	750.54

CUMULATIVE EFFECT OF EXCELLING IN A NUMBER OF MANAGEMENT FACTORS

Studies of earnings of farmers in this area show that there are seven major management factors causing variations in earnings among farmers within a given year. These seven factors are (1) crop yields, (2) choice of crops, (3) returns from livestock (4) amount of livestock, (5) size of business, (6) work accomplishment per worker, and (7) control over expenses. The combined or cumulative influence of these seven management factors on earnings is shown in Table 9. The farmer's earnings are determined to a considerable extent by his accomplishments in these seven factors.

Table 9. 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 is in proportion to the average operator's labor earnings	Average operator's labor earnings
None or 1	12	_____	xxxxxxxxxxxxxxxx	\$2515
2	35	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	3930
3	40	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	4296
4	44	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	5386
5	29	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	7395
6 or 7	13	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	8051

The array in Table 9 indicates that it will be worth while for each cooperator to study carefully his ranking on pages 10 and 11, and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.

Table 10. Measures of Farm Organization and Management Efficiency, 1948

measures used in chart on page 11	Your farm	Average of 173 farms	35 most profit- able farms	35 least profit- able farms
Operator's Labor Earnings	\$ _____	\$5177	\$9623	\$1652
(1) Crop yields*	_____	100	104	94
(2) % of tillable land in high ret. crops**	_____	51.0	52.0	49.0
(3) Ret. for \$100 feed to prod. livestock***	_____	100	115	92
(4) Prod. livestock units per 100 acres****	_____	22.2	24.0	22.0
(5) Size of business - work units	_____	577	727	505
(6) Work units per worker	_____	288	330	252
(7) Pcw., mach., equip., & bldg. exp. per work unit	\$ _____	\$5.62	\$5.07	\$6.37
Measures and items related to some of the above measures:				
(3) Index of return for \$100 feed from:				
Dairy cattle (see pages 16 & 17)	_____	100	118	91
Dual purpose cattle (see pages 18&19)	_____	100	117	98
Beef breeding herd (see page 20)	_____	100	124	-
Feeder cattle (see page 20)	_____	100	110	92
Hogs (see page 15)	_____	100	111	93
Native sheep (see page 21)	_____	100	115	111
Turkeys (see page 23)	_____	100	-	-
Chickens (see page 22)	_____	100	101	92
(4) Number of animal units prod. livestock	_____	40.8	52.4	34.8
(5) Work units on crops	_____	146	185	146
Work units on productive livestock	_____	393	479	333
Other work units	_____	38	63	26
(6) Number of family workers	_____	1.4	1.4	1.3
Number of hired workers	_____	.6	.8	.7
Total number of workers	_____	2.0	2.2	2.0
(7) Power expense per work unit	\$ _____	\$2.92	\$2.60	\$3.32
Crop mach. expense per work unit	_____	1.11	.95	1.25
Livestock equip. exp. per work unit	_____	.34	.28	.40
Building exp. per work unit	_____	1.25	1.24	1.40

\*Given as a percentage of the average

\*\*Crops are marked on page 12 as (A), (B), (C), and (D). All of the 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 10, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the 173 farms included in this summary are located between the dotted lines across the center of this page.

Oper. labor earnings	Crop Yields	High return crops	Return from productive livestock	Pr. l.s. units per 100 A.	Work units	Work units per worker	Pow., mach., eq. & bldg. exp. per work unit
\$11600	140	75.0	140	38.0	895	450	\$1.60
10800	135	72.0	135	36.0	855	430	2.10
10000	130	69.0	130	34.0	815	410	2.60
9200	125	66.0	125	32.0	775	390	3.10
8400	120	63.0	120	30.0	735	370	3.60
7600	115	60.0	115	28.0	695	350	4.10
6800	110	57.0	110	26.0	655	330	4.60
6000	105	54.0	105	24.0	615	310	5.10
5200	100	51.0	100	22.0	575	290	5.60
4400	95	48.0	95	20.0	535	270	6.10
3600	90	45.0	90	18.0	495	250	6.60
2800	85	42.0	85	16.0	455	230	7.10
2000	80	39.0	80	14.0	415	210	7.60
1200	75	36.0	75	12.0	375	190	8.10
400	70	33.0	70	10.0	335	170	8.60
-400	65	30.0	65	8.0	295	150	9.10

Table 11. Distribution of Acres in Farm, 1948

Crop: (A), (B), (C) and (D) refer to ranking used in calculating % of tillable land in High Return Crops (see page 10)	No. growing this crop	Your farm	Average of 173 farms	35 most profitable farms	35 least profitable farms
Canning peas (A)	21	_____	2.3	2.3	3.4
Flax (C)	50	_____	6.4	11.5	9.9
Soybeans (C)	59	_____	7.1	13.5	6.7
Barley (D)	58	_____	5.4	6.4	6.5
Oats and barley (D)	24	_____	2.2	1.0	1.4
Oats (D)	167	_____	35.5	46.5	30.6
Oats and wheat (D)	31	_____	2.7	4.7	2.5
Wheat (D)	55	_____	3.0	5.7	1.9
Rye, millet and buckwheat (D)	15	_____	.5	.3	.9
Total small grain and peas	172	_____	65.1	91.9	63.8
Sugar beets, hybrid seed corn, potatoes and truck crops (A)	31	_____	1.5	1.6	2.9
Corn grain (A)	172	_____	39.8	55.1	33.0
Corn silage (B)	148	_____	9.5	9.7	8.9
Sweet corn (B)	7	_____	.6	.9	-
Corn fodder (B)	17	_____	.4	.2	.3
Total cultivated crops	173	_____	51.8	67.5	45.1
Alfalfa hay (A)	151	_____	20.6	23.0	19.7
Red clover hay (B)	40	_____	3.5	5.1	1.4
Soybean hay (C)	16	_____	.5	.4	.2
Mixed legumes & non-legumes (C)	26	_____	3.1	4.1	3.6
Legumes for seed (C)	13	_____	.4	.7	.2
Timothy and/or brome hay (D)	23	_____	1.1	1.5	1.6
Other annual hay (D)	4	_____	.2	-	.3
Total tillable land in hay	173	_____	29.4	34.8	27.0
Alfalfa and mixtures incl. alf. (A)	81	_____	7.7	9.9	3.3
Sweet clover pasture (B)	3	_____	.3	-	.3
Other legumes and mixtures (C)	51	_____	4.5	6.6	4.6
Sudan grass or rape pasture (C)	29	_____	.9	.8	.6
Other tillable pasture (D)	63	_____	7.2	7.9	7.3
Total tillable land in pasture	142	_____	20.6	27.2	16.1
Tillable land not cropped (D)	10	_____	.7	-	1.9
Total tillable land	173	_____	167.6	221.4	153.9
Phalaris hay (non-tillable)	5	_____	1.1	1.2	3.6
Wild hay (non-tillable)	53	_____	2.9	1.7	3.2
Non-tillable pasture	135	_____	28.0	23.3	27.0
Timber (not pastured)	71	_____	7.0	10.3	10.2
Roads and waste		_____	11.8	13.7	10.0
Farmstead		_____	6.7	8.2	6.0
Total acres in farm		_____	225.1	279.8	213.9
Per cent land tillable		_____	74.5	79.1	71.9
Per cent tillable land in high ret. crops		_____	51.0	52.0	49.0

Table 12. Crop Yields Per Acre, 1948

Crop	Your farm	Average 173 farms	35 most profitable farms	35 least profitable farms
Canning peas, value above seed cost	\$ _____	\$47.84	\$45.52	\$53.13
Flax, bu.	_____	12.5	14.4	11.9
Soybeans, bu.	_____	18.5	20.0	15.4
Barley, bu.	_____	32.6	35.3	29.9
Oats and barley, bu.	_____	44.6	48.8	28.4
Oats, bu.	_____	55.0	60.5	52.4
Oats and wheat, bu.	_____	46.3	41.6	56.4
Wheat, bu.	_____	22.9	21.7	20.5
Rye, bu.	_____	18.9	25.0	15.9
Corn, grain, bu.	_____	60.3	63.5	56.1
Corn and cane silage, tons	_____	9.3	10.1	8.2
Sweet corn, tons	_____	3.0	3.1	-
Corn and cane fodder, tons	_____	2.7	3.5	2.7
Alfalfa hay, tons	_____	2.3	2.2	2.2
Red clover hay, tons	_____	1.6	1.7	1.8
Soybean hay, tons	_____	1.6	1.5	1.8
Mixed legume & non-legume hay, tons	_____	1.4	1.5	1.4
Legumes for seed, lbs.	_____	110	-	-
Timothy and/or brome hay, tons	_____	1.3	1.2	1.1
Other annual hay, tons	_____	1.4	-	-
Phalaris hay or non-tillable land, tons	_____	1.0	.8	-
Wild hay, tons	_____	.9	1.4	.9

Table 13. Average Price of Feeds, 1948

Item	Value	Item	Value
Ear corn, per bu.	\$1.63	Alfalfa hay, per ton	\$20.00
Oats, per bu.	.88	Red or alsike clov. hay, per ton	17.00
Barley, per bu.	1.59	Soybean hay, per ton	17.00
Wheat, per bu.	2.20	Timothy, per ton	11.60
Soybeans, per bu.	3.08	Wild hay, per ton	10.00
Bran, per cwt.	2.85	Corn fodder, per ton	9.00
Linseed oilmeal, per cwt.	4.50	Corn silage, per ton	5.85
Soybean oilmeal, per cwt.	4.65	Pasture, per mo. per an. unit	1.25
Tankage, per cwt.	6.10	Skim milk, per cwt.	.40



Table 14. Feed Costs for Horses, 1948

Items	Your farm	Average of 150 farms
Feed per horse, lbs.:#		
Grain	_____	411
Hay	_____	3095
Fodder and stover	_____	200
Feed cost per horse:*		
Grain	_____	\$12.20
Roughage	_____	23.05
Pasture	_____	6.57
Total feed cost	_____	41.82
Number of work horses	_____	2.6
Number of colts	_____	.2

\*Two colts equal one horse

Table 15. Power and Machinery Expenses Per Crop Acre, 1948

Items	Your farm	Average of 173 farms	35 most profitable farms	35 least profitable farms
Crop acres per farm	_____	150.3	197.1	142.7
Tractor and horse exp. per crop acre	_____	\$5.42	\$4.44	\$6.13
Crop & gen.mach.exp. per crop acre	_____	4.32	3.77	4.54

#### TOTAL RETURNS AND FEED COST FROM YOUR LIVESTOCK ENTERPRISES

The total "return over feed costs" for each class of livestock is shown in Table 16. This differs from the "return over feed" shown in the enterprise statement in that it is the total for each class of livestock instead of a return "per head", "per unit" or "per 100 pounds". These data indicate the relative importance of different classes of livestock as a source of income and as a market for feed. The total return is the same as the returns and net increases shown on page 9. The return over feed is not a net return, but rather the amount available from the gross income, after paying the feed bill, to cover the outlay for hired labor, power, equipment, taxes, insurance, interest, and veterinary bills and to provide a return for the use of family labor and capital.

Feed is the largest single item of cost for all classes of livestock. However, the proportion of the total cost represented by feed varies considerably between classes of livestock. Feed makes up approximately 45 per cent of the total costs of maintaining dairy cattle and poultry, 50 per cent in the case of a farm flock of sheep and 75 to 90 per cent for hogs, feeder cattle and feeder lambs. Consequently, it is necessary to secure a relatively higher return over feed from dairy cattle and poultry than from the other livestock enterprises in order to be able to cover all the costs other than feed.

Table 16. Total Feed Costs and Returns From Your Livestock Enterprises, 1948

	Dairy or dual purpose cattle			Beef	Feeder cattle
	Cows	Other	All	breeding herd	
Total returns	_____	_____	_____	_____	_____
Total feed cost	_____	_____	_____	_____	_____
Total return over feed	_____	_____	_____	_____	_____
		Sheep			
		Farm	Feeders	Turkeys	Chickens
	Hogs	flock			
Total returns	_____	_____	_____	_____	_____
Total feed cost	_____	_____	_____	_____	_____
Total return over feed	_____	_____	_____	_____	_____

Table 17. Feed Costs and Returns from Hogs, 1948

Items	Your farm	Average of 151 farms	30 farms highest in returns above feed	30 farms lowest in returns above feed
Feed per cwt. hogs produced, lbs.:				
Corn	_____	327	243	454
Small grain	_____	125	113	160
Commercial feeds	_____	39	33	34
Total concentrates	_____	491	389	648
Skim milk, buttermilk and whey	_____	87	94	109
Feed cost per cwt. hogs produced:				
Concentrates	\$ _____	\$14.50	\$11.35	\$19.22
Skim milk, buttermilk and whey	_____	.35	.35	.44
Pasture	_____	.19	.21	.15
TOTAL FEED COSTS	\$ _____	\$15.04	\$11.91	\$19.81
Net increase in value per cwt hogs prod.	_____	20.56	22.63	18.98
RETURNS ABOVE FEED COST PER CWT. HOGS PROD.	\$ _____	5.52	10.72	-.83
RETURNS FOR \$100 OF FEED	\$ _____	\$143	\$191	\$97
Price received per cwt. hogs sold	\$ _____	22.95	24.00	22.01
No. of spring litters raised	_____	8.8	9.3	8.4
No. of fall litters raised	_____	5.4	5.4	3.5
Total no. of litters raised	_____	14.2	14.7	11.9
No. of pigs born per litter	_____	7.9	8.4	7.2
No. of pigs weaned per litter	_____	6.4	7.1	5.7
Pounds of hogs produced	_____	22015	25538	16439

Table 18. Factors of Cost and Returns from Dairy Cows, 1948

Items	Your farm	Average of 147 farms	29 farms highest in butterfat per cow	29 farms lowest in butterfat per cow
Pounds of butterfat per cow	_____	284	373	197
% butterfat in milk	_____	3.7	3.7	3.7
Price rec. per lb. B.F. sold (cents)	_____	108.8	113.0	103.0
As manufacturing cream (cents)	_____	94.6	95.5	92.1
Other (cents)	_____	111.4	115.5	112.6
Feeds per cow, lbs:				
Corn	_____	1111	1416	761
Small grain	_____	968	1289	586
Commercial feeds	_____	456	765	125
Legume hay	_____	3118	3359	3383
Other hay	_____	1087	914	706
Fodder and stover	_____	180	51	134
Total concentrates	_____	2535	3470	1472
Total dry roughage	_____	4385	4324	4223
Silage	_____	6646	6942	6194
Total digestible nutrients*	_____	5453	5988	4275
T.D.N. per lb. B.F.	_____	19.2	16.1	21.7
% T.D.N. that is protein	_____	14.0	14.6	14.5
Feed cost per cow:				
Concentrates	\$ _____	\$80.55	\$111.67	\$45.36
Roughages	_____	55.41	58.17	53.83
Pasture	_____	6.16	5.82	6.55
TOTAL FEED COSTS	\$ _____	\$142.12	\$175.66	\$105.74
Value of produce per cow:				
B.F. sales	\$ _____	\$288.55	\$396.81	\$181.11
Dairy produce used in house	_____	8.93	7.84	11.20
Milk to livestock	_____	16.60	17.68	20.41
Net increases in value of cows	_____	31.89	29.13	28.62
TOTAL VALUE PRODUCED	\$ _____	\$345.97	\$451.46	\$241.34
RETURNS ABOVE FEED COST PER COW	\$ _____	\$203.85	\$275.80	\$135.60
RETURNS FOR \$100 OF FEED	\$ _____	\$257.00	\$265.00	\$259.00
Feed cost per lb. B.F. (cents)	_____	50.0	47.1	53.7
% fall freshening	_____	56	59	52
Number of cows**	_____	18.1	19.6	15.2

\*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 19. Feed Costs and Returns from Other Dairy Cattle, 1948

Items	Your farm	Average of 146 farms*	29 farms highest in butterfat per cow	28 farms lowest in butterfat per cow*
Feeds per head, lbs.:				
Concentrates	_____	577	761	318
Hay and fodder	_____	1677	1696	1566
Silage	_____	2258	2161	2469
Skim milk	_____	288	295	458
Whole milk	_____	347	365	368
TOTAL FEED COSTS PER HEAD	\$ _____	\$60.65	\$62.75	\$78.16
Net inc. in value of other dairy cattle	_____	80.68	90.71	108.72
RETURNS ABOVE FEED COST PER HEAD	\$ _____	20.03	27.96	30.56
RETURNS FOR \$100 OF FEED	\$ _____	143.00	145.00	163.00
Number of head of other dairy cattle	_____	18.4	20.2	14.2

Table 20. Feed Costs and Returns From All Dairy Cattle, 1948

Items	Your Farm	Average of 147 farms	29 farms highest in butterfat per cow	29 farms lowest in butterfat per cow
Feeds per animal unit, lbs.:				
Concentrates	_____	2063	2760	1175
Hay and fodder	_____	3945	3966	3829
Silage	_____	5871	6021	5645
TOTAL FEED COSTS PER ANIMAL UNITS	\$ _____	\$120.20	\$146.62	\$ 90.33
Value of produce per animal unit:				
Dairy products	\$ _____	199.18	266.16	135.73
Net increase in val. of dairy cattle	_____	69.05	78.80	65.32
TOTAL VALUE PRODUCED	\$ _____	\$268.22	\$344.96	\$201.05
RETURNS ABOVE FEED PER ANIMAL UNIT	\$ _____	\$148.02	\$198.34	\$110.72
RETURNS PER \$100 OF FEED	\$ _____	\$233.00	\$237.00	\$233.00
Animal units of dairy cattle	_____	27.5	30.0	22.3

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

Table 21. Factors of Cost and Returns from Dual Purpose Cows, 1948

Items	Your farm	Average of 15 farms	7 farms highest in butterfat per cow	7 farms lowest in butterfat per cow
Pounds of butterfat per cow	_____	186	222	150
% butterfat in milk	_____	3.7	3.7	3.7
Price received per lb. B.F. sold (cents)	_____	96.2	100.5	92.5
As manufacturing cream (cents)	_____	90.2	90.4	89.8
Other (cents)	_____	112.7	113.9	108.8
Feeds per cow, lbs.:				
Corn	_____	680	847	548
Small grain	_____	469	613	354
Commercial feeds	_____	304	345	283
Legume hay	_____	2493	2906	1935
Other hay	_____	1240	918	1487
Fodder and stover	_____	480	210	819
Total concentrates	_____	1453	1805	1185
Total dry roughage	_____	4213	4034	4241
Silage	_____	5567	5277	5312
Total digestible nutrients*	_____	4069	4277	3746
T.D.N. per lb. B.F.	_____	21.9	19.3	25.0
% T.D.N. that is protein	_____	12.8	14.0	11.7
Feed cost per cow:				
Concentrates	\$ _____	\$45.49	\$55.27	\$38.10
Roughages	_____	47.42	47.99	43.62
Pasture	_____	7.21	7.30	7.32
TOTAL FEED COSTS	\$ _____	\$100.12	\$110.56	\$ 89.04
Value of produce per cow:				
B.F. sales	_____	\$154.84	\$193.71	\$118.15
Dairy produce used in house	_____	9.95	9.58	10.01
Milk to livestock	_____	26.47	30.04	20.64
Net increases in value of cows	_____	39.12	56.45	24.62
TOTAL VALUE PRODUCED	\$ _____	230.38	289.78	173.42
RETURNS ABOVE FEED COST PER COW	\$ _____	\$130.26	\$179.22	\$ 84.38
RETURNS FOR \$100 OF FEED	\$ _____	\$247.00	\$269.00	\$230.00
Feed cost per lb. B.F. (cents)*	_____	53.8	49.8	59.4
% fall freshening	_____	42	48	28
Number of cows	_____	14.1	15.1	13.3

\*Not including nutrients received from pasture.

Table 22. Feed Costs and Returns from Other Dual Purpose Cattle, 1948

Items	Your farm	Average of 15 farms	7 farms highest in returns above feed	7 farms lowest in returns above feed
Feeds per head, lbs.:				
Concentrates	_____	502	397	604
Hay and fodder	_____	1451	1194	1726
Silage	_____	2267	2052	2225
Skim milk	_____	654	737	663
Whole milk	_____	343	236	466
TOTAL FEED COST PER HEAD	\$ _____	\$49.97	\$42.11	\$57.60
Net increase in value	_____	\$77.24	\$89.05	\$65.74
RETURNS ABOVE FEED COST PER HEAD	\$ _____	27.27	46.94	8.14
RETURNS FOR \$100 OF FEED	_____	\$167.00	\$218.00	\$118.00
Number of head	_____	21.6	21.5	22.8

Table 23. Feed Costs and Returns From All Dual Purpose Cattle, 1948

Items	Your farm	Average of 15 farms	7 farms highest in returns above feed	7 farms lowest in returns above feed
Pounds of butterfat per cow	_____	186	214	155
Feeds per animal unit, lbs.:				
Concentrates	_____	1107	855	1313
Hay and fodder	_____	3412	3395	3577
Silage	_____	4755	3269	5944
TOTAL FEED COSTS PER ANIMAL UNIT	\$ _____	\$87.05	\$82.21	\$90.69
Value of produce per animal unit:				
Dairy products	_____	\$98.68	\$116.66	\$73.95
Net increase in value	_____	87.65	110.84	69.61
TOTAL VALUE PRODUCED	_____	\$186.33	\$227.50	\$143.56
RETURNS ABOVE FEED PER ANIMAL UNIT	\$ _____	99.28	145.29	52.87
RETURNS FOR \$100 OF FEED	\$ _____	\$228.00	\$299.00	\$159.00
Animal units	_____	25.3	21.1	30.0

Table 24. Feed Costs and Returns from Beef Cattle, 1948

Items	Your farm	Average of all farms
Beef breeding herd: No. of farms:		10
Feeds per animal unit, lbs:		
Concentrates	_____	826
Legume hay	_____	2299
Other hay	_____	851
Fodder and stover	_____	227
Silage	_____	4180
Feed cost per animal unit:		
Concentrates	\$ _____	\$26.61
Roughages	_____	38.42
Pasture	_____	6.54
TOTAL FEED COSTS	\$ _____	\$71.57
Value of produce per animal unit:		
Dairy products	\$ _____	\$6.05
Net increase in value of animals	_____	143.36
TOTAL VALUE PRODUCED	_____	\$149.41
RETURNS ABOVE FEED COST PER ANIMAL UNIT	_____	\$77.84
RETURNS FOR \$100 OF FEED	\$ _____	\$222.00
Number of cows and herd bulls	_____	15.0
Number of animal units in the herd	_____	28.0
Lbs. beef produced	_____	12468
<hr/>		
Feeder cattle: No. of farms:		13
Feeds per cwt. beef produced, lbs.:		
Corn	_____	628
Small grain	_____	103
Commercial feeds	_____	33
Legume hay	_____	413
Other hay	_____	173
Fodder and stover	_____	57
Total concentrates	_____	764
Total dry roughages	_____	643
Silage	_____	723
Feed cost per cwt. beef produced		
Concentrates	\$ _____	\$22.96
Roughages	_____	7.09
Pasture	_____	.36
TOTAL FEED COSTS	\$ _____	\$30.41
Net increase in value of feeders	\$ _____	\$37.40
RETURNS ABOVE FEED COST PER CWT.	_____	
BEEF PRODUCED	\$ _____	6.99
RETURNS FOR \$100 OF FEED	_____	\$138.00
Price recd. per cwt. beef sold in 1948	_____	28.16
Price paid per cwt. beef bought	_____	26.39
No. of animal units	_____	21.8
Pounds of beef produced	_____	9937

Table 25. Feed Costs and Returns from a Farm Flock of Sheep, 1948

Items	Your farm	Average of 37 farms	12 farms highest in returns above feed	12 farms lowest in returns above feed
Feeds per head, * lbs.:				
Concentrates	_____	59	46	64
Legume hay	_____	226	149	252
Other hay	_____	58	69	78
Fodder and stover	_____	11	12	5
Silage	_____	166	137	236
Feed cost per head:				
Concentrates	\$ _____	\$1.84	\$1.42	\$2.01
Roughages	_____	2.92	2.15	3.48
Pasture	_____	1.18	1.12	1.16
TOTAL FEED COSTS	\$ _____	5.94	4.69	6.65
Value of produce per head:				
Wool	_____	\$3.20	\$3.34	\$3.24
Net increase in value of sheep	_____	10.80	15.96	4.85
TOTAL VALUE PRODUCED	\$ _____	14.00	19.30	8.09
RETURNS ABOVE FEED COST PER HEAD	_____	8.06	14.61	1.44
RETURNS FOR \$100 OF FEED	\$ _____	\$296	\$497	\$140
Price per cwt. of lambs sold	\$ _____	\$22.13	\$23.88	\$20.37
Price per lb. wool sold (cts.)	_____	46.3	46.7	46.4
Pounds of wool per sheep sheared	_____	8.2	8.6	8.0
Number of ewes kept for lambing	_____	30	32	28
% lamb crop**	_____	107	105	99
% death loss**	_____	9.5	7.7	12.7
Pounds of sheep produced	_____	2477	3274	1467
No. of head of sheep*	_____	48.8	52.3	43.5

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

\*\*Lambs which die during month of birth are not included.



Table 26. Feed Costs and Returns from Chickens, 1948

Items	Your farm	Average of 150 farms	30 farms highest in return above feed	30 farms lowest in return above feed
Feed per hen, lbs.:				
Grain	_____	92	94	99
Commercial feeds	_____	38	40	40
Total concentrates	_____	130	134	139
Skim milk and buttermilk	_____	3	-	
TOTAL FEED COST PER HEN	\$ _____	\$4.78	\$4.91	\$5.14
Value of produce per hen:				
Eggs sold and used in house	\$ _____	\$6.36	\$7.73	\$4.96
Net increase in value of chickens	_____	.94	1.80	.49
TOTAL VALUE PRODUCED	_____	7.30	9.53	5.45
RETURNS ABOVE FEED COST PER HEN	\$ _____	2.52	4.62	.31
RETURNS FOR \$100 OF FEED	\$ _____	\$158	\$202	\$108
Price rec'd per doz. eggs sold (cents)	_____	42.9	43.6	41.7
Eggs laid per hen	_____	179	213	144
Ave. no. of hens on farm during year	_____	263	263	221
% of hens that are pullets	_____	82	90	77
% of death loss of hens	_____	13	11	15
Number of chicks started	_____	387	438	285
Pounds of poultry produced	_____	1110	1592	635

Table 27. Feed Costs and Returns for Turkeys, 1948

Items	Your farm	Average of 5 farms
Feed per cwt. turkeys produced, lbs.:		
Grain	_____	335
Commercial feeds	_____	238
Total concentrates	_____	573
Feed cost per cwt. turkeys produced	\$ _____	\$18.43
Net increase in value per cwt. turkeys produced	\$ _____	\$45.91
RETURNS ABOVE FEED COST PER CWT. TURKEYS PRODUCED	\$ _____	\$27.48
RETURNS FOR \$100 FEED	\$ _____	\$256
No. of poults put on feed	_____	1364
Price paid per poult purchased (cts.)	_____	80.8
% death loss	_____	23.1
Price rec'd per lb. turkeys sold (cts.)	_____	48.0
Weight per bird sold (lbs.)	_____	15.9
Pounds of turkeys produced	_____	17885

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 28.

Table 28. 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	14.0 per cow	Small grain	.7 per acre
Other dairy & du.pur.cattle	4.0 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	.35 per 100 lbs.	Corn, husked	1.1 per acre
Sheep - farm flock	1.8 per an. unit*	Corn, hogged	.7 per acre
Sheep - feeders	.4 per 100 lbs.	Corn, shredded	2.2 per acre
Hogs	.3 per 100 lbs.	Corn silage	1.7 per acre
Turkeys	.7 per 100 lbs.	Corn fodder	1.0 per acre
Hens	22.0 per 100 hens	Alfalfa hay	.9 per acre
Canning peas	2.0 per acre	Scybean hay	1.4 per acre
Scybeans for grain	.7 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.

Table 29. Summary by Years

	Average 1928-29	Average 1930-32	Average 1933-39	Average 1940-41	1942	1943	1944	1945	1946	1947	1948
Number of farms	148	157	139	172	201	177	161	170	170	170	173
Acres in farm	170	194	214	226	230	224	229	224	222	223	225
Crop acres in farm	116	134	144	148	150	148	145	145	149	146	150
Farm inventory	\$24574	\$21767	\$19341	\$24080	\$26088	\$27278	\$28034	\$27634	\$29020	\$31183	\$33873
Farm Earnings (see page 28)											
<b>FARM EXPENSES</b>											
Cattle	\$ 141	\$ 79	\$ 177	\$ 514	\$ 444	\$ 374	\$ 357	\$ 372	\$ 333	\$ 436	\$ 646
Hogs bought	85	69	59	91	203	205	182	168	158	226	199
Sheep bought	6	10	73	64	53	62	80	108	86	65	45
Poultry bought	37	39	70	109	132	167	194	210	195	149	145
Horses bought	36	32	40	30	34	34	30	17	17	11	11
Misc. livestock expense	66	72	82	90	123	161	155	165	198	250	257
Misc. crop expenses	186	177	197	192	284	364	472	463	551	780	933
Feed bought	440	324	467	710	1416	1799	1730	1764	1920	2224	2090
Custom work hired	-	-	-	119	164	185	240	273	363	400	507
Power mach. (new & exp.)	399	340	483	712	696	647	818	855	1135	1515	2178
Mach. and equip. (new)	190	132	231	383	464	348	384	515	524	823	1372
Mach. and equip. (upkeep)	72	57	63	79	166	188	208	231	257	303	318
Bldgs., fencing (new)	130	98	191	332	245	361	382	249	431	897	1205
Bldgs., fencing (upkeep)	52	29	66	124	226	228	236	200	277	354	383
Hired labor	272	252	350	429	571	693	805	663	740	893	957
Taxes and insurance	298	338	280	278	313	312	332	338	384	425	525
General farm	30	31	32	42	46	63	67	72	79	94	104
Total farm purchases	\$2,440	\$2,079	\$2,861	\$4,298	\$5,580	\$6,191	\$6,672	\$6,663	\$7,648	\$9,845	\$11,875
Decrease in farm capital	-	755	-	-	-	-	511	238	-	-	-
Board to hired labor	102	93	125	143	177	171	156	108	147	201	209
Interest on farm capital	1,228	1,089	967	1,204	1,304	1,364	1,402	1,382	1,451	1,559	1,694
Unpaid family labor	358	292	233	274	304	386	395	441	506	582	544
Total farm expenses	\$4,128	\$4,308	\$4,186	\$5,919	\$7,365	\$8,112	\$9,136	\$8,832	\$9,752	\$12,187	\$14,322

Table 29. Summary by Years (continued)

	Average 1928-29	Average 1930-32	Average 1933-39	Average 1940-41	1942	1943	1944	1945	1946	1947	1948
<b>FARM RECEIPTS</b>											
Cattle	\$ 753	\$ 467	\$ 617	\$ 1,196	\$1,514	\$1,280	\$1,492	\$1,439	\$1,520	\$2,108	\$2,440
Dairy products	1,662	1,209	1,366	1,587	2,078	2,475	2,961	3,403	4,192	4,129	4,811
Hogs	1,164	950	926	1,381	3,104	3,551	3,168	2,573	2,863	4,362	4,222
Sheep and wool	52	39	169	168	177	203	214	230	265	224	299
Poultry	140	139	331	461	722	688	814	787	954	609	596
Eggs	275	232	340	464	765	1,040	1,022	1,265	1,172	1,410	1,402
Horses	30	30	46	40	34	31	28	23	20	23	15
Corn	37	39	137	108	111	137	143	175	207	402	316
Small grain	241	140	322	248	312	320	261	239	372	904	1,264
Other crops	163	170	162	268	457	520	762	776	705	1,033	911
Income labor off farm	102	112	157	147	119	146	145	168	168	173	225
Agric. adj. payments	0	0	218	328	343	190	81	48	67	65	76
Misc.	134	151	210	318	269	214	290	300	431	505	611
Total farm sales	\$4,753	\$3,678	\$5,001	\$6,714	\$10,005	\$10,795	\$11,381	\$11,426	\$12,936	\$15,947	\$17,188
Increase in farm cap.	617	-	534	1,224	1,498	1,167	-	-	1,706	3,542	1,520
Fam. living from farm	325	248	254	482	576	643	646	639	700	741	791
Total farm receipts	5,695	3,926	5,789	8,420	12,079	12,605	12,027	12,065	15,342	20,230	19,499
Total farm expenses	4,128	4,308	4,186	5,919	7,365	8,112	9,136	8,832	9,752	12,187	14,322
Oper. lab. earnings	1,567	-382	1,603	2,501	4,714	4,493	2,891	3,233	5,590	8,043	5,177

**MISCELLANEOUS ITEMS**

Yield per A. corn (bu.)	44.8	43.5	46.1	57.0	61.2	51.8	51.6	34.0	50.7	41.6	60.3
Yield per A. barley (bu.)	36.0	30.1	26.3	35.0	28.1	16.2	9.8	32.7	31.0	29.4	32.6
Yield per A. oats (bu.)	46.0	48.1	39.0	44.8	49.3	42.7	39.1	48.3	43.1	47.5	55.0
Yield per A. alfalfa (tons)	3.0	2.6	2.2	2.4	2.7	2.4	2.1	2.5	2.2	2.4	2.3
% high return crops	31.9	34.1	40.2	41.2	43.5	41.1	49.3	47.1	50.3	50.2	51.0
A.U. livestock per 100 A.	19.2	20.7	19.6	24.0	25.2	25.4	23.8	23.4	22.8	22.6	22.2
No. of work units	599	729	777	661	690	671	666	645	634	573	577
Work units per worker	310	339	339	296	316	305	303	323	317	287	288
Expenses per work unit	\$1.76	\$1.34	\$1.30	\$1.72	\$2.23	\$2.79	\$3.21	\$3.32	\$3.81	\$4.74	\$5.62
No. of work horses	5.4	5.4	4.8	4.0	3.9	3.8	3.5	3.2	2.8	2.5	2.3
No. of colts	.8	.8	1.0	1.0	.9	.7	.7	.5	.3	.2	.2
No. of milk cows	14.2	17.1	18.1	17.2	18.1	17.5	17.9	17.3	16.7	16.9	16.7

Table 29. Summary by Years (continued)

Misc. Items (cont.)	Average 1928-29	Average 1930-32	Average 1933-39	Average 1940-41	1942	1943	1944	1945	1946	1947	1948
No. of litters of pigs	9.3	11.7	9.5	13.0	15.7	18.1	12.1	12.3	9.1	11.0	12.4
Lbs. of hogs produced	12,706	16,219	13,471	19,000	24,383	25,149	20,398	18,669	15,516	17,686	19,215
No. of head of sheep	7.0	11.5	18.2	17.4	16.2	15.2	12.7	11.8	11.3	11.0	10.8
No. of hens	136	156	184	197	219	246	250	247	240	239	230
Lbs. B.F. per dairy cow	244	241	238	260	253	247	237	254	266	281	284
Lbs. B.F. per dual pur. cow	-	-	-	192	189	182	169	173	170	180	186
Pigs weaned per litter	6.3	6.2	6.3	6.3	6.3	6.0	6.1	6.3	6.5	6.2	6.4
No. of eggs laid per hen	95	112	127	136	146	147	157	168	173	177	179
<b>PRICE RECEIVED PER:</b>											
Lb. B.F. sold as cream	\$ .52	\$ .30	\$ .31	\$ .36	\$ .45	\$ .55	\$ .61	\$ .65	\$ .82	\$ .84	\$ .95
Dwt. hogs sold	8.92	5.82	6.96	7.24	13.24	13.88	13.08	14.24	17.23	24.54	22.95
Cwt. feeder cattle sold	-	-	-	9.20	11.69	13.84	13.84	13.86	15.53	21.94	28.16
Lb. wool sold	.36	.13	.24	.36	.41	.42	.43	.44	.46	.37	.46
Doz. eggs sold	.28	.17	.17	.20	.29	.36	.32	.37	.35	.42	.43
Lb. turkey sold	-	-	.19	.18	.29	.33	.34	.33	.33	.36	.48
<b>RETURN ABOVE FEED COST PER:</b>											
Dairy cow	\$76.50	\$28.16	\$43.72	\$64.85	\$84.86	\$93.27	\$101.31	\$125.85	\$178.55	\$153.06	\$203.85
Dual purpose cow	-	-	-	41.85	55.88	57.81	60.36	74.15	110.58	106.77	130.26
Cwt. hogs produced	1.50	.30	2.34	3.46	7.09	2.90	2.77	4.26	7.04	8.19	5.52
Head of sheep	5.50	-.07	2.62	4.46	5.77	4.51	3.98	5.05	8.52	7.33	8.06
Hen	1.82	1.13	1.02	1.29	2.16	2.55	1.82	2.66	2.05	1.34	2.52
Cwt. turkeys prod.	-	-	10.51	8.51	16.56	14.89	19.24	14.30	9.85	4.74	27.48
<b>FEED COST PER:</b>											
Dairy cow	\$69.50	\$52.27	\$43.47	\$46.16	\$58.29	\$77.61	\$87.44	\$95.32	\$106.99	\$141.42	\$142.12
Dual purpose cow	-	-	-	37.90	50.39	62.90	71.32	69.93	69.97	93.83	100.12
Cwt. hogs produced	7.66	4.50	4.72	4.64	7.16	10.21	10.93	9.97	12.77	17.99	15.04
Head of sheep	2.82	2.26	2.56	2.59	3.01	4.34	3.96	4.60	4.40	5.54	5.94
Hen	1.62	1.09	1.47	1.58	2.27	3.03	3.42	3.56	4.11	5.53	4.78
Cwt. turkeys prod.	-	-	8.04	9.20	11.90	17.66	16.35	15.28	19.93	27.70	18.43
Horse	55.09	36.13	35.67	33.41	40.25	50.93	49.60	43.79	41.67	48.56	41.82
<b>PRICE OF FEED:</b>											
Corn (per bu.)	\$ .70	\$ .49	\$ .53	\$ .49	\$ .69	\$ .91	\$ .98	\$ .88	\$ 1.17	\$ 1.76	\$ 1.63
Barley (per bu.)	.60	.36	.50	.34	.57	.79	.92	.94	1.22	1.82	1.59
Oats (per bu.)	.48	.25	.28	.29	.44	.62	.68	.64	.71	.92	.88
Bran (per cwt.)	1.70	1.00	1.14	1.32	1.95	2.10	2.20	2.20	2.70	3.20	2.85
Oilmeal (per cwt.)	3.00	2.00	2.05	1.88	2.30	2.55	2.82	2.82	3.40	4.50	4.50
Alfalfa (per ton)	14.75	12.00	9.45	7.75	8.00	11.00	15.00	15.00	15.50	21.50	20.00

Footnote for pages 24, 25 and 26.

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 decreased 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 1948.

The charges for unpaid family labor and board for hired labor were also changed from year to year. The rates used for the period 1928 to 1948 were as follows:

<u>Year</u>	<u>Unpaid family labor</u>	<u>Board for hired labor</u>	<u>Year</u>	<u>Unpaid family labor</u>	<u>Board for hired labor</u>
1928	\$60	\$20	1939	\$45	\$18
1929	60	20	1940	45	18
1930	60	20	1941	50	20
1931	40	15	1942	60	25
1932	30	10	1943	75	25
1933	30	10	1944	85	25
1934	30	10	1945	90	25
1935	40	15	1946	100	30
1936	43	18	1947	125	36
1937	45	18	1948	125	36
1938	45	18			

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 the 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.

The crop ratings used in calculating the percentage of the tillable land in high return crops were changed considerably in 1944.

These adjustments should be considered in comparing 1948 results with previous years.