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#### 1953 Annual Report

## SOUTHEASTERN MINNESOTA FARM MANAGEMENT SERVICE

University of Minnesota
Institute of Agriculture
and
United States Department of Agriculture
Agricultural Research Service
and the
County Extension Services of

Dakota, Dodge, Freeborn, Goodhue, LeSueur, Mower, Nicollet, Olmsted, Rice, Scott, Steele, Wabasha, Waseca and Winona Counties

and the

Southeast Minnesota Farm Management Association Cooperating

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Report No. 214
Department of Agricultural Economics
Institute of Agriculture
St. Paul 1, Minnesota
April, 1954

#### INDEX

		- Y	1
	Introduction	]	T-1-
	Summary of Farm Inventories	2	}
- 2	Summary of Farm Earnings (Cash Statement)	L	<b>,</b>
	Summary of Farm Earnings (Enterprise Statement)	t	5 /
	Net Worth Statement.	6	,
	Summary of Farm Earnings by Tenure (Operator's Share)	7	
		,	
	Household and Personal Expenses		
	Family Living from the Farm		
	Cumulative Effect From Excelling in a Number of Management Factors .		
	Measures of Farm Organization and Management Efficiency		
	Thermometer Chart	11	L
	Distribution of Acres in Farm and Yield of Crops		
	Average Price of Feeds	13	3
	Power and Machinery Expenses per Crop Acre		
	Total Feed Costs and Returns from Your Livestock Enterprise	1	3
	Feed Costs and Returns from Hogs		
	Feed Costs and Returns from Beef Cattle		
	Feed Costs and Returns from Dairy Cows		
	Feed Costs and Returns from Other Dairy Cattle		
×			
	Feed Costs and Returns from All Dairy Cattle		
1	Feed Costs and Returns from Dual Purpose Cows		
	Feed Costs and Returns from Other Dual Purpose Cattle		
	Feed Costs and Returns from All Dual Purpose Cattle		
	Feed Costs and Returns from Chickens	, 20	,
	Feed Costs and Returns from Chicks	. 2.	L.
	Feed Costs and Returns from Laying Hens	, 2	L
	Feed Costs and Returns from Sheep	. 22	2
	Feed Costs and Returns from Turkeys	. 2	3
	Explanation of "Work Units"	. 2	3
	Summary of Years 1928 - 1953	. 2	4
	Notes	. 2'	7

Twenty-sixth Annual Report of the Southeast Minnesota Farm Management Service.

Prepared by T. R. Nodland, G. A. Pond and R. B. Zoller

#### INTRODUCTION

The Department of Agricultural Economics and the Agricultural Extension Service of the University of Minnesota, the Agricultural Research Service 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 Department 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 E. Hartmans. Harvey Bjerke was the field agent for this project. At the end of the year, R. B. Zoller, S. A. Engene, Donald Moore, Jay Swanson, R. H. Hinton and Niels Rorholm of the Department 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. Kunau, Don Hasbargen, F. L. Liebenstein, F. E. Wetherill, Ray Aune, Warren Liebenstein, Chester Graham, J. R. Gute, Douglas A. Mossberg, Mathas Metz, C. F. Murphy, Esbern Johnson and Gordon Anderson.

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 1953 were:

President: Levern Wilker, Owatonna, Steele County Vice President: Wesley Pierson, Aldine, Freeborn County Secretary-Treasurer: Ray Miller, New Richland, Waseca County

The board of directors included these officers and also the following:
John Harkness, Dakota County; Harry Morton, Dodge County; Felix Mahoney,
Goodhue County; Emil Dietz, Le Sueur County; Harvey Holst, Mower County; Russell
Malmberg, Nicollet County; Earl Kleinwort, Olmsted County; George Little, Rice
County; Merrill Will, Scott County; Everett Freiheit, Wabasha County; and Homer
Goss, Winona County.

The following tabulation shows by counties the number of records submitted in 1953:

Dakota Dodge	7 13 18	Mower Nicollet Olmsted	8 14 15	Steele Wabasha Waseca	16 13 15
Freeborn Goodhue LeSueur	25 4	Rice Scott	11 5	Winona Total	$\frac{9}{173}$

The table on page 4 and succeeding pages show 157 farms. Thirteen 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. Three records were not returned for analysis following completion of income tax schedules.

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 variation 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

	Roches	ter	Aust	in	Faril	pault
	Precip-	Departure	Precip-	Departure	Precip-	Departure
	itation	from	itation	from	itation	from
		normal		normal		normal
	Inches	Inches	Inches	Inches	Inches	Inches
January	1.23	0.30	1.33	.44	•95	0.27
February	. 94	0.19	.45	47	.92	0.23
March	1.67	0.12	1.76	.11	2.03	0.92
April	3.50	1.19	4.70	2.38	3.93	2 <b>.02</b>
May	2.82	-0.56	3.04	-1.57	3.49	0.29
June	4.33	0.00	7.43	2. <b>2</b> 1	5.07	0.70
July	6.95	3.48	6.15	3.07	7.35	74.00
August	1.80	-1.68	4.62	0.37	2.88	-0.53
September	• 33	-3.72	. 7:7	-3.21	. 77	-2.68
October	. 20	-1.49	.99	-0.87	.15	-1.93
November	1.95	0.43	1.80	0.22	1.39	0.05
December	1.26	0.24	1.77	0.90	<u>1.51</u>	0.83
1953 Total	26.98	-1.50	34.81	3.58	30.44	4.17
1952 Total	28.99	+.59	<b>2</b> 5.99	-5.24	24.97	-1.30
1951 Total	40.39	+11.99	33.76	+2.53	43.73	+17.46
1950 Total	23.23	-5.5 <sup>4</sup>	23.57	-7.66	23.79	-2.48
1949 Total	26.60	-2.17	24.12	-7.11	26.47	+.20
Normal Annua						
Precipitat	ion 28.48		31.23		26.27	

The year, as a whole, was somewhat warmer and considerably wetter than usual. It was the warmest year since 1941 and the wettest since 1951. For the state in general, the 1953 crop season ranks among the very best in terms of aggregate production of all crops. Spring field work which began earlier than usual was later delayed and growth of vegetation retarded by cool, wet weather in April and May. At the close of June the harvesting of a good hay crop was well under way in southern Minnesota and a considerable acreage of corn had reached the "knee-high" stage. Warm, humid, wet weather in July was unfavorable for small grain and considerable rust developed. Corn picking was about completed during the first week in November, with yields and quality excellent. Fall plowing was practically at a standstill in October and November because of extremely dry topsoil.

Table 2. Summary of Farm Inventories, 1953\* Your Farm Average of 157 farms Jan. 1 Dec. 31 Jan. 1 Dec. 31 Items Size of farm (acres) Size of business (work units) \*\* \$ 3015 Dairy and dual purpose cows Other dairy & dual purpose cattle Beef cattle Hogs Sheep Poultry (including turkeys) Productive livestock (total) Crop, seed, and feed Power mach. (farm share)

31 least profitable 31 most profitable farms farms Dec. 31 Jan. 1 Jan. 1 Dec. 31 Items Size of farm(acres) Size of business (work units) \*\* \$ 3304 \$ 3224 \$ 4005 \$ 3976 Dairy & dual purpose cows Other dairy & dual purpose cattle Beef cattle (incl. feeders) Hogs Sheep (including feeders) Poultry (including turkeys) Productive livestock (total) Horses Crop, seed, and feed Power mach. (farm share) Crop & general machinery (farm share) Livestock equipment & supplies Mach. & equipment (total) Miscellaneous Buildings, fences etc. Land Total farm capital

Crop and general mach. (farm share)

Live tock equipment and supplies

Mach. and equipment (total)

Buildings, fences, etc.

Total farm capital

Miscellaneous

Land

<sup>\*</sup> 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.

<sup>\*\*</sup> See page 23 for an explanation of "work units."

Table 3. Summary of Farm Earnings (Cash Statement). 1953

	TOTTITIE'S		31 most	77 7
	Your	Average	-	31 least
Items	farm	farms	profitable farms	-
FARM RECEIPTS	141111	Taims	Talms	farms
Dairy and dual-purpose cows		\$665	\$797	\$688
Dairy products		5070	9445	4536
Other dairy & dual-purpose cattle	···········	633	728	60 <b>2</b>
Beef cattle (including feeding cattle)	<u></u>	1450	138 <sup>1</sup> 4	793
Hogs	4.48.48.44.44.44.44.44.44.44.44.44.44.44	4411	6912	3053
Sheep and wool		172	66	4 <b>1</b> 1
Poultry (including turkeys)	<del></del>	468	1415	127
Eggs		<b>1</b> 453	1171	1001
Horses		12	13	55
Corn		1017	1917	767
Small grain		398	530	246
Other crops		908	1890	703
Machinery & equip. sold	100 A	143	235	88
Agricultural adjustment payments	<del></del>	51	59	43
Income from work off the farm		302	368	166
Miscellaneous		111	84	68
(1) Total farm sales		17264	24011	13314
(2) Increase in farm capital		654	2409	
(3) Family living from the farm		446	492	399
(4) Total farm receipts (1)+(2)+(3)		18364	26912	13713
			<b>7</b>	-21-2
FARM EXPENSES				
Dairy and dual-purpose cows bought		\$ 85	\$ 81	\$ 213
Other dairy & dual-pur. cattle bought		62	38	47
Beef cattle bought (incl. feeding cattle)		506	545 .	41
Hogs bought		231	183	259
Sheep bought		35	112	17
Poultry bought (including turkeys)		170	306	132
Horses bought		74	<sup>7</sup> 2	10
Misc. livestock expenses		421	488	417
Misc. crop expenses		1170	1806	88 <b>0</b>
Feed bought		2148	2836	14 <b>8</b> 6
Custom work hired		592	665	540
Mech. power mach. (farm share) (new)		640	836	471
Mech. power mach. (farm share) (upkp)		377	4 <b>1</b> 6	3 <sup>1</sup> 41
Mech. power (farm share)(gas, oil, etc.)		917	1127	849
Crop and general mach. (new)		1068	1524	790
Crop and general mach. (upkp)		5,46	306	200
Livestock equipment (new)		206	282	354
livestock equipment (upkeep)		<b>1</b> 34	133	123
Buildings and fencing (new)		835	1092	5 <b>2</b> 5
Buildings and fencing (upkeep)		370	¥37	313
Hired labor		806	1370	598
Taxes		672	824	653
General farm and insurance		250	287	<b>2</b> 22
(5) Total farm purchases		11945	15696	9481
(6) Decrease in farm capital				<b>1</b> 623
(7) Interest on farm capital		2164	2636	2052
(8) Unpaid family labor		523	486	712
(9) Board furnished hired labor		138	225	101
(10) Total farm exp. (sum of (5) to (9)		14770	19043	13969
(11) Operator's earnings (4) -(10)		3594	7869	-256

Table 4. Summary of Farm Earnings (Enterprise Statement) 1953\*

	<b>V</b>	Average	31 most	31 least
	Your	of 157	profitable	profitable
tems	farm	farms	farms	farms
ETURNS AND NET INCREASES		dra rr	φ <i>(</i> )μος	φ); <del></del> ();
Dairy and dual purpose cows		<b>\$5155</b>	\$649 <b>1</b>	\$4364
Other dairy & dual pur. cows		1216 144	15 <b>25</b>	1083
Beef breeding herd		144 422	85 469	305
Feeding cattle				-2
Hogs		4348	7269	2541
Sheep		121	86	<b>22</b> 5
Turkeys		<b>2</b> 42	1124	1706
Chickens	·	1624	1253	1106
All productive livestock		13272	18302	9622
Crops, seed and feed	· · · · · · · · · · · · · · · · · · ·	-653	644	-1265
Agricultural conservation payments		51	59	43
ncome from labor off the farm		125	109	93
Miscellaneous		<b>9</b> 9	73	68
(1) Total returns & net increases		12894	19187	8561
EXPENSES AND NET DECREASES				
Horses		<b>\$</b> 50	\$ 49	\$ 38
Tractor		802	<b>8</b> 87	807
Truck		296	44 <b>0</b>	<b>26</b> 6
Auto (farm share)		346	376	<b>32</b> 2
Gas engine and elect. exp. (f. share	e)	212	247	515
Hired power		317	_366	<u> 276</u>
Potal power		2123	2365	1921
Crop and general machinery		998	1170	1007
Livestock equipment		259	<b>2</b> 68	241
Buildings, fencing and tiling		903	1034	770
Misc. productive livestock expense		418	488	417
Labor	Committee for the Committee of	1613	<b>22</b> 46	1534
Real estate taxes		528	659	504
Personal property tax	***	144	165	149
Insurance		105	106	95
General farm		145	181	127
Interest on farm capital		2164	2636	2052
(2) Total expenses & net decreases	· .	9300	11318	8817
		3594	7869	<b>-2</b> 56

<sup>\*</sup>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 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, 1953 (Operator's Share)

Jan. 1	farm Dec. 31	35 0w Jan. 1 182 182 - \$36886 173 1919 1629 1217	Dec. 31 \$37354 149 1796
		182 182 - \$36886 173 1919 1629	\$37354 149
		182 - \$36886 173 1919 1629	149
		\$36886 173 1919 1629	149
		173 1919 1629	149
		173 1919 1629	149
		1919 16 <b>2</b> 9	
		1629	-, ) -
	-		1720
			1188
		37i	1430
		5136	5134
		3959	3878
		733	931
		2238	2337
			7146
1		49125	49783
		1487	1651
		4063	334 <b>2</b>
	•	73	92
		104	146
		56 <b>5</b>	<b>53</b> 3
		1528	1361
·····		138	140
-		7958	7265
		41167	42518
			+1351
l3 part-		16 Ren	ters **
	Dec. 31		<u>Dec. 31</u>
		<b>2</b> 26	
	<b>#</b> 70 <b>7</b> 7		A - C 1
			\$16174
		1	11
	_		7178
77 77			969
			326
			150
		1799	1893.
	-	710	423
			335
	-		2640
		-,	2975
	-	19130	21053
		-	
-			-
		6=7	705
785	1971	1619	725
	エフィエ	T() I A	2105
クドクマ		. •	_
2523	<b>2</b> 585	2042	2108
410	<b>2</b> 585 <b>1</b> 61	2042 349	2108 <b>20</b> 4
	<b>2</b> 585	2042	2108
ָּבְּיבְּיבְּיבְּיבְיבְיבְיבְיבְיבְיבְיבְיבְיבְיבְיבְיבְי	Tan. 1 268 133 135 135 162 1680 1561 77 695 4013 1749 2742 2279 6770 48400 417 3146 400 62	268 133 135 37455 \$39833 162 185 1680 1863 1561 1720 77 19 695 763 4013 4365 1749 1803 2742 3152 2279 2328 6770 7283 48400 51666 417 927 3146 2608 400 727 62 127	6930 49125 1487 4063 73 104 565 1528 138 7958 41167  L3 part-owners* Ian. 1 Dec. 31 Jan. 1 268 133 135 226 133 135 226 37455 \$39833 \$15068 162 185 1680 1863 469 1561 1720 842 77 19 375 695 763 113 4013 4365 1799 1749 1803 - 2742 3152 319 2279 2328 2546 6770 7283 2865 48400 51666 19736 417 927 3146 2608 400 727 62 127 657

<sup>\* 7</sup> rented for cash, 1 cash and crop share, 2 crop share and 3 livestock and crop share.

<sup>\*\*4</sup> rented for cash, 3 cash and crop share, 1 crop share and 8 livestock and crop share.

Table 6. Summary of Farm Earnings by Tenure, 1953 (Operator's Share) Your 5. 13 partfarm Items owners owners rerters FARM RECEIPTS \$424 \$665 \$419 Dairy and dual purpose cows Dairy products Other dairy and dual purpose cattle Beef cattle (including feeding cattle) Sheep and wool Poultry (including turkeys) Horses Corn Small grain Other crops Machinery & equipment sold Agricultural adjustment payments Income from work off the farm Miscellaneous (1) Total farm sales 46g (2) Increase in farm capital (3) Family living from the farm (4) Total farm receipts (1)+(2)+(3)\$20859 \$15565 \$12892 FARM EXPENSES \$ 95 \$ 45 Dairy and dual purpose cows bought \$181 Other dairy & dual purpose cattle bought Beef cattle bought (including feeding cattle) Hogs bought Sheep bought Poultry bought (including turkeys) Horses bought Misc. livestock expenses Misc. crop expenses Feed bought Custom work hired Mech. power mach. (farm share) ( new) Mech. power (farm share) (upkeep) 285. Mech. power (farm share) (gas, oil, etc.) 770. Crop and general mach. (new) Crop and general mach. (upkeep) Livestock equipment (new) Livestock equipment (upkeep) Land, buildings & fencing (new) Buildings and fencing (upkeep) Hired labor Taxes (real estate & personal property) 22 General farm and insurance Cash rent Interest paid \$10440 \$ 9046 \$15517 (5) Total farm purchases (b) Decrease in farm capital (7) Interest on farm capital 5,40 (8) Unpaid family labor (9) Board furnished hired labor \$12425 \$17525 \$10165 (10) Total farm expense (sum of (5) to (9) (11) Operator's earning (4) - (10)(12) Return to cap. & family lab. (7)+(8)+(11)

Table 7. Household and Personal Expenses for

Those Farms Which Kept Complete Accounts of These Expenses, 1953 16 most 16 least Average profitprofit-Your of 81 **a**ble able Items farm farms farms farms Number of persons - family 4.3 4.3 4.0 Number of adult equiv. - family 3.2 3.1 3.0 other\* • 3 •5 • 3 Food and meals bought \$688 \$731 \$602 Operating and supplies 274 279 206 Clothing and clothing materials 300 329 247 Personal care, personal spending 92 63 53 Furnishings and equipment 246 280 189 Education, recreation and development 152 179 100 Medical care and health insurance 286 362 220 Church, welfare 198 211 112 Personal share of auto expense 120 157 107 Household share of elect. & gas engine expense 75 86 71 H.H. & pers. share of new auto, new dwelling 156 258 239 House upkeep 67 122 41 Gifts and special events 79 54 81 Misc. taxes Total cash living expenses \$3140 \$2257 State and Federal income taxes \$167 \$215 \$ 57 Insurance 208 357 137 Total household and personal cash expense 3116 3712 2451 Food furnished by the farm \$451 \$546 \$354 Fuel furnished by the farm Total cash expenses & perquisites 4269 2817 Purchase of stocks bonds, and other invest. \$383 \$1535 \$ 6 Receipts: Sale of investments \$ 6 \$ 30 \$ ... Income from investments 169 407 39 Miscellaneous income 107 37 330

<sup>\*</sup>Hired help or others boarded.

Table 8. Family Living From the Farm, 1953

Items Adult equiv	family	Your farm	Average 157 farms	Your farm	Average 157 farms
Whole milk Skim milk Cream Beef Hogs Sheep Poultry Eggs Potatoes Vegetables & f Farm fuel Total	others		.4 1276 92 56 673 331 3 112 194 5		\$87.99 .92 12.68 101.33 63.87 .49 23.04 78.56 6.79 58.92 11.25

#### 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 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 earnings	Average operator's earnings
None or 1 2 3 4 5 6 or 7	19 22 32 42 26 16		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	\$ 932 2711 3355 3896 4821 5656

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 Ef	ficiency.	1953
Measures used in chart Your on page 11 farm			31 least profit- able farms
Operator's earnings \$	\$3593	\$7869	<b>\$-2</b> 56
(1) Crop yields*	100	101	92
(2) % of tillable land in high ret. crops**	65.7	67.6	63.1
(3) Ret. for \$100 feed to prod. livestock***	100	106	87
(4) Prod. livestock units per 100 acres****		33.0	27.3
(5) Size of business - work units	740	541	392
(6) Work units per worker	<b></b> 5/1/1	258	218
(7) Pow., mach., equip., &bldg.exp.per work unit	\$9.70	\$9.13	\$10.31
above measures:  (3) Index of return for \$100 feed from:  Dairy cattle (see pages 16&17)  Dual purpose cattle (see pages 18&19)  Beef breeding herd (see page 15)  Feeding cattle (see page 15)  Hogs (see page 14)  Native sheep (see page 22)  Turkeys (see page 23)  Chickens (see pages 20 & 21)	100 100 100 100 100 100 100	109 - 103 106 73 98 100	85 - 82 - 90 92 - 88
(4) Number of animal units prod. livestock	57.8	70.2	50.3
(5) Work units on crops Work units on productive livestock Other work units	99 323 18	129 397 15	9 <sup>4</sup> 285 13
(6) Number of family workers  Number of hired workers  Total number of workers	1.3 .5 1.8	1.3 8 2.1	1.5 -3 1.8
(7) Power expense per work unit  Crops mach. expense per work unit  Livestock equip. exp. per work unit  Building exp. per work unit	\$4.76 2.34 .58 2.02	\$4.51 2.22 .48 1.92	\$5.11 2.59 .62 1.99

<sup>\*</sup> Given as a percentage of the average.

<sup>\*\*</sup> Crops are marked on apge 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.

<sup>\*\*\*\*</sup>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 157 farms included in this summary are located between the dotted lines across the center of this page.

Oper- ator's earn-	s Crop	High return	Return from pr ductiv	o- units		Work units per	Pow., mach., eq. & bldgs. exp. per
ings	yields		livesto	-		•••	work unit
\$10000	140	86.0	140	54.0	680	365 \$3	.75
9200	135	83.5	135	51.0	650	350	.50
8400	130	81.0	130	48.0	620	335 = 5	5.25
7600	125	78.5	125	45.0	590	320 6	5.00
6800	120	76.0	120 =	42.0	560		75
6000	115	73.5	115	39.0	530		.50
5200 <u> </u>	110	71.0	105	36.0	500	=	3.25
				33.0	470		2.00 = =.
3600 	95	66.0	95	27.0	410		. 75
2000	90	61.0	90	24.0	380		25
1200	85	58.5	85	21.0	350	200 12	2.00
400	80	56.0	80	18.0	320	185 12	2. 75
-400	75	53.5	75	15.0	290	170 13	. 50
-1200	70	51.0	70	12.0	260	155 = 14	. 25
-2000	65	48.	65	9.0	230	140 15	.00
	‡= ]						F

Table 11. Distribution of Acres in Farm and Yield of Crops, 1953

Crop: (A), (B), (C) and (D) refer		No.	Acres	in farm		, 1953 elds per acre
to ranking used in calculating		growing		Average		Ave. of farm
% of tillable land in high		this	Your	of 157	Your	growing each
return crops (see page 10)		crop	farm	farms	farm	crop
		<u> </u>	***************************************			
Canning peas	(A)	18		1.8		\$48.49
Flax	(°C)	12		• 9	***************************************	7.1 bu.
Barley	(D)	19		2.2		25.9 bu.
Oats and barley	(D)	14		1.7		34.2 bu.
Oats	(D)	152		35.9		37.4 bu.
Oats and wheat	(D)	8		.8		42.6 bu.
Wheat	(D)	20	<del>,,,,</del>	1.6		23.0 bu.
Rye	(D)	5		.2	<del></del>	13.7 bu.
Total small grain and peas	\-,	156		.2 45.1	***	1) of 500
sover smarr Starin and pour				, , , , , ,		
Sugar beets, hybrid seed corn,						
potatoes and truck crops	(A)	11		1.2		
Corn grain	(A)	157		52.2		61.8 bu.
Corn silage	(B)	106		6.9		9.4 tons
Sweet corn	(B)	15		1.9		2.3 tons
Soybeans for grain	(c)	54		9.1		20.3 bu.
Corn fodder	(D)	1		9.1	<del></del>	20.5 04.
Total cultivated crops	(1)	157		${71.3}$		
TOTAL CULTIVATED CLUPS		±21	<del></del>	11.0		
Alfalfa hay	(A)	151		33.7		2.9 tons
Red clover hay	(B)	26			<del></del>	2.1 tons
Mixed legumes & non-legumes	(c)	8 -	<del></del>	2.3 .8		
Legumes for seed	(c)	1				1.7 tons
Timothy and /or brome hay and seed		4	<del></del>	.2		
		_				
Other annual hay	(D)	<u>3</u> 156		-1	<del></del>	
Total tillable land in hay		150 -	<del></del>	37.1		
Alfolfo and mintures inal alf	7.43	115		16.5		
Alfalfa and mixtures incl. alf.	(A)	115		-		
Other legumes and mixtures	(C)	20		1.9		
Sudan grass or rape pasture	(C)	11 -	<del></del>	• 3		
Other tillable land in pasture	(D)	27	<del></del>	2.6		
Total tillable and in pasture		133	<del></del>	21.3		
Millable land not amount	(m)	<b>ד</b> ר		1 1		
Tillable land not cropped	(D)	17	<del></del>	1.1		
Total tillable land		157		175.9		<b>-</b> .
Wild hay (non-tillable)		36		3.0		.5 tons
Non-tillable pasture		114		23.1		
Timber (not pastured)		61		6.5		
Roads and waste				10.3		
Farmstead		-	<del></del>	6.7		
m 1 2				005 5		
Total acres in farm		·	· · · · · · · · · · · · · · · · · · ·	225.5		
Per cent land tillable			<del></del>	78.0		
Per cent tillable land in high ret.	cro	ms		65.7		

Table 12. Average Price of Feeds, 1953

Item	Value	Item	Value
Ear corn, per bu.	\$1.31	Alfalfa hay, per ton	\$17.50
Oats, per bu.	,71	Red or alsike clov. hay, per ton	14.80
Barley, per bu.	1.11	Timothy, per ton	10.10
Wheat, per bu.	2.10	Wild hay, per ton	8.75
Bran, per cwt.	2.95	Corn fodder, per ton	7.85
Linseed oilmeal, per cwt.	4.10	Corn silage, per ton	5.85
Soybean oilmeal, per cwt.	4.40	Pasture, per mo. per cow	2.50
Meatscraps per cwt.	5.30	Skim milk, per cwt.	. 36

Table 13. Power and Machinery Expenses per Crop Acre, 1953

Items	Your farm	Average of 157 farms	31 most profitable farms	31 least profitable farms
Crop acres per farm	***************************************	156.5	206.7	141.3
Tractor and horse exp. per crop acre Crop & gen. mach. exp. per crop acre		\$5.72 6.67	<b>\$5.10</b> 5.90	\$6.19 7.05

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

The total "return over feed costs" for each class of livestock is shown in Table 14. 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 14. Total Feed Costs and Returns From Your Livestock Enterprises, 1953

	Dairy or	dual purpose	cattle	Beef breeding	Feeder
	Cows	Other	All	herd	Cattle
Fotal returns					
Cotal feed cost				And The section of th	
Cotal return over feed	ale differentia e visit de la constanta				***************************************
		Sheen			
	Hogs	Farm flock	Feeders	Turkeys	Chickens
otal returns				· · · · · · · · · · · · · · · · · · ·	
otal feed cost				·	
otal return over feed					

Table 15. Feed Costs and Returns from Hogs, 1953 24 farms 24 farms Average highest in lowest in Your of 118 returns returns Items farm farms above feed above feed Feed per cwt. hogs produced, lbs.: Corn 304 352 507 Small grain 89 72 Commercial feeds 49 29 490 Total concentrates 405 Skimmilk, buttermilk and whey 56 87 Feed cost per cwt. hogs produced: Concentrates \$12.73 \$10.15 \$16.84 Skim milk, buttermilk and whey .21 .31 .20 Pasture .10 TOTAL FEED COSTS 13.04 17.15 Net increase in value per cwt hogs prod. \$ \$23.21 \$24.77 \$22.00 RETURNS ABOVE FEED COST PER CWT. HOGS PROD. \$10.17 \$14.22 \$4.85 RETURNS FOR \$100 OF FEED \$242 \$189 \$139 Price received per cwt. hogs sold \$21.28 \$21.50 \$20.57 No. of spring litters raised 10.0 11.0 7.5 No. of fall litters raised 5.6 Total no. of litters raised 15.6 16.5 13.0 No. of pigs born per litter 8.2 8.0 No. of pigs weaned per litter 6.7 24837 26612 21646

Pounds of hogs produced

Items Your of a farm Beef breeding herd: No. of farms: 1 Feeds per animal unit, lbs: Concentrates	36 17 16
ItemsfarmfarmBeef breeding herd:No. of farms:1Feeds per animal unit, lbs:         Concentrates         Legume hay         Other hay         Silage         50         571         50         572         572         564         573         564         574         564         574         564         574         564         574         564         574         564         564         574         564	36 47 06
Beef breeding herd: No. of farms:  Feeds per animal unit, lbs:  Concentrates Legume hay Other hay Silage  Feed cost per animal unit: Concentrates  \$\$40.6	36 17 26
Feeds per animal unit, lbs:  Concentrates  Legume hay Other hay  Silage  Feed cost per animal unit:  Concentrates  \$40.0	36 +7 06
Concentrates 165 Legume hay 381 Other hay 50 Silage 571  Feed cost per animal unit: Concentrates \$ \$40.0	17 06
Legume hay 38 50 571 Silage 571  Feed cost per animal unit: Concentrates \$ \$40.0	17 06
Other hay 50 Silage 571  Feed cost per animal unit: Concentrates \$ \$40.0	06
Silage 571  Feed cost per animal unit:  Concentrates \$_\$40.0	
Feed cost per animal unit:  Concentrates \$\$40.0	LU
Concentrates \$\$40.0	
Concentrates \$\$40.0	
	)9
Pasture 14.2	
TOTAL FEED COSTS 107.	
Value of produce per animal unit:	
Dairy products \$ \$2.9	
Net increase in value of animals 67.2 TOTAL VALUE PRODUCED 70.3	27
TOTAL VALUE PRODUCED 70.2	21
TO COMPANY TO THE TAXABLE PROPERTY OF TAXABLE PROPERTY	201
RETURNS ABOVE FEED COST PER ANIMAL UNIT	
RETURNS FOR \$100 OF FEED \$	65
Number of cows and herd bulls 20	.8
Number of young beef cattle 35	.6
Number of animal units in the herd 27	• 3
Lbs. beef produced 147	15
Feeder cattle: No. of farms:	<b>2</b> 2
Feeds per cwt. beef produced, lbs.:	
Corn	30
Small grain	21
Commercial feeds	47 .
	æ)ı
	84
Other hay	37
Markal assessment as	98
10041	21
Total diy Toughagos	58
Silage Feed cost per cwt. beef produced:	۰
Concentrates \$\$12.	60
Roughages 5.	
Pasture	17
	•
	87
Net increase in value of feeders \$ 14.  RETURNS ABOVE FEED COST PER CWT.	87
	87
Net increase in value of feeders \$ 14.  RETURNS ABOVE FEED COST PER CWT.  BEEF PRODUCED \$\$\$	87
Net increase in value of feeders \$ 14.  RETURNS ABOVE FEED COST PER CWT.  BEEF PRODUCED \$ \$-4.  RETURNS FOR \$100 OF FEED \$  Price paid per cwt. beef bought in 1953 \$17.	87 30 75
Net increase in value of feeders \$ 14.  RETURNS ABOVE FEED COST PER CWT.  BEEF PRODUCED \$ \$-4.  RETURNS FOR \$100 OF FEED \$  Price paid per cwt. beef bought in 1953 \$17.  Price recd. per cwt. beef sold in 1953 20.	87 30 75 68 73
Net increase in value of feeders \$ 14.  RETURNS ABOVE FEED COST PER CWT.  BEEF PRODUCED \$ \$-4.  RETURNS FOR \$100 OF FEED \$  Price paid per cwt. beef bought in 1953 \$17.  Price recd. per cwt. beef sold in 1953 20.	87 30 75 68 73

Table 17. Factors of Cost and Returns from Dairy Cows, 1953 26 farms 26 farms highest in lowest in Average of 128 butterfat butterfat Your farm farms per cow per cow Items 394 226 309 Pounds of butterfat per cow 3.9 % of butterfat in milk 3.8 3.7 87.5 94.5 Price rec. per 1b. B.E. sold(cents) 98.8 75.4 74.2 77.7 As manufacturing cream (cents) 99.1 94.3 97.3 Other (cents) Feeds per cow, lbs.: 1483 1705 2318 Corn 604 767 1052 Small grain 5/14. 550 383 Commercial feeds 4383 4317 4208 Legume hay 608 ,231 528 Other hay Fodder and stover 3920 -2331 2855 Total concentrates 4631 4816 4852 Total hay and fodder 5496 6490 8216 Silage Feed cost per cow: \$56.96 \$72.86 \$99.39 Concentrates 63.43 56.08 59.67 Roughages 10.90 12.23 11.53 Pasture 144.06 TOTAL FEED COSTS Value of produce per cow: \$180.56 \$275.91 \$363.71 Dairy product sales 5.98 5.95 6.10 Dairy produce used in house 12.50 15.21 15.88 Milk to livestock -6.98 -11.88 -11.97 Net increase in value of cows 282.42 372.99 195.56 TOTAL VALUE PRODUCED \$138.36 \$199.27 \$70.29 RETURNS ABOVE FEED COST PER COW \$156 \$199 \$220 RETURNS FOR \$100 OF FEED 46.6 44.1 55.4 Feed cost per lb. B.F. (cents) 18.2 21.2 22.1 Number of cows\*

<sup>\*</sup> 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 18. Feed Costs and Returns fr	rom Other Dairy Cattle, 1953	
You Items far	26 farms 26 farm Average highest in lowest ur of 128 butterfat butterf	in fat
Feed per head, lbs.:  Concentrates  Hay and fodder  Silage  Skim milk  Whole milk	720 845 73 <sup>1</sup> 2055 1963 2096 2104 2167 203 185 44 38 <sup>1</sup> 318 418 35 <sup>1</sup>	8 3 4
TOTAL FEED COSTS PER HEAD	\$58 <b>.2</b> 6 \$63.69 \$59.9	3
Net inc, in value of other dairy cattle	61.45 74.13 62.2	9
RETURNS ABOVE FEED COST PER HEAD	3.19 10.44 2.3	6
RETURNS FOR \$100 OF FEED	105 \$116 \$10	71
Number of head of other dairy cattle	23.0 25.0 19.	2

Table 19. Feed Costs and Return	Your farm	÷	26 farms highest in butterfat per cow	26 farms lowest in butterfat per cow
Feeds per animal unit, lbs.: Concentrates Hay and fodder Silage		232 <b>1</b> 4545 5627	307 <sup>4</sup> 4459 6681	1989 4425 4949
TOTAL FEED COSTS PER ANIMAL UNITS		\$125.60	\$145.67	\$113.62
Value of produce per animal unit: Dairy products Net increase in val. of dairy cattle TOTAL VALUE PRODUCED		\$182.49 <u>33.82</u> \$216.31	\$233.58 <u>144.96</u> \$278.511	\$12 <sup>4</sup> .75 <u>3<sup>4</sup>.52</u> \$159.27
RETURNS ABOVE FEED PER ANIMAL UNIT	***************************************	\$90.71	\$132.87	\$45.65
RETURNS PER \$100 OF FEED	gunnalism, ha na der della sesse	\$175	\$194	\$143
Animal units of dairy cattle		32.9	35.0	28.4

Table 20. Factors of Costs and Re	Your farm	Average of 11 farms
Pounds of butterfat per cow		181
Per cent butterfat in milk		3.5
Price received per 1b. B.F. sold (cents)		8Í.9
As manufacturing cream (cents)		73.6
Other (cents)		93.2
Feeds per cow, lbs.:		
Corn		851
Small grain		504
Commercial feeds		135
Tandria ba	-	
Legume hay	·	4001
Other hay	-	532
Total concentrates		1490
Total hay and fodder	· ·	4533
Silage		50 <b>9</b> 4
Feed cost per cow:		
Concentrates		ф-д С <b></b>
Roughages	<del> </del>	\$36.37
Pasture		52.52
TOTAL FEED COSTS		12.12 \$101.01
W-1 С		
Value of produce per cow: Dairy product sales		A
Dairy produce used in house		\$130.01
Milk to livestock		7.21
Net increases in value of cows		22.88
TOTAL VALUE PRODUCED		<u>-24.86</u>
101111 11010011		\$135.24
RETURNS ABOVE FEED COST PER COW		\$34.23
DEMINDED DOD BARROOM STORES	**************************************	
RETURNS FOR \$100 OF FEED	**************************************	\$135
Feed cost per lb. B.F. (cents)		55.8
Number of cows		17.1

Table 21. Feed Costs and Returns from Other Dual Purpose Cattle, 1953

Table 21. Feed Costs and Returns Items	Your farm	Average of ll farms	
Feeds per head, lbs.: Concentrates Hay and fodder	· .	678 1679	. * :
Silage Skim milk Whole milk		1854 315 441	
TOTAL FEED COST PER HEAD		\$54.66	
Net increase in value	-	\$54.40	
RETURNS ABOVE FEED COST PER HEAD		\$26	
RETURNS FOR \$100 OF FEED		\$100	
Number of head		24.7	

Table 22. Feed Costs and Returns from All Dual Purpose Cattle, 1953

Table 22. Feed C	osts and Returns	I TOM ALL	Dual Fulpo		
Items			Your farm	Average of 11 farms	
Feeds per animal Concentrates Hay and fodde Silage		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1416 3940 4334	
TOTAL FEED COSTS	PER ANIMAL UNIT			\$90.36	
Value of produce Dairy produce Net increase	ts			\$81.5 <sup>1</sup> 4 _30.22	
	LUE PRODUCED			\$111.76	
RETURNS ABOVE FE	ED PER ANIMAL UNIT			\$21.40	
RETURNS FOR \$100	OF FEED			\$123	
Animal units				29.7	

Table 23. Feed Costs and Returns from Chickens, 1953\*

Table 23. Feed Costs and	necurns	Trom Unicke		
			25 farms	25 farms
		Average	highest in	lowest in
	Your	of 123	return	return
Items	farm	farms	above feed	above feed
Feed per hen, lbs.:		0.5	0.5	
Grain	·	95	92	109
Commercial feeds		<u>51</u> 146	148	$\frac{51}{160}$
Total concentrates		146	140	160
Skim milk and buttermilk		1	4	2
TOTAL FEED COST PER HEN	\$	\$4.69	\$4.49	\$5 <b>.05</b>
Walue of madues non-bone				
Value of produce per hen:	ė.	\$6.80	¢ø Eo	\$4.81
Eggs sold and used in house	Φ	•	\$8.50	the state of the s
Net increase in value of chickens		<u>.39</u> \$7.19	<u>.97</u> \$9.47	.08 \$4.89
TOTAL VALUE PRODUCED		\$7.19	\$9.47	\$4.89
RETURNS ABOVE FEED COST PER HEN	\$	\$2.50	\$4.98	\$16
RETURNS FOR \$100 OF FEED	\$	\$159	\$216	\$98
21/2		10.7	:); = =	112 5
Price received per doz. eggs sold (cents	<i></i>	42.1	42.5	41.5
Eggs laid per hen		194	5/15	141
Ave. no. of hens on farm during year		275	359	<b>2</b> 32
Per cent of hens that are pullets		82	95	73
Per cent of death loss of hens		14	10	15
Number of chicks started - pullets		341	481	309
- straight run		52	46	44
-cockerels		214	41	22
Pounds of poultry produced		1208	1987	808
The Francisco E Theorem				

<sup>\*</sup> Includes feeds and returns from the laying flock and chicks.

Table 24. Feed Costs and Returns from Chicks, 1953

Items			and Recuir	Your farm	micks, 1995	Average of 57 farms
Number of cas Feed per 100 Grain Commercia	chicks raised					1422 1314 2736
Total feed co Net increase Return over f	in val. per	nicks rais 100 chicks	•			\$98.22 104.02 5.80
Return for \$1	00 of feed			· .		\$106
Number of chi- Pullets Straight Cockerels	run					431 33 21
Price paid pe Pullets Straight Cockerels		00 t:				\$43.80 19.40 4.31
Per cent deat Number chicks Price rec'd p Pounds of pou	raised er pound sold					15.2 403 26.9 1660

Table 25. Feed Cost and Returns from Laying Hens, 1953

			s laid per her	1
	Your	Below.	175-	225 and
<u>Items</u>	farm	175	<b>2</b> 24	over
Number of cases		16	27	23
Feed per hen, lbs.:				
Grain		78	79	76
Commercial feeds		31	_39	42
Total concentrates		109	118	118
Skim milk		14		4
Total feed cost per hen	The Control of the Co	\$3.10	<b>\$</b> 3.69	\$3.72
Value of produce per hen:				
Eggs sold and used in home		\$5.00	\$7.08	\$8.67
Less depreciation and death loss		. 75		1.16
Total value produced		4.25	1.05 6.03	$\frac{\frac{2.20}{7.51}}{7.51}$
			)	1-2-
Return above feed cost per hen		\$1.15	\$2.34	\$3.79
Return for \$100 of feed	<del></del>	\$137	\$163	\$202
Eggs laid per hen		140	202	249
Price rec'd per doz. eggs sold (cts.)		42.8	42.3	42.0
Ave. no. hens on farm during year		254	324	317
No. of hens on hand beginning of year		292	356	361
% death loss		16	14	12
% hens that are pullets		56	92	96

Table 26. Feed Costs and Returns from a Farm Flock of Sheep, 1953 18 farms 18 farms Average highest in lowest in Your of 37 returns returns Items farm farms above feed above feed Feeds per head. \*1bs.: Concentrates 81 78 87 Legume hay 316 248 379 Other hay 20 43 124 Silage 16ī 92 Feed cost per head: Concentrates \$1.97 \$1.94 \$2.05 Roughages 3.31 2.57 4.02 Pasture 2.53 2.51 2.57 TOTAL FEED COSTS \$7.02 Value of produce per head: Wool \$3.75 \$3.75 \$3,79 Net increase in value of sheep 5.15 8.18 2.11 TOTAL VALUE PRODUCED \$5.90 RETURN ABOVE FEED COST PER HEAD \$1.09 \$4.91 \$-2.74 RETURNS FOR \$100 OF FEED \$120 \$170 \$68 Price per cwt. of lambs sold \$18.62 \$19.49 \$17.95 Price per lb. wool sold (cts.) 50.2 51.5 49.0 Pounds of wool per sheep sheared 9.3 9.6 9.1 34 Number of ewes kept for lambing 27 40 % lamb crop\*\* 94 94 97 % death loss\*\* 8.7 8.1 9.5 Pounds of sheep produced 2377 2028 2765 No. of head of sheep\* 46.9 36.9 57.3

<sup>\*</sup> Two lambs under six months of age considered as one head

<sup>\*\*</sup> Lambs which die during month of birth are not included.

Table 27. Feed Costs and Returns for Turkeys, 1953

Items	Your farm	Average of 4 farms
Feed per cwt. turkeys produced, lbs.:	,	
Grain Commercial feeds Total concentrates	-	380 1 <u>52</u> 532
Feed cost per cwt. turkeys produced	\$	\$16.29
Net increase in value per cwt. turkeys produced	\$	\$31.11
RETURNS ABOVE FEED COST PER CWT. TURKEYS PRODUCED	\$	\$14.82
RETURNS FOR \$100 FEED	\$	\$192
No. of poults put on feed Price paid per poult purchased (cts.) Per cent death loss Price received per lb. turkeys sold(cts.) Weight per bird sold (lbs.)		2512 57.6 15.5 36.0 14.2
Pounds of turkey produced		31862

#### 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

	No. of		No. of
Item	work units	Item	work units
Dairy and dual pur. cows	10.0 per cow	Small grain	.5 per acre
Other dairy & du.pur.cattle	3.5 per an. unit*	Sugar beets	1.5 per acre
Beef breeding herd	3.5 per an. unit*	Sweet corn	.7 per acre
Feeder cattle	.25 per 100 lbs.	Corn husked	.7 per acre
Sheep - farm flock	1.5 per an. unit*	Corn, hogged	.4 per acre
Sheep - feeder	.3 per 100 lbs.	Corn, shredded	1.5 per acre
Hogs	.2 per 100 lbs.	Corn, silage	1.0 per acre
Turkeys	.5 per 100 lbs.	Corn, fodder	1.0 per acre
Hens	20.0 per 100 hens	Alfalfa hay	.6 per acre
Canning peas	.5 per acre	Soybean hay	.8 per acre
Soybeans for grain	.5 per acre	Other hay crops	.4 per acre

<sup>\*</sup> 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 1,100 pounds of turkeys produced.

148 170 116 24574	Average 1930-34 140 199 136 \$19851	Average 1935-39 149 218 147	Average 1940-44 177 227	Average 1945-48	1949 164	1950 <b>1</b> 65	1951	1952	1953
17 <b>0</b> 116	199 136	218			164	165	7.60		
17 <b>0</b> 116	199 136	218					162	160	157
116	136			223	2 <b>23</b>	222	222	229	226
			148	148	150	153	153	158	156
	427072	\$20286	\$25912	\$30428	_	\$37768	\$42333	\$45863	
	والمنافذة المراجعة ا					_			<b>.</b>
141	\$ 83	\$ 213							
85	52	72							231
6	14	94		,					35
37	41	80	142	175	182	148	145	161	170
36	33	43	32	14	12	9	. 5	11	. 4
	64	94	124	217					421
	16 <b>0</b>	222	30 <b>1</b>	68 <b>2</b>	780	-	•		1170
440	313	535	1273	2000	1773	1972	<b>229</b> 9	2383	2 <b>1</b> 48
	-		165	386	461	446	522	58 <b>3</b>	592
399	321	559	717	142 <b>I</b>	2128				1934
		281	392	808	990	1251			1274
72	55	67	144	277	290	304	346	364	380
130	81	245	331	696	1109	1139	1218	972	835
				-	403	409	359	377	370
					990	891		901	806
								756	777
								140	145
2,440	\$1,955			\$9,008	\$10,947	\$11,657	\$12,899	\$12,287	\$11,945
	230	·			_			-	100
102									138
1,228				• -					
358	261 \$3,525			<u>518</u> \$11,213	<u>483</u> \$13,398	\$14,212	<u>505</u> \$15,710		\$14,770
	85 6 37 36 66 186 440 - 399 190 72 130 52 272 298 30 1,228	85 52 6 14 37 41 36 33 66 64 186 160 440 313 	85 52 72 6 14 94 37 41 80 36 33 43 66 64 94 186 160 222 440 313 535	85       52       72       154         6       14       94       64         37       41       80       142         36       33       43       32         66       64       94       124         186       160       222       301         440       313       535       1273         -       -       -       165         399       321       559       717         190       122       281       392         72       55       67       144         130       81       245       331         52       32       79       188         272       243       398       585         298       313       281       303         30       28       35       52         \$2,440       \$1,955       \$3,298       \$5,408         102       87       145       158         1,228       992       1,014       1,296         358       261       239       326	85       52       72       154       188         6       14       94       64       76         37       41       80       142       175         36       33       43       32       14         66       64       94       124       217         186       160       222       301       682         440       313       535       1273       2000         -       -       165       386         399       321       559       717       1421         190       122       281       392       808         72       55       67       144       277         130       81       245       331       696         52       32       79       188       303         272       243       398       585       813         298       313       281       303       418         30       28       35       52       87         2440       \$1,955       \$3,298       \$5,408       \$9,008         102       87       145       158       166         1,2	85 52 72 154 188 217 6 14 94 64 76 18 37 41 80 142 175 182  36 33 43 32 14 12 66 64 94 124 217 268 186 160 222 301 682 780 440 313 535 1273 2000 1773  165 386 461 399 321 559 717 1421 2128 190 122 281 392 808 990 72 55 67 144 277 290  130 81 245 331 696 1109 52 32 79 188 303 403 272 243 398 585 813 990 298 313 281 303 418 575 30 28 35 52 87 115 30 28 35 52 87 115 30 128 992 1,014 1,296 1,521 1,765 358 261 239 326 518 483	85 52 72 154 188 217 179 6 14 94 64 76 18 10 37 41 80 142 175 182 148  36 33 43 32 14 12 9 66 64 94 124 217 268 315 186 160 222 301 682 780 819 440 313 535 1273 2000 1773 1972  165 386 461 446 399 321 559 717 1421 2128 2186 190 122 281 392 808 990 1251 72 55 67 144 277 290 304  130 81 245 331 696 1109 1139 52 32 79 188 303 403 409 272 243 398 585 813 990 891 298 313 281 303 418 575 656 30 28 35 52 87 115 116 \$2,440 \$1,955 \$3,298 \$5,408 \$9,008 \$10,947 \$11,657	85	85 52 72 154 188 217 179 219 136 6 14 94 64 76 18 10 54 26 37 41 80 142 175 182 148 145 161  36 33 43 32 14 12 9 5 11 66 64 94 124 217 268 315 327 323 186 160 222 301 682 780 819 876 957 440 313 535 1273 2000 1773 1972 2299 2383  165 386 461 446 522 583 399 321 559 717 1421 2128 2186 2194 1932 190 122 281 392 808 990 1251 1380 1181 72 55 67 144 277 290 304 346 364  130 81 245 331 696 1109 1139 1218 972 52 32 79 188 303 403 409 359 377 272 243 398 585 813 990 891 885 901 298 313 281 303 418 575 656 671 756 30 28 35 52 87 115 116 128 140 \$2,440 \$1,955 \$3,298 \$5,408 \$9,008 \$10,947 \$11,657 \$12,899 \$12,287\$  - 230

	Average 1928-29	Average 1930-34	Average	Average 1940-44	Average 1945-48	1949	1950	1951	1952	1953
ARM RECEIPTS										
Cattle	<b>\$</b> 753	\$ 431	<b>\$</b> 713	\$ 1,335	\$ 1,877	\$ 2,602	\$ 2,844		\$ 2,992	
Dairy products	1,662	1,188	1,451	2,138	4,134	3,866	4,005	4,500	5,021	5,070
Hogs	1,164	793	1,074	2,517	3,5 <b>05</b>	3,971	3,9 <b>2</b> 6	4,646	4,233	4,411
Sheep and wool	52	60	200	186	254	143	160	177	159	172
Poultry	140	166	381	629	735	416	327	359	342	468
Eggs	275	243	372	751	1,312	1,347	1,158	1,522	1,240	1,453
Horses	30	27	5 <b>5</b>	34	20	17	19	10	17	12
Corn	37	62	153	121	277	576	433	प्रमिष	697	1,017
Small grain	241	177	357	278	695	511	766	461	50 <b>0</b>	398
Other crops	163	155	174	455	856	672	669	739	982	908
Income from labor off farm		118	168	141	183	153	199	232	151	125
Agric. adj. payments	0	74	230	254	64	36	59	60	72	51
Misc.	134	<u>138</u>	247	282	<u>462</u>	<u>503</u>	<u>788</u>	792	<u>619</u>	43
Total farm sales	\$ 4,753	\$ 3,632	\$ 5,575	\$ 9,121	\$14,374	\$14,813	<b>\$</b> 15,353	\$17,493	\$17,025	
Increase in farm cap.	617		524	921	1,632	527	3,457	3,064	1,364	654
Fam. living from farm	325	232	273	<u>566</u>	718	<u>700</u>	702	<u>816</u>	805	446
Total farm receipts	5,695	3,864	6,372	10,608	16,724	16,040	19,512	21,373	19,194	18,36 <sup>1</sup>
Total farm expenses	4,128	3,525	4,696	7,188	11,213	13,398	14,212	15,710	15,230	14,770
Operator's earnings	1,567	339	1,676	3,420	5,511	2,642	<b>5,30</b> 0	<u>5,663</u>	3,964	3,59
ISCELLANEOUS ITEMS										<b>.</b> .
Yield per A. corn (bu.)	44.8	43.4	47.2	55.7	46.6	51.3	52.0	50.8	65.0	61.8
Yield per A. barley (bu.)	36.0	26.2	28.7	24.8	31.4	28.2	34.6	27.9	25.7	25.
Yield per A. oats (bu.)	46.0	40.0	43.4	44.2	48.5	47.2	45.7	48.6	45.7	37.
Yield per A. alfalfa (tons	) 3.0	2.3	2.3	2.4	2,4	2 <b>.2</b>	2,2	2.9	2.7	2.9
Per cent high return crops	31.9	35.8	41.0	43.3	49.6	56.0	55.9	63.2	64.0	
A.U. livestock per 100 A.	19.2	<b>20.</b> 6	19.3	24.5	22.8	22.7	22.7	29.6	29.9	30.
No. of work units	599	747	777	670	607	577	588	594	599	44(
Work units per worker	310	338	341	305	304	288	294	313		
Expenses per work unit	\$1.76	<b>\$1.2</b> 6		\$2.35	\$4.37	\$5.97	\$5.95	\$6.54		\$9.70
No. of work horses	5.4		4.5	3. 9	2.7	2.0	1.6	1.3	1.1	
No. of colts and ponies	.8		1.2			. 2	.1	.1		
No. of milk cows	14.2		17.8	17.6	16.9	17.4	17.2	16.6	17.2	18.6

	,	Table	29. <b>S</b> ur	mary by Y	ears (con	tinued)			· · · · · · · · · · · · · · · · · · ·	
	Average		Average	Average	Average					2010
Misc. Items (cont.)	1928-29	1930-34	1935-39	1940-44	1945-48	1949	1950	<u> 1951</u>	1952	1953
No. of litters of pigs	9.3	10.8	9.5	14.4	11.2	13.7	14.0	15.5	13.4	11.8
Lbs. of hogs produced	12,706	15,153	13,438	21,586	17,772	21,438	21,593	23,957	22,967	18,799
No. of head of sheep	7.0	13.5	18.8	15.8	11.2	9.3	8.4	10.1	10.9	11.3
No. of hens	136	169	182	222	239	220	219	224	217	
Lbs. B.F. per dairy cow	244	240	238	<b>2</b> 52	271	305	312	307	299	309
Lbs. B.F. per dual pur. cow		-	440	185	177	197	206	204	185	181
Pigs weaned per litter	6.3	6.1	6.4	6.2	6.4	6.7	6.6	6.5	6.9	6.7
No. of eggs laid per hen	95	114	131	145	174	191	198	193	192	194
PRICE RECEIVED PER:									4 -	<b>.</b>
Lb. B.F. sold as cream	\$.52	\$.28	\$.34	\$.47	\$.82	\$.70	\$.70	\$.79	\$.85	\$.75
Cwt. hogs sold	8.92	4.98	8.26	10.93	19.74	17.84	18.25	19.69	17.43	21.28
Cwt. feeder cattle sold	-	****		11.55	19.87	23.32	27.31	33.83	28.91	20.73
Lb. wool sold	. 36	.16	. 25	• 39	.43	. 45	• <b>5</b> 5	• 93	.44	.50
Doz. eggs sold	.28	.16	.19	. 27	•39	.40	•33	·LL	. 37	. 42
Lb. turkey sold	_	***	. 20	.27	.38	.40	<b>.3</b> 6	.39	. 38	. 36
RETURN ABOVE FEED COST PER:								•		_
Dairy cow	<b>\$</b> 76.50	\$28.15	\$49.95	\$81.83	\$165.33	\$145.03	\$160.62	\$189.01	\$178.78	\$138.36
Dual purpose cow		-	_	51.55	105.44	99.52	104.44	130.72	89.25	34.23
Cwt. hogs produced	1.50	. 48	2.98	3.93	6.25	5.43	6.99	5 <b>. 9</b> 4	2.68	10.17
Head of sheep	5.50	.81	2.82	4.63	7.24	6.70	13.25	14.72	1.20	1.09
Hen	1.82	• 99	1.12	1.82	2.14	2.99	1.62	2.73	1.00	2.50
Cwt. turkeys prod.	sino		10.81	13.54	14.09	16.52	10.83	12.02	10.40	14.82
FEED COST PER:					. •	_				
Dairy cow	\$69.50	\$47.30	\$44.93	\$63 <b>.13</b>	\$121.46	\$130.28	\$136.97	\$144.56	\$144.82	\$144.06
Dual purpose cow		_	_	52.08	83.46	88.73	99.65	101.54	98.59	101.01
Cwt. hogs produced	7.66	4.21	5.10	7.52	13.94	10.40	12.20	13.31	13.87	13.04
Head of sheep	2.82	2.23	2.62	3.30	5.12	5 <b>.3</b> 5	6.25	7.18	7.71	7.81
Hen	1.62		1.57	2 <b>. 38</b>	4.50	3.95	4.49	4.83	5 <b>.13</b>	4.69
Cwt. turkeys prod.			8.47	12.86	20.34	17.08	19.32	21.11	21.61	16.29
Horse	55.09	<b>35.5</b> 9	36.02	41.52	43.96	36.75	42.66	44.31	· <u> </u>	-
PRICE OF FEED:	22.07	22.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Corn (per bu.)	\$.70	\$.45	\$.59	\$.71	\$1.36	\$1.02	\$1.20	\$1.36	\$1.34	\$1.31
Barley (per bu.)	.60	.42	.49		1.39	.99	1.20	1.23		1.11
Oats (per bu.)	.48	.26	. 28		•79	.59	.72	_		.71
Bran (per cwt.)	1.70	.98	1.22		2.74	2.85	2.80			
Oilmeal (per cwt.)	3.00	1.96	2.12		3.80	4.00	3.95	3.85		4.10
Alfalfa (per ton)	14.75	11.10	9.30		18.00	20.00	21.00		-	17.50
Trarra (Det pom)	T4+ 12	11.10	7.00	7. 70	TO• 00	20.00	· ~ ± • 00	±9.00	-,,,,,,	-, -, -

Foot note 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. The 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 1953.

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 1953 were as follows:

Unpaid Year family labor		Board for hired labor	Year	Unpaid family labor	Board for hired labor
1928-30	\$60	\$20	1941	\$50	\$20
1931	40	15	1942	60	<b>2</b> 5
1932-3 <sup>L</sup>	30	10	1943	75	25
1935	<b>7</b> 10	15	1944	85	25
1936	43	18	1945	90	<b>2</b> 5
1937-40	45	18	1946	100	30
		-	1947-5	3 125	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.

The standards used in the calculation of work units were changed in 1953. Also the value of the house, which had been included in the investment of the farm buildings since 1940, was omitted from all the records except the net worth statements.

These adjustments should be considered in comparing 1953 results with previous years.