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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
1951

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Cooperator: _____

Mimeographed Report No. 195
Division of Agricultural Economics
University Farm
St. Paul 1, Minnesota
April 1952

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Twenty-fourth 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 1951.

Prepared by T. R. Nodland, H. G. Routhe 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. Harvey Bjerke was the field agent for this project. At the end of the year, B. F. Stanton, S. A. Engene, R. M. Dennistoun and Neils Rorholm 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. F. Jacobs, G. J. Kunau, Russell Miller, Don Hasbargen, F. L. Liebenstein, F. E. Wetherill, Ray Aune, Warren Liebenstein, Chester Graham, J. R. Gute, Herbert Feldman, C. F. Murphy, Norman Mindrum, and Esbern Johnson.

The Southeast Minnesota Farm Management Association was organized in 1939 by the farmers cooperating in the S. F. 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 1951 were:

President: R. L. Zimmerman, Racine, Mower County
Vice President: Wesley Pierson, Aldine, Freeborn County
Secretary-Treasurer: George Williamson, Shakopee, Scott County

The board of directors included these officers and also the following: Sarah Holland, Dakota County; Harry Morton, Dodge County; Cameron Hayward, Goodhue County; Emil Dietz, Le Sueur County; Sidney Johnson, Nicollet County; Earl Kleinwort, Olmsted County; George Little, Rice County; Alvin Ebel, Scott County; Levern Wilker, Steele County; James Walker, Wabasha County; Ray Miller, Waseca County; and Marvin Simon, Winona County.

The following tabulation shows by counties the number of records submitted in 1951:

Dakota	8	Mower	8	Steele	17
Dodge	13	Nicollet	13	Wabasha	10
Freeborn	19	Olmsted	15	Waseca	16
Goodhue	21	Rice	10	Winona	9
Le Sueur	5	Scott	5	Total	169

The table on page 4 and succeeding pages show 162 farms. Seven 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 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 1. Monthly and Annual Precipitation

	Rochester		Austin		Faribault	
	Precipitation	Departure from normal	Precipitation	Departure from normal	Precipitation	Departure from normal
	Inches	Inches	Inches	Inches	Inches	Inches
January	.85	-.25	.83	-.06	.64	-.04
February	2.03	+1.21	2.35	+1.43	1.90	+1.21
March	4.01	+2.53	4.23	+2.58	2.92	+1.81
April	3.98	+1.62	4.05	+1.73	2.84	+.93
May	3.17	-.61	3.16	-1.45	3.97	+.77
June	5.50	+1.03	3.97	-1.25	6.74	+2.37
July	8.14	+4.87	1.91	-1.17	8.46	+5.11
August	4.56	+1.14	5.32	+1.07	6.25	+2.84
September	2.82	-.45	3.20	-.78	5.54	+2.09
October	2.73	+.77	2.14	+.28	1.83	-.25
November	1.80	+.26	1.47	-.11	1.67	+.33
December	.80	-.18	1.13	+.26	.97	+.29
1951 Total	40.39	+11.94	33.76	+2.53	43.73	+17.46
1950 Total	23.23	-5.54	23.57	-7.66	23.79	-2.48
1949 Total	26.60	-2.17	24.12	-7.11	26.47	+.20
1948 Total	25.75	-3.04	27.57	-3.66	25.63	-1.64

Very unusual weather and crop growing conditions characterized the year 1951 in Southeastern Minnesota. The winter during the early part of the year was the coldest since 1936 - 37 and the wettest since 1938 - 39. Southeast Minnesota during March had the greatest snowfall recorded by the weather bureau since records were started in 1891. These heavy snows caused heavy flooding and a wet soil condition which prevented spring work in the fields from starting before the 20th of April. The late spring and summer months were characterized by heavy and frequent rains, very cool weather, much less than normal sunshine and very slow development of corn and soybeans. This was the coolest summer since 1927 and the wettest since 1944. Because of the rains first cutting hay crops suffered considerable damage thru spoilage and poor quality. Pastures were good to excellent thruout the summer and fall months. Harvesting, and combining of small grains progressed slowly and although yields were average and higher the quality was low. Corn continued to develop slowly thruout the summer and fall with about 75% in the early dent stage when the killing frost hit on September 28th. Considerable soft corn was picked and subsequent spoilage was common. This was the third coldest fall on record.

Table 2. Summary of Farm Inventories, 1951*

Items	Your farm		Average of 162 farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)			222	
Size of business (work units)**			594	
Dairy and dual purpose cows			\$ 2237	\$ 2588
Other dairy & dual purpose cattle			1483	1843
Beef cattle (incl. feeders)			1217	1790
Hogs			1520	1585
Sheep (including feeders)			165	254
Poultry (including turkeys)			307	309
Productive livestock (total)			6929	8369
Horses			75	67
Crop, seed, and feed			5043	5354
Power mach. (farm share)			2919	3166
Crop and general mach. (farm share)			3508	3958
Livestock equipment & supplies			677	702
Mach. & equipment (total)			7104	7826
Miscellaneous			12	12
Buildings, fences, etc.			11499	12098
Land			10139	10139
Total farm capital			\$40801	\$43865

Items	32 most profitable farms		32 least profitable farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)	293		196	
Size of business (work units)**	750		491	
Dairy & dual purpose cows	\$ 2613	\$ 3151	\$ 1653	\$ 2037
Other dairy & dual purpose cattle	2072	2419	1086	1320
Beef cattle (incl. feeders)	2419	3089	1589	2217
Hogs	1875	1997	1576	1501
Sheep	208	282	141	332
Poultry	278	278	240	268
Productive livestock (total)	9465	11216	6285	7675
Horses	96	90	87	81
Crop, seed, and feed	7270	8110	3987	3783
Power mach. (farm share)	3475	3777	2953	3262
Crop & general machinery	4526	5031	3245	3734
Livestock equipment & supplies	763	711	708	780
Mach. & equipment (total)	8764	9519	6906	7776
Miscellaneous	-	-	-	-
Buildings, fences etc.	12726	12964	10460	11233
Land	13328	13328	9211	9211
Total farm capital	51649	55227	36936	39759

*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), 1951

Items	Your farm	Average of 162 farms	32 most profitable farms	32 least profitable farms
FARM RECEIPTS				
Dairy and dual-purpose cows	_____	\$ 1325	\$ 1747	\$ 1250
Dairy products	_____	4500	6057	2620
Other dairy & dual-purpose cattle	_____	900	1187	912
Beef cattle (including feeders)	_____	1326	3483	1053
Hogs	_____	4646	5677	4275
Sheep and wool (including feeders)	_____	177	245	184
Poultry (including turkeys)	_____	359	412	195
Eggs	_____	1522	1510	1002
Horses	_____	10	7	15
Corn	_____	444	930	292
Small grain	_____	461	747	285
Other crops	_____	739	1063	552
Machinery & equip. sold	_____	539	827	419
Agricultural adjustment payments	_____	60	78	48
Income from work off the farm	_____	370	517	267
Miscellaneous	_____	115	61	33
(1) Total farm sales	_____	17493	24548	13402
(2) Increase in farm capital	_____	3064	3578	2823
(3) Family living from the farm	_____	816	891	705
(4) Total farm receipts (1)+(2)+(3)	_____	\$21373	\$29017	\$16930
FARM EXPENSES				
Dairy and dual-purpose cows bought	_____	\$ 194	\$ 64	\$ 454
Other dairy & dual-pur. cattle bought	_____	196	147	359
Beef cattle bought (incl. feeders)	_____	881	1873	784
Hogs bought	_____	219	203	367
Sheep bought (including feeders)	_____	54	54	201
Poultry bought (including turkeys)	_____	145	148	112
Horses bought	_____	5	2	8
Misc. livestock expenses	_____	327	421	259
Misc. crop expenses	_____	876	1100	739
Feed bought	_____	2299	2621	1873
Custom work hired	_____	522	515	387
Mech. power mach. (farm share) (new)	_____	1007	1279	1109
Mech. power mach. (farm share) (unkp.)	_____	273	348	287
Mech. power (farm share) (gas, oil, etc.)	_____	914	1164	858
Crop and general mach. (new)	_____	1224	1552	1131
Crop and general mach. (unkp.)	_____	236	298	194
Livestock equipment (new)	_____	156	91	195
Livestock equipment (unkeep)	_____	110	122	95
Buildings and fencing (new)	_____	1218	867	1228
Buildings and fencing (unkeep)	_____	359	448	273
Hired labor	_____	885	1256	776
Taxes	_____	583	772	533
General farm and insurance	_____	216	271	178
(5) Total farm purchases	_____	12899	15616	12400
(6) Decrease in farm capital	_____	-	-	-
(7) Interest on farm capital	_____	2117	2672	1917
(8) Unpaid family labor	_____	505	539	488
(9) Board furnished hired labor	_____	189	216	192
(10) Total farm exp. (sum of (5) to (9))	_____	\$15710	\$19043	\$14997
(11) Operator's labor earnings (4) - (10)	_____	\$ 5663	\$ 9974	\$ 1933

Table 4. Summary of Farm Earnings (Enterprise Statement) 1951*

Items	Your farm	Average of 162 farms	32 most profitable farms	32 least profitable farms
RETURNS AND NET INCREASES				
Dairy and dual purpose cows	_____	\$5446	\$7416	\$3444
Other dairy & dual pur. cattle	_____	2089	2854	1618
Beef breeding herd	_____	293	57	733
Feeder cattle	_____	675	1976	173
Hogs	_____	4622	5912	3924
Sheep - farm flock and feeders	_____	212	264	174
Turkeys	_____	126	175	4
Chickens	_____	1719	1731	1188
All productive livestock	_____	15182	20385	11258
Crops, seed and feed	_____	-1350	-282	-1842
Agricultural conservation payments	_____	60	77	48
Income from labor off the farm	_____	232	336	129
Miscellaneous	_____	277	257	223
(1) Total returns & net increases	_____	14401	20773	9816
EXPENSES AND NET DECREASES				
Horses	_____	\$61	\$76	\$78
Tractor	_____	750	921	768
Truck	_____	283	359	276
Auto (farm share)	_____	333	374	371
Gas engine and elect. exp. (f. share)	_____	184	217	163
Hired power	_____	236	253	149
Total power	_____	1847	2200	1805
Crop and general machinery	_____	864	1072	770
Livestock equipment	_____	232	252	214
Buildings, fencing and tiling	_____	816	970	634
Misc. productive livestock expense	_____	322	421	259
Labor	_____	1741	2169	1573
Real estate taxes	_____	458	622	424
Personal property tax	_____	125	150	109
Insurance	_____	88	115	63
General farm	_____	128	156	115
Interest on farm capital	_____	2117	2672	1917
(2) Total expenses & net decreases	_____	8738	10799	7883
(3) Oper. labor earnings (1)-(2)	_____	5663	9974	1933

*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, 1951 (Operator's Share)

	Your Farm		44 Owners	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total acres in farm			183.3	
Owned			183.3	
Rented			-	
Total farm capital			\$34877	\$37432
Accounts receivable			415	419
Stocks and bonds			2073	1974
Life insurance			1286	1364
Outside real estate			1655	2934
Other outside investments			368	394
Total outside investments			5382	6666
Cash on hand and in bank			462	751
Other household & personal assets			2055	2192
Total cash, household & personal assets			2517	2943
TOTAL ASSETS			43191	47460
Federal Land Bank Mortgage			1021	982
Other mortgages on land operated			3247	3151
Mortgages on other real estate			231	774
Production Credit Association			349	330
Sealed Grain			105	29
Other chattel mortgages			422	420
Notes payable			1395	1343
Accounts payable			400	404
TOTAL LIABILITIES			7170	7433
Farmer's net worth			36021	40027
Gain in net worth				+4006
	17 part-owners*		16 Renters**	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total acres in farm	228.1		193.5	
Owner	132.0		-	
Rented	96.1		193.5	
Total farm capital	\$32431	\$36237	\$12338	\$14366
Accounts receivable	825	972	555	998
Stocks and bonds	1151	1136	990	1006
Life insurance	1282	1204	829	979
Outside real estate	56	59	10	10
Other outside investments	536	557	253	269
Total outside investments	3025	2956	2082	2264
Cash on hand and in bank	1008	1432	925	773
Other household & personal assets	2202	2467	2719	2863
Total cash, household & personal assets	3210	3899	3644	3636
TOTAL ASSETS	39491	44064	18619	21264
Federal Land Bank Mortgage	-	-	-	-
Other mortgages on land operated	4603	4383	-	-
Mortgages on other real estate	-	-	-	-
Production Credit Association	-	-	490	511
Sealed grain	64	-	112	65
Other chattel mortgages	712	1332	552	847
Notes payable	3150	3155	1618	1450
Accounts payable	341	361	344	533
TOTAL LIABILITIES	8870	9231	3116	3406
Farmer's net worth	30621	34833	15503	17858
Gain in net worth		+4212		+2355

* 11 rented for cash, 3 cash and crop share, 2 crop share and 2 livestock and crop share.

**9 rented for cash, 3 cash and crop share, and 9 livestock share,

Table 6. Summary of Farm Earnings by Tenure, 1951 (Operator's Share)

	Your farm	44 Owners	17 part- owners	16 renters
FARM RECEIPTS				
Dairy and dual purpose cows		\$ 1176	\$1727	\$ 752
Dairy products		4397	4639	3498
Other dairy and dual purpose cattle		801	964	547
Beef cattle (including feeders)		974	1127	213
Hogs		4264	4388	2664
Sheep and wool (including feeders)		131	188	95
Poultry (including turkeys)		293	539	129
Eggs		1388	1652	1006
Horses		43	4	5
Corn		373	72	194
Small grain		349	459	214
Other crops		450	755	341
Machinery & equipment sold		418	648	347
Agricultural adjustment payments		57	58	31
Income from work off the farm		478	371	532
Miscellaneous		29	237	34
(1) total farm sales		15621	17828	10602
(2) increase in farm capital		2555	3806	2028
(3) family living from the farm		809	754	726
(4) total farm rec. (1)+(2)+(3)		18985	22388	13356
FARM EXPENSES				
Dairy and dual purpose cows bought		\$ 241	\$ 355	\$ 80
Other dairy & dual pur. cattle bought		240	239	166
Beef cattle bought (including feeders)		680	918	33
Hogs bought		228	107	277
Sheep bought (including feeders)		36	3	10
Poultry bought (including turkeys)		112	198	56
Horses bought		13	-	4
Misc. livestock expenses		312	273	196
Misc. crop expenses		837	905	427
Feed bought		2149	2707	1343
Custom work hired		567	668	464
Mech. power mach. (farm share) (new)		823	1286	1304
Mech. power mach. (farm share) (upkeep)		294	295	227
Mech. power (farm share)(gas, oil, etc.)		794	924	722
Crop and general mach. (new)		1060	1496	698
Crop and general mach. (upkeep)		215	272	202
Livestock equipment (new)		194	111	67
Livestock equipment (upkeep)		182	156	79
Land, buildings & fencing (new)		647	1138	104
Buildings and fencing (upkeep)		343	347	101
Hired labor		724	999	544
Taxes (real estate & pers. property)		443	378	95
General farm and insurance		195	222	133
Cash rent		-	398	697
Interest paid		282	266	123
(5) Total farm purchases		11611	14661	8152
(6) Decrease in farm capital		-	-	-
(7) Interest on farm capital		1526	1451	544
(8) Unpaid family labor		342	136	259
(9) Board furnished hired labor		142	271	168
(10) Total farm exp. (sum of (5) to (9))		13621	16519	9123
(11) Operator's labor earn. (4) - (10)		5364	5869	4233
(12) Ret. cap. & family lab.(7)+(8)+(11)		7232	7456	5036

Table 7. Household and Personal Expenses for
Those Farms Which Kept Complete Accounts of These Expenses, 1951

Items	Your farm	Average of 79 farms	16 most profitable farms	16 least profitable farms
Number of persons - family	_____	4.3	5.0	4.5
Number of adult equiv. - family other*	_____	3.1	3.7	3.3
	_____	.5	.6	.4
Food and meals bought	_____	\$714	\$727	\$632
Operating and supplies	_____	291	254	285
Clothing and clothing materials	_____	322	328	281
Personal care, personal spending	_____	96	159	68
Furnishings and equipment	_____	278	359	258
Education, recreation and development	_____	147	166	111
Medical care and health insurance	_____	255	304	188
Church, welfare, gifts	_____	263	359	160
Personal share of auto expense	_____	124	139	84
Household share of elect. & gas eng. exp.	_____	75	96	51
H.H. & pers. shr. of new auto, gas eng. & motors bot.	_____	166	225	179
Total cash living expenses	_____	2731	3116	2297
State and Federal income taxes	_____	\$186	\$232	\$159
Insurance	_____	211	211	193
Total household and personal cash exp.	_____	3128	3559	2649
Food furnished by the farm	_____	493	652	490
Fuel furnished by the farm	_____	15	6	2
House rental	_____	297	307	217
Total cash expenses & perquisites	_____	3933	4524	3358
Purchase of stocks, bonds, and other invest.	_____	168	359	203
Receipts:				
Income from investments	_____	228	371	179
Miscellaneous income	_____	170	12	123

*Hired help or others boarded.

Table 8. Family Living From the Farm, 1951

Items	Your farm	Average 162 farms	Your farm	Average 162 farms
Adult equiv. - family	_____	3.2	_____	
- others	_____	.6	_____	
Whole milk	_____	1261 qts.	_____	\$90.02
Skim milk	_____	107 qts.	_____	1.15
Cream	_____	62 pts.	_____	14.56
Farm made butter	_____	-	_____	.03
Beef	_____	416 lbs.	_____	103.56
Hogs	_____	436 lbs.	_____	85.09
Sheep	_____	1 lb.	_____	.12
Poultry	_____	133 lbs.	_____	30.19
Eggs	_____	198 doz.	_____	79.54
Potatoes	_____	6 bu.	_____	7.42
Vegetables & fruits	_____		_____	66.64
Farm fuel	_____	1 cd.	_____	6.27
Rental vl. of house	_____		_____	331.71
Total	_____		_____	816.30

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	17	_____	xxxxxxxxxxxxxxxxxxxx	\$3562
2	28	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	4746
3	37	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	5136
4	40	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	6147
5	30	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	7121
6 or 7	10	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	7443

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, 1951

Measures used in chart on page 11	Your farm	Average of 162 farms	32 most profitable farms	32 least profitable farms
Operator's labor earnings	\$ _____	\$5663	\$9974	\$1933
(1) Crop yields*	_____	100	101	94
(2) % of tillable land in high ret. crops**	_____	63.2	61.6	60.5
(3) Ret. for \$100 feed to prod. livestock***	_____	100	103	89
(4) Prod. livestock units per 100 acres****	_____	29.6	29.4	27.9
(5) Size of business - work units	_____	594	750	491
(6) Work units per worker	_____	313	341	273
(7) Pow., mach., equip., & bldg. exp. per work unit	_____	\$6.54	\$6.01	\$7.45
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	102	87
Dual purpose cattle (see pages 18 & 19)	_____	100	99	105
Beef breeding herd (see page 20)	_____	100	-	-
Feeder cattle (see page 20)	_____	100	120	95
Hogs (see page 15)	_____	100	104	88
Native sheep (see page 21)	_____	100	87	87
Turkeys (see page 24)	_____	100	-	-
Chickens (see page 22 & 23)	_____	100	106	93
(4) Number of animal units prod. livestock	_____	56.3	75.7	48.4
(5) Work units on crops	_____	147	196	127
Work units on productive livestock	_____	408	498	342
Other work units	_____	39	56	22
(6) Number of family workers	_____	1.3	1.4	1.3
Number of hired workers	_____	.6	.8	.5
Total number of workers	_____	1.9	2.2	1.8
(7) Power expense per work unit	\$ _____	\$3.24	\$2.96	\$3.90
Crops mach. expense per work unit	_____	1.49	1.42	1.66
Livestock equip. exp. per work unit	_____	.41	.35	.47
Building exp. per work unit	_____	1.40	1.28	1.42

*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 162 farms included in this summary are located between the dotted lines across the center of this page.

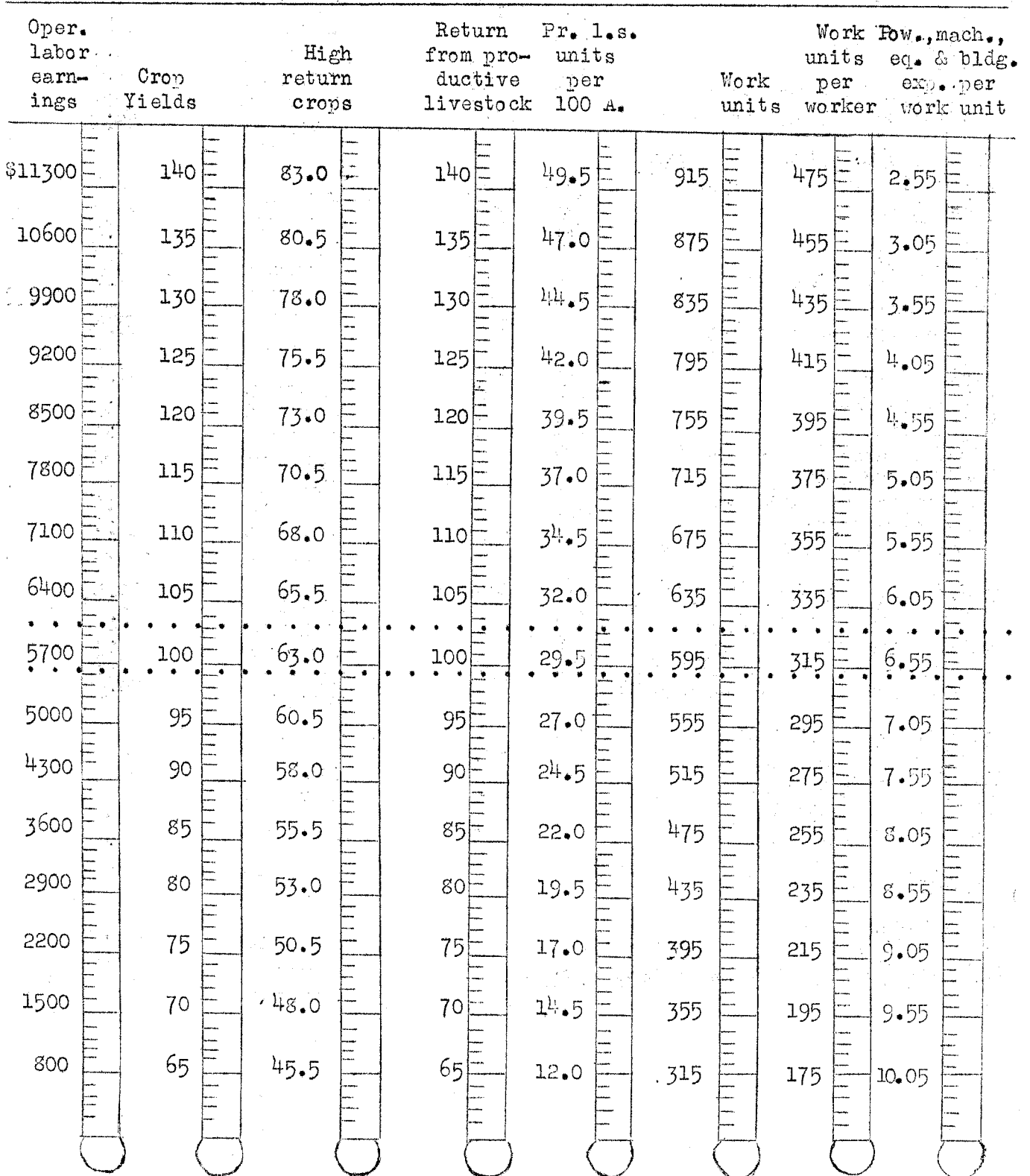


Table 11. Distribution of Acres in Farm, 1951

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 162 farms
Canning peas	(A) 17	_____	1.5
Flax	(C) 20	_____	2.0
Barley	(D) 48	_____	5.0
Oats and barley	(D) 20	_____	2.8
Oats	(D) 151	_____	32.7
Oats and wheat	(D) 9	_____	1.0
Wheat	(D) 29	_____	2.2
Rye, millet and buckwheat	(D) 16	_____	1.1
Total small grain and peas	159	_____	48.3
Sugar beets, hybrid seed corn, potatoes and truck crops	(A) 13	_____	1.1
Corn grain	(A) 160	_____	44.4
Corn silage	(B) 101	_____	6.4
Sweet corn	(B) 13	_____	1.3
Soybeans for grain	(C) 57	_____	7.7
Corn fodder	(D) 2	_____	-
Total Cultivated crops	161	_____	60.9
Alfalfa hay	(A) 162	_____	37.4
Red clover hay	(B) 28	_____	2.6
Soybean hay	(C) 1	_____	.1
Mixed legumes & non-legumes	(C) 6	_____	.3
Legumes for seed	(C) 7	_____	.4
Timothy and/or brome hay	(D) 6	_____	.2
Other annual hay	(D) 2	_____	.1
Total tillable land in hay	162	_____	41.1
Alfalfa and mixtures incl. alf.	(A) 126	_____	13.5
Other legumes and mixtures	(C) 36	_____	3.7
Sudan grass or rape pasture	(C) 12	_____	.4
Other tillable land in pasture	(D) 44	_____	3.0
Total tillable land in pasture	148	_____	20.6
Tillable land not cropped	(D) 30	_____	2.0
Total tillable land	162	_____	172.9
Wild hay (non-tillable)	49	_____	2.9
Non-tillable pasture	118	_____	24.8
Timber (not pastured)	60	_____	5.8
Roads and waste		_____	9.0
Farmstead		_____	6.8
Total acres in farm		_____	222.2
Per cent land tillable		_____	77.8
Per cent tillable land in high ret. crops		_____	63.4

Table 12. Crop Yields Per Acre, 1951

Crop	Your farm	Average of farms growing each crop
Canning peas, value above seed cost	\$ _____	\$68.20
Flax, bu.	_____	9.0
Barley, bu.	_____	27.9
Oats and barley, bu.	_____	45.1
Oats, bu.	_____	48.6
Oats and wheat, bu.	_____	50.1
Wheat, bu.	_____	22.8
Rye, bu.	_____	19.6
Corn, grain, bu.	_____	50.8
Corn and cane silage, tons	_____	8.6
Sweet corn, tons	_____	4.2
Soybeans, bu.	_____	17.2
Alfalfa hay, tons	_____	2.2
Red clover hay, tons	_____	2.1
Mixed legume & non-legume hay, tons	_____	1.7
Legumes for seed, lbs.	_____	106
Timothy and/or brome hay, tons	_____	1.7
Wild hay, tons	_____	.5

Table 13. Average Price of Feeds, 1951

Item	Value	Item	Value
Ear corn, per bu.	\$1.36	Alfalfa hay, per ton	\$19.00
Oats, per bu.	.81	Red or alsike clov. hay, per ton	16.00
Barley, per bu.	1.23	Soybean hay, per ton	16.00
Wheat, per bu.	2.20	Timothy, per ton	11.00
Soybeans, per bu.	2.82	Wild hay, per ton	9.50
Bran, per cwt.	3.20	Corn fodder, per ton	8.55
Linseed oilmeal, per cwt.	3.85	Corn silage, per ton	6.00
Soybean oilmeal, per cwt.	4.55	Pasture, per mo. per an. unit	1.40
Tankage, per cwt.	6.20	Skim milk, per cwt.	.40

Table 14. Feed Costs for Horses, 1951

Items	Your farm	Average of 89 farms
Feed per horse, lbs.:		
Grain	_____	278
Hay	_____	3701
Fodder and stover	_____	163
Feed cost per horse:		
Grain	_____	\$6.95
Roughage	_____	30.27
Pasture	_____	7.09
Total feed cost	_____	44.31
Number of work horses	_____	2.4
Number of colts	_____	.2

*Two colts equal one horse

Table 15. Power and Machinery Expenses per Crop Acre, 1951

Items	Your farm	Average of 162 farms	32 most profitable farms	32 least profitable farms
Crop acres per farm	_____	153.2	203.3	136.8
Tractor and horse exp. per crop acre	_____	\$5.53	\$4.98	\$6.43
Crop & gen. mach. exp. per crop acre	_____	5.83	5.48	5.66

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 5. 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 cost other than feed.

Table 16. Total Feed Costs and Returns From Your Livestock Enterprises, 1951

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

Table 17. Food Costs and Returns from Hogs, 1951

Items	Your farm	Average of 145 farms	29 farms	29 farms
			highest returns above feed	lowest returns above feed
Feed per cwt. hogs produced, lbs.:				
Corn	-----	313	250	391
Small grain	-----	116	89	138
Commercial feeds	-----	44	35	62
Total concentrates	-----	473	374	591
Skim milk, buttermilk and whey	-----	87	78	101
Feed cost per cwt. hogs produced:				
Concentrates	\$	\$12.78	\$10.14	\$16.29
Skim milk, buttermilk and whey	-----	.35	.32	.41
Pasture	-----	.18	.16	.16
TOTAL FEED COSTS	-----	13.31	10.62	16.86
Net increase in value per cwt hogs prod.	\$	\$19.25	\$20.67	\$17.92
RETURNS ABOVE FEED COST PER CWT. HOGS PROD.	\$	\$ 5.94	\$10.05	\$ 1.06
RETURNS FOR \$100 OF FEED	\$	\$151	\$198	\$108
Price received per cwt. hogs sold	\$	\$19.69	\$20.42	\$19.38
No. of spring litters raised	-----	10.4	9.4	8.7
No. of fall litters raised	-----	6.9	6.1	7.4
Total no. of litters raised	-----	17.3	15.5	16.1
No. of pigs born per litter	-----	8.3	8.3	8.0
No. of pigs weaned per litter	-----	6.5	6.6	6.0
Pounds of hogs produced	-----	25931	24511	22407

Table 18. Factors of Cost and Returns from Dairy Cows, 1951

Items	Your farm	Average of 133 farms	27 farms highest in butterfat per cow	27 farms lowest in butterfat per cow
Pounds of butterfat per cow	307	386	225
% butterfat in milk	3.8	3.9	3.6
Price rec. per lb. B.F. sold (cents)	95.9	99.9	88.6
As manufacturing cream (cents)	79.2	79.5	79.0
Other (cents)	1101.5	102.3	98.2
Feeds per cow, lbs:				
Corn	1433	1645	1465
Small grain	797	931	679
Commercial feeds	378	495	210
Legume hay	4484	4436	4491
Other hay	549	589	144
Fodder and stover	98	18	14
Total Concentrates	2608	3071	2354
Total dry roughage	5131	5043	4649
Silage	6708	8108	6322
Total digestible nutrients*	5837	6506	5352
T.D.N. per lb. B.F.	19.0	16.9	23.8
%T.D.N. that is protein	15.0	15.0	14.9
Feed cost per cow:				
Concentrates	\$70.38	\$83.52	\$61.66
Roughages	67.54	71.70	63.53
Pasture	6.64	6.68	6.67
TOTAL FEED COSTS	144.56	161.90	131.86
Value of produce per cow:				
B.F. sales	\$273.40	\$363.28	\$177.20
Dairy produce used in house	7.40	6.02	11.36
Milk to livestock	18.03	15.10	22.44
Net increases in value of cows	34.74	41.11	38.66
TOTAL VALUE PRODUCED	333.57	425.51	249.66
RETURNS ABOVE FEED COST PER COW	\$189.01	\$263.61	\$117.80
Returns for \$100 OF FEED	\$240	\$270	\$206
Feed cost per lb. B.F. (cents)	47.1	41.9	58.6
% fall freshening	52	55	52
Number of cows**	18.2	20.6	15.3

* 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, 1951

Items	Your farm	Average of 133 farms	27 farms	27 farms
			highest in butterfat per cow	lowest in butterfat per cow
Feeds per head, lbs.:				
Concentrates		640	879	558
Hay and fodder		1960	2109	1865
Silage		2170	2424	2389
Skim milk		360	214	750
Whole milk		402	384	354
TOTAL FEED COSTS PER HEAD		\$58.08	\$66.06	\$55.42
Net inc. in value of other dairy cattle		\$117.87	\$122.89	\$107.29
RETURNS ABOVE FEED COST PER HEAD		\$59.79	\$56.83	\$51.87
RETURNS FOR \$100 OF FEED		\$221	\$196	\$236
Number of head of other dairy cattle		19.9	23.9	16.6

Table 20. Feed Costs and Returns From All Dairy Cattle, 1951

Items	Your farm	Average of 133 farms	27 farms	27 farms
			highest in butterfat per cow	lowest in butterfat per cow
Feeds per animal unit, lbs.:				
Concentrates		2112	2566	1880
Hay and fodder		4637	4720	4208
Silage		5814	6826	5706
TOTAL FEED COSTS PER ANIMAL UNITS		\$123.66	\$140.86	\$112.85
Value of produce per animal unit:				
Dairy products		\$183.54	\$234.77	\$127.48
Net increase in val. of dairy cattle		101.52	113.31	90.98
TOTAL VALUE PRODUCED		\$285.06	\$348.08	\$218.46
RETURNS ABOVE FEED PER ANIMAL UNIT		\$161.40	\$207.22	\$105.61
RETURNS PER \$100 OF FEED		\$239	\$253	\$211
Animal Units of dairy cattle		28.4	32.8	23.8

Table 21. Factors of Cost and Returns from Dual Purpose Cows, 1951

Items	Your farm	Average of 14 farms
Pounds of butterfat per cow	-----	204
% butterfat in milk	-----	3.7
Price received per lb. B.F. sold (cents)	-----	84.4
As manufacturing cream (cents)	-----	78.1
Other (cents)	-----	96.9
Foods per cow, lbs.:		
Corn	-----	692
Small grain	-----	696
Commercial feeds	-----	126
Legume hay	-----	3344
Other hay	-----	466
Fodder and stover	-----	247
Total concentrates	-----	1514
Total dry roughage	-----	4057
Silage	-----	6497
Total digestible nutrients*	-----	4365
T.D.N. per lb. B.F.	-----	21.3
% T.D.N. that is protein	-----	14.3
Feed cost per cow:		
Concentrates	-----	\$38.74
Roughages	-----	56.13
Pasture	-----	6.67
TOTAL FEED COSTS	-----	101.54
Value of produce per cow:		
B.F. sales	-----	\$153.45
Dairy produce used in house	-----	7.03
Milk to livestock	-----	25.79
Net increases in value of cows	-----	45.99
TOTAL VALUE PRODUCED	-----	\$232.26
RETURNS ABOVE FEED COST PER COW	-----	\$130.72
RETURNS FOR \$100 OF FEED	-----	\$240
Feed cost per lb. B.F. (cents)*	-----	49.8
% fall freshening	-----	44
Number of cows	-----	18.5

*Not including nutrients received from pasture.

Table 22. Food Costs and Returns from Other Dual Purpose Cattle, 1951

Items	Your farm	Average of 14 farms
Feeds per head, lbs.:		
Concentrates	-----	916
Hay and fodder	-----	1746
Silage	-----	2025
Skim milk	-----	510
Whole milk	-----	485
TOTAL FEED COST PER HEAD	-----	\$62.91
Net increase in value	-----	\$122.69
RETURNS ABOVE FEED COST PER HEAD	-----	\$59.78
RETURNS FOR \$100 OF FEED	-----	\$204
Number of head	-----	25.7

Table 23. Food Costs and Returns From All Dual Purpose Cattle, 1951

Items	Your farm	Average of 14 farms
Feeds per animal unit, lbs.:		
Concentrates	-----	1633
Hay and fodder	-----	3727
Silage	-----	5505
TOTAL FEED COSTS PER ANIMAL UNIT	-----	\$96.83
Value of produce per animal unit:		
Dairy products	-----	\$ 98.45
Net increase in value	-----	119.58
TOTAL VALUE PRODUCED	-----	218.03
RETURNS ABOVE FEED PER ANIMAL UNIT	-----	\$121.20
RETURNS FOR \$100 OF FEED	-----	\$244
Animal units	-----	31.6

Table 24. Feed Costs and Returns from Beef Cattle, 1951

Items	Your farm	Average of all farms
Beef breeding herd: No. of farms:		9
Feeds per animal unit, lbs:		
Concentrates	_____	2011
Legume hay	_____	4006
Other hay	_____	1412
Fodder and stover	_____	653
Silage	_____	6885
Feed cost per animal unit:		
Concentrates	\$ _____	\$52.65
Roughages	_____	68.19
Pasture	_____	8.65
TOTAL FEED COSTS	_____	129.49
Value of produce per animal unit:		
Dairy products	\$ _____	\$ 6.09
Net increase in value of animals	_____	207.76
TOTAL VALUE PRODUCED	_____	213.85
RETURNS ABOVE FEED COST PER ANIMAL UNIT	_____	\$84.36
RETURNS FOR \$100 OF FEED	_____	\$173
Number of cows and herd bulls	_____	18.6
Number of animal units in the herd	_____	23.6
Lbs. beef produced	_____	12623
Feeder cattle: No. of farms: 20		
Feeds per cwt. beef produced, lbs.:		
Corn	_____	390
Small grain	_____	40
Commercial feeds	_____	37
Legume hay	_____	511
Other hay	_____	194
Fodder and stover	_____	-
Total concentrates	_____	467
Total dry roughages	_____	705
Silage	_____	745
Feed cost per cwt. beef produced		
Concentrates	\$ _____	\$12.08
Roughages	_____	8.04
Pasture	_____	1.22
TOTAL FEED COSTS	\$ _____	21.34
Net increase in value of feeders	\$ _____	38.66
RETURNS ABOVE FEED COST PER CWT	_____	
BEEF PRODUCED	\$ _____	\$17.32
RETURNS FOR \$100 OF FEED	_____	\$210
Price recd. per cwt. beef sold in 1951	_____	\$33.83
Price paid per cwt. beef bought	_____	37.70
No. of Animal units	_____	33.1
Pounds of beef produced	_____	14996

Table 25. Feed Costs and Returns from a Farm Flock of Sheep, 1951

Items	Your farm	Average of 34 farms	17 farms highest in returns above feed	17 farms lowest in returns above feed
Feeds per head, *lbs.:				
Concentrates	_____	73	38	108
Legume hay	_____	333	247	419
Other hay	_____	58	84	31
Fodder and stover	_____	25	-	50
Silage	_____	145	153	137
Feed cost per head:				
Concentrates	\$ _____	\$1.88	\$1.02	\$2.74
Roughages	_____	4.15	3.26	5.03
Pasture	_____	1.15	1.22	1.09
TOTAL FEED COSTS	\$ _____	7.18	5.50	8.86
Value of produce per head:				
Wool	_____	\$6.13	\$6.93	\$5.33
Net increase in value of sheep	_____	15.77	20.13	11.41
TOTAL VALUE PRODUCED	\$ _____	21.90	27.06	16.74
RETURNS ABOVE FEED COST PER HEAD	_____	14.72	21.56	7.88
RETURNS FOR \$100 OF FEED	_____	\$397	\$564	\$230
Price per cwt. of lambs sold	\$ _____	\$29.87	\$29.93	\$29.81
Price per lb. wool sold (cts.)	_____	93.4	99.2	87.2
Pounds of wool per sheep sheared	_____	9.2	9.3	9.0
Number of ewes kept for lambing	_____	31	26	35
% lamb crop**	_____	108	117	99
% death loss**	_____	11.0	11.0	11.0
Pounds of sheep produced	_____	2449	2470	2427
No. of head of sheep*	_____	45.8	38.3	53.3

*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, 1951*

Items	Your farm	Average of 134 farms	27 farms highest in return above feed	27 farms lowest in return above feed
Feed per hen, lbs.:				
Grain	_____	95	92	92
Commercial feeds	_____	48	47	57
Total concentrates	_____	143	139	149
Skim milk and buttermilk	_____	2	2	4
TOTAL FEED COST PER HEN	\$ _____	\$4.83	\$4.67	\$5.32
Value of produce per hen:				
Eggs sold and used in house	\$ _____	\$6.96	\$8.51	\$5.28
Net increase in value of chickens	_____	.60	1.23	.22
TOTAL VALUE PRODUCED	_____	7.56	9.74	5.50
RETURNS ABOVE FEED COST PER HEN	\$ _____	\$2.73	\$5.07	\$.18
RETURNS FOR \$100 OF FEED	\$ _____	\$166	\$216	\$109
Price rec'd per doz. eggs sold (cents)	_____	43.5	44.4	42.7
Eggs laid per hen	_____	193	230	150
Ave. no. of hens on farm during year	_____	269	282	209
% of hens that are pullets	_____	82	96	71
% of death loss of hens	_____	16	12	19
Number of chicks started-straight run	_____	70	63	61
-pullets	_____	301	421	239
-cockerels	_____	32	39	28
Pounds of poultry produced	_____	1241	1956	958

*Includes feeds and returns from the laying flock and chicks.

Table 27. Feed Costs and Returns from Chicks, 1951

Items	Your farm	Average of 64 farms
Number of cases		
Feed per 100 chicks raised, lbs.:		
Grain		1373
Commercial feeds		1288
Total concentrates		2661
Total feed cost per 100 chicks raised		\$99.01
Net increase in val. per 100 chicks		72.93
Return over feed cost per 100 chicks		-26.08
Return for \$100 of feed		\$86
Number of chicks bot:		
Pullets		366
Straight run		92
Cockerels		29
Price paid per 100 chicks bot:		
Pullets		\$44.72
Straight run		19.25
Cockerels		3.99
Per cent death loss		15
Number chicks raised		410
Price rec'd per pound sold (cts.)		21.6
Pounds of poultry produced		1741

Table 28. Feed Cost and Returns from Laying Hens, 1951

Items	Your farm	Eggs laid per hen		
		Below 175	175-224	225 and over
Number of cases		25	36	21
Feed per hen, lbs:				
Grain		69	79	78
Commercial feeds		31	33	34
Total concentrates		100	112	112
Skim milk		1	1	2
Total feed cost per hen		\$3.26	\$3.72	\$3.77
Value of produce per hen:				
Eggs sold and used in home		\$5.30	\$7.24	\$8.83
Less depreciation and death loss		.39	.52	.53
Total value produced		4.91	6.72	8.30
Return above feed cost per hen		\$1.65	\$3.00	\$4.53
Return for \$100 of feed		\$151	\$181	\$220
Eggs laid per hen		150	200	245
Price rec'd per doz. eggs sold (cts.)		42.9	43.5	43.2
Ave. no. hens on farm during year		278	264	333
No. of hens on hand beginning of year		312	292	389
% death loss		19	15	14
% of hens that are pullets		65	87	97

Table 29. Feed Costs and Returns for Turkeys, 1951

Items	Your farm	Average of 5 farms
Feed per cwt. turkeys produced, lbs.:		
Grain	_____	335
Commercial feeds	_____	263
Total concentrates	_____	598
Feed cost per cwt. turkeys produced	\$ _____	\$21.11
Net increase in value per cwt. turkeys produced	\$ _____	\$33.13
RETURNS ABOVE FEED COST PER CWT. TURKEYS PRODUCED	\$ _____	\$12.02
RETURNS FOR \$100 FEED	\$ _____	\$167
No. of poults put on feed	_____	1077
Price paid per poult purchased (cts.)	_____	61.3
% death loss	_____	19.6
Price rec'd per lb. turkeys sold (cts.)	_____	39.1
Weight per bird sold (lbs.)	_____	13.2
Pounds of turkey produced	_____	11806

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 30.

Table 30. 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	5.0 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	Soybean hay	1.4 per acre
Soybeans for grain	.7 per acre	Other hay crops	.6 per acre

* Animal unit represents one dairy cow or bull, two other dairy cattle, 1 1/4 beef cows or bull, 1 feeder steer or heifer, 3 1/3 other beef cattle, 7 sheep, 14 lambs, 2 1/2 hogs, 5 pigs, 50 hens or 1100 pounds of turkeys produced.

Table 31. Summary by Years

	Average 1928-29	Average 1930-34	Average 1935-39	Average 1940-44	Average 1945-46	1947	1948	1949	1950	1951
Number of farms	148	140	149	177	170	170	173	164	165	162
Acres in farm	170	199	218	227	223	223	225	223	222	222
Crop acres in farm	116	136	147	148	147	146	150	150	153	153
Farm inventory	\$24574	\$19851	\$20286	\$25912	\$28327	\$31183	\$33873	\$35300	\$37768	\$42333
Farm earnings (see page 27.)										
<u>FARM EXPENSES</u>										
Cattle	\$ 141	\$ 83	\$ 213	\$ 441	\$ 352	\$ 436	\$ 646	\$ 636	\$ 807	\$ 1271
Hogs bought	85	52	72	154	163	226	199	217	179	219
Sheep bought	6	14	94	64	97	65	45	18	10	54
Poultry bought	37	41	80	142	202	149	145	182	148	145
Horses bought	36	33	43	32	17	11	11	12	9	5
Misc. livestock expense	66	64	94	124	182	250	257	268	315	327
Misc. crop expenses	186	160	222	301	507	780	933	780	819	876
Feed bought	440	313	535	1273	1842	2224	2090	1773	1972	2299
Custom work hired	-	-	-	165	318	400	507	461	446	522
Power mach. (new & exp.)	399	321	559	717	995	1515	2178	2128	2186	2194
Mach. and equip. (new)	190	122	281	392	520	823	1372	990	1251	1380
Mach. and equip. (upkeep)	72	55	67	144	244	303	318	290	304	346
Bldgs., fencing (new)	130	81	245	331	340	897	1205	1109	1139	1218
Bldgs., fencing (upkeep)	52	32	79	188	238	354	383	403	409	359
Hired labor	272	243	398	585	702	893	957	990	891	885
Taxes and insurance	298	313	281	303	361	425	525	575	656	671
General farm	30	28	35	52	76	94	104	115	116	128
Total farm purchases	\$2,440	\$1,955	\$3,298	\$5,408	\$7,156	\$9,845	\$11,875	\$10,947	\$11,657	\$12,899
Decrease in farm capital	-	230	-	-	-	-	-	-	-	-
Board to hired labor	102	87	145	158	128	201	209	203	205	189
Interest on farm capital	1,228	992	1014	1296	1417	1559	1694	1765	1888	2117
Unpaid family labor	358	261	239	326	474	582	544	483	462	505
Total farm expenses	\$4,128	\$3,525	\$4,696	\$7,188	\$9,175	\$12,187	\$14,322	\$13,398	\$14,212	\$15,710

Table 31. Summary by Years (continued)

	Average 1928-29	Average 1930-34	Average 1935-39	Average 1940-44	Average 1945-46	1947	1948	1949	1950	1951
FARM RECEIPTS										
Cattle	\$ 753	\$ 431	\$ 713	\$ 1335	\$ 1480	\$ 2108	\$ 2440	\$ 2602	\$ 2844	\$ 3551
Dairy products	1662	1188	1451	2138	3797	4129	4811	3866	4005	4500
Hogs	1164	793	1074	2517	2718	4362	4222	3971	3926	4646
Sheep and wool	52	60	200	186	247	224	299	143	160	177
Poultry	140	166	381	629	871	609	596	416	327	359
Eggs	275	243	372	751	1218	1410	1402	1347	1158	1522
Horses	30	27	55	34	22	23	15	17	19	10
Corn	37	62	153	121	190	402	316	576	433	444
Small grain	241	177	357	278	306	904	1264	511	766	461
Other crops	163	155	174	455	740	1033	911	672	669	739
Income from labor off farm	102	118	168	141	168	173	225	153	199	232
Agric. adj. payments	0	74	230	254	58	65	76	36	59	60
Misc.	134	138	247	282	366	505	611	503	788	792
Total farm sales	\$ 4,753	\$ 3,632	\$ 5,575	\$ 9,121	\$12,181	\$15,947	\$17,188	\$14,813	\$15,353	\$17,493
Increase in farm cap.	617	-	524	921	734	3542	1520	527	3457	3064
Fam. living from farm	325	232	273	566	670	741	791	700	702	816
Total farm receipts	5,695	3,864	6,372	10,608	13,585	20,230	19,499	16,040	19,512	21,373
Total farm expenses	4,128	3,525	4,696	7,188	9,175	12,187	14,322	13,398	14,212	15,710
Over. lab. earnings	1,567	339	1,676	3,420	4,410	8,043	5,177	2,642	5,300	5,663
MISCELLANEOUS ITEMS										
Yield per A. corn (bu.)	44.8	43.4	47.2	55.7	42.4	41.6	60.3	51.3	52.0	50.8
Yield per A. barley (bu.)	36.0	26.2	28.7	24.8	31.9	29.4	32.6	28.2	34.6	27.9
Yield per A. oats (bu.)	46.0	40.0	43.4	44.2	45.7	47.5	55.0	47.2	45.7	48.6
Yield per A. alfalfa (tons)	3.0	2.3	2.3	2.4	2.4	2.4	2.3	2.2	2.2	2.9
% high return crops	31.9	35.8	41.0	43.3	48.7	50.2	51.0	56.0	55.9	63.2
A.U. livestock per 100 A.	19.2	20.6	19.3	24.5	23.1	22.6	22.2	22.7	22.7	29.6
No. of work units	599	747	777	670	640	573	577	577	588	594
Work units per worker	310	338	341	305	320	287	288	288	294	313
Expenses per work unit	\$1.76	\$1.26	\$1.37	\$2.35	\$3.57	\$4.74	\$5.62	\$5.97	\$5.95	\$6.54
No. of work horses	5.4	5.4	4.5	3.9	3.0	2.5	2.3	2.0	1.6	1.3
No. of colts	.8	.7	1.2	.8	.4	.2	.2	.2	.1	.1
No. of milk cows	14.2	17.8	17.8	17.6	17.0	16.9	16.7	17.4	17.2	16.6

Table 31. Summary by Years (continued)

Misc. Items (cont.)	Average 1928-29	Average 1930-34	Average 1935-39	Average 1940-44	Average 1945-46	1947	1948	1949	1950	1951
No. of litters of pigs	9.3	10.8	9.5	14.4	10.7	11.0	12.4	13.7	14.0	15.5
Lbs. of hogs produced	12,706	15,153	13,438	21,586	18,178	17,686	19,215	21,438	21,593	23,957
No. of head of sheep	7.0	13.5	18.8	15.8	11.6	11.0	10.8	9.3	8.4	10.1
No. of hens	136	169	182	222	244	239	230	220	219	224
Lbs. B.F. per dairy cow	244	240	238	252	260	281	284	305	312	307
Lbs. B.F. per dual pur. cow	-	-	-	185	172	180	186	197	206	204
Pigs weaned per litter	6.3	6.1	6.4	6.2	6.4	6.2	6.4	6.7	6.6	6.5
No. of eggs laid per hen	95	114	131	145	171	177	179	191	198	193
<u>PRICE RECEIVED PER:</u>										
Lb. B.F. sold as cream	\$.52	\$.28	\$.34	\$.47	\$.79	\$.84	\$.95	\$.70	\$.70	\$.79
Cwt. hogs sold	8.92	4.98	8.26	10.93	15.74	24.54	22.95	17.84	18.25	19.69
Cwt. feeder cattle sold	-	-	-	11.55	14.75	21.94	28.16	23.32	27.31	33.83
Lb. wool sold	.36	.16	.25	.39	.45	.37	.46	.45	.55	.93
Doz. eggs sold	.28	.16	.19	.27	.36	.42	.43	.40	.33	.44
Lb. turkey sold	-	-	.20	.27	.33	.36	.48	.40	.36	.39
<u>RETURN ABOVE FEED COST PER:</u>										
Dairy cow	\$76.50	\$28.15	\$49.95	\$81.83	\$152.20	\$153.06	\$203.85	\$145.03	\$160.62	\$189.01
Dual purpose cow	-	-	-	51.55	92.37	106.77	130.26	99.52	104.44	130.72
Cwt. hogs produced	1.50	.48	2.98	3.93	5.65	8.19	5.52	5.43	6.99	5.94
Head of sheep	5.50	.81	2.82	4.63	6.79	7.33	8.06	6.70	13.25	14.72
Hen	1.82	.99	1.12	1.82	2.36	1.34	2.52	2.99	1.62	2.73
Cwt. turkeys prod.	-	-	10.81	13.54	12.08	4.74	27.48	16.52	10.33	12.02
<u>FEED COST PER:</u>										
Dairy cow	\$69.50	\$47.30	\$44.93	\$63.13	\$101.16	\$141.42	\$142.12	\$130.28	\$136.97	\$144.56
Dual purpose cow	-	-	-	52.08	69.95	93.83	100.12	88.73	99.55	101.54
Cwt. hogs produced	7.66	4.21	5.10	7.52	11.37	17.99	15.04	10.40	12.20	13.31
Head of sheep	2.82	2.23	2.62	3.30	4.50	5.54	5.94	5.35	6.25	7.18
Hen	1.62	1.13	1.57	2.38	3.84	5.53	4.78	3.95	4.49	4.83
Cwt. turkeys prod.	-	-	8.47	12.86	17.61	27.70	18.43	17.08	19.32	21.11
Horse	55.09	35.59	36.02	41.52	42.73	48.56	41.82	36.75	42.56	44.31
<u>PRICE OF FEED:</u>										
Corn (per bu.)	\$.70	\$.45	\$.59	\$.71	\$.98	\$1.76	\$1.63	\$1.02	\$1.20	\$1.36
Barley (per bu.)	.60	.42	.49	.59	1.08	1.82	1.59	.99	1.20	1.23
Oats (per bu.)	.48	.26	.28	.46	.68	.92	.88	.59	.72	.81
Bran (per cwt.)	1.70	.98	1.22	1.80	2.45	3.20	2.85	2.85	2.80	3.20
Oilmeal (per cwt.)	3.00	1.96	2.12	2.30	3.11	4.50	4.50	4.00	3.95	3.85
Alfalfa (per ton)	14.75	11.10	9.30	9.90	15.25	21.50	20.00	20.00	21.00	19.00

Footnote for pages 25, 26, and 27

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 1950.

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 1950 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	1940	\$45	\$18
1929	60	20	1941	50	20
1930	60	20	1942	60	25
1931	40	15	1943	75	25
1932	30	10	1944	85	25
1933	30	10	1945	90	25
1934	30	10	1946	100	30
1935	40	15	1947	125	36
1936	43	18	1948	125	36
1937	45	18	1949	125	36
1938	45	18	1950	125	36
1939	45	18	1951	125	36

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 and the animal unit equivalent were changed in 1951.

These adjustments should be considered in comparing 1951 results with previous years.