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UNIVERSITY OF MINNESOTA
Department of Agriculture
and UNITED STRATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultures! Economics
and the
County Extension Services of
Dakota, Dodge, Freeborn, Goodhue, Le Sueur, Mower, Nicoliet, Olmsted,
Rice, Scott, Steele, Wabasha, Wascoa, and Winona Counties
Cooperating

Annual Report
of the
Southwastern Minnesofta
Farm Management Service
1944

-----University Farm
St. Paul S, Minnesota
April 1945

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Seventeenth Annual Report of the Farm Management Service of Dakota, Dodge, Freeborn, Goodhue, LeSueur, Mower, Nicollet, Olmsted, Rice, Scott, Steele, Wabasha, Waseca and Winona Counties for the Year 1944.

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

INTRODUCTION

The Division of Agricultural Economics and the Division of Agricultural Extension of the University of Minnesota, the Bureau of Agricultural Economics of the United States Department of Agriculture, and the county extension services of Dodge, Freeborn, Goodhue, Rice, Steele and Waseca Counties organized late in 1927 the Farm Management Service Project, to operate in the above named counties, beginning January 1, 1928. Additional counties have since been added. This farm management service is offered to farmers who desire to keep farm records, and to have these records summarized and analyzed in connection with those of other farmers. Each farmer who cooperates in this service pays an annual fee which covers a part of the cost. The balance of the cost is defrayed by the University of Minnesota and the United States Department of Agriculture.

General administration of this project, analysis of the records and preparation of the reports is handled by the Division of Agricultural Economics under the direction of G. A. Pond and T. R. Nodland. Extension work in connection with the project is handled by S. B. Cleland and J. B. McNulty of the Agricultural Extension Division. Glen Myers is the field agent for this project. At the end of the year G. E. Toben and V. G. Dose of the Division of Agricultural Economics aided in closing the records. County agricultural extension agents who cooperate in this project include H. Lawrenz, V. Sander, W. M. Lawson, G. J. Kunau, R. D. Evans, F. L. Liebenstein, F. E. Wetherill, R. Aune, Alfred Halvorson, D. Marti, C. Graham, J. R. Gute, O. Nelson, C. F. Murphy, and Geo. Chambers.

The Southeast Minnesota Farm Management Association was organized in 1939 by the farmers cooperating in the S. E. Farm Management Service. This association now represents its membership as an additional cooperating agency to determine policies and especially to maintain the field organization and membership. Officers for 1944 were:

President, B. B. Witte, Faribault, Rice County; Vice-President, Wm. A. Benitt, Hastings, Dakota County; Secretary-Treasurer, Emery Lindesnith, Owatonna, Steele County.

The board of directors included these officers and also the following: G. R. Kellar, Dodge; Henry Opdahl, Freeborn County; Dwight Ericson, Goodhue County; Emil Dietz, Le Sueur County; Carl Kehret, Mower County; Carl Schattschneider, Olmsted County; Herman Krueger, Scott County; Harvey Carlton, Wabasha County; C. L. Sauffeur, Waseca County; and Elmer Wirt, Winona County.

In addition to records kept by members of the S. E. Minn. Farm Mgt. Service, 9 records from farmers in a detailed accounting study in Nicollet County are included. Since these farms are in the same area and of the same type as the others and since the same type of records are available they have been combined with those of the regular service to increase the size of the sample and make the comparison more significant. These records have been kept under the general direction of S. A. Engene of the Division of Agricultural Economics and serviced by V. G. Dose.

The following tabulation shows by counties the number of records submitted in 1944:

Dakota	5	• •	Mower	1.1	Steele	16
Dodge	12		Nicollet	15	Wabasha	- g
Freeborn	19		Olmsted	13	Waseca	18
Goodhue	18		Rice	16 1 15 12 1	Winona	$\sim -\tilde{q}$.
LeSuevr	5		Scott	11	Total	166

The table on page 4 and succeeding pages show 161 farms. Five farms have been omitted from all the averages in the tables because they differed so widely in type from the others or the records were not sufficiently complete for a full analysis.

TYPE OF FARMING

Most of the farms are livestock farms on which dairy cattle, hogs and poultry are the principal sources of income. Although some milk and cream are retailed in cities, and some milk is sold for shipment to the Twin Cities, most of the dairy products are sold to creameries and cheese factories. The principal crops grown are corn, cats, barley and hay. These crops are raised primarily as livestock feed, although a seasonal surplus may be sold. Wheat, sweet corn, canning peas, flax and seed crops are grown to a limited extent as cash crops.

WEATHER, SOIL AND TOPOGRAPHY

The spring of 1944 was somewhat cooler and very much wetter than usual. Weather conditions were very unfavorable for early spring farm activities. The seeding of small grains was seriously delayed and by the end of May some lowlands were still too wet for seeding. In the western portion of the area, haying, cultivating and the planting of late crops were delayed by heavy rains in June. There was considerable loss from hail storms in some areas during July. Weather conditions in August and September were generally favorable for haying, harvesting and maturing corn and other late crops. The months of September and October were very dry. Killing frosts occurred early in October. A considerable amount of corn at harvest time contained excessive moisture for storage.

There is some variation in soil conditions and topography among these counties. The soil varies from sandy loam to a rich black clay loam; the latter type predominates in this area. Some of the farms are level, all tillable and well drained, but most of them are gently rolling with some land too rough or too wet to cultivate. Goodhue, Wabasha and Winona Counties have more rolling land than the other counties. Much of the level land is tiled to make possible its cultivation in wet years. However, on a number of farms, there is considerable land which is poorly drained. In much of Goodhue, Dodge, Mower, Olmsted and Winona Counties and in the eastern part of Dakota, Rice and Steele Counties, the soil is lime deficient and applications of lime are necessary in order to grow alfalfa and sweet clover. In the remainder of the area it is not necessary, as a rule, to apply lime in order to grow these two crops.

Note that the second of the se

Table 1. Monthly and Annual Precipitation

	Rochester		Albert Lea		Fari	bault	St. Peter	
		Depart-		Depart-		Depart-		Depart-
	Precip-	ure from	Precip-	ure from	Precip-	ure from	Precip-	ure from
	itation	normal	itation	normal	itation	normal	itation	normal
	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
January	0.68	-0.42	0.89	+0.08	0.46	+0.22	0.56	-0.32
February	1.01	+0.19	0.77	-0.14	0.75	+0.06	1.28	+0.58
March	1.04	-0.28	1.60	+0.37	0.99	-0.12	1.18	-0.09
April	3.52	+1.06	1.64	-0.76	2.82	+0.91	2.55	+0.34
May	4.22	+0.42	7.52	+3.69	5.22	+2.02	6.91	+3.59
June	4.16	-0.43	4.63	+0.05	8.87	+4.50	6.43	+1.72
July	2.71	-0.45	5.22	+1.74	5.88	+2.53	4.38	+0.98
August	2.39	-1.06	4.70	+1.05	4.60	+1.19	4.77	+1.31
September		-2.45	1.55	-2.18	1.08	-2.37	1.35	-2.07
October	0.24	-1.86	0.38	-1.75	0.22	-1.86	0.28	-1.91
November	1.07	-0.50	1.64	+0.17	0.71	-0.63	0.70	-0.59
December	0.40	-0.52	0.41	-0.54	0.24	-0.44	0.19	-0.66
1944 Tota		-6.30	30.95	+1.78	31.84	+5.57	30.58	+2.88
1 943 Tota		-5.27	37.78	+8.61	28.12	+1.85	35.26	-7. 56
1942 Tota		+12.91	31.22	+2.05	28,57	+2.30	27.94	+ ,24
1941 Tota		+1.03	36.35	+7.18	23.08	+3.19	29.95	+2.25
1940 Tota		+ .10	27.81	-1.36	23.34	-2.93	38.39	+10.69
1939 Tota		-6.85	19.74	-9· ⁴ 3	16.28	-9.99	22.49	-5,21
1938 Tota	1 43.69	+14.92	38.04	+8.87	27.14	+ .87	30.81	+3.11

RECORDS KEPT

The records kept by the cooperators included inventories at the beginning and end of the year, cash receipts and expenses, a report of feed fed to the various classes of livestock, and a record of farm produce used by the farm family. Supplementary information was also secured during the year regarding crop and livestock production and practices.

The cooperators were assisted and supervised in keeping their records by the field agent, Glen Myers, who visited each farm several times during the year. In addition to securing the supplementary information, the field agent's duties included numerous services, such as, securing a monthly list of prices of farm products prevailing in the area, helping the farmer place uniform values on real estate and equipment, checking the cash and feed records, and answering any questions that might arise as to how the entries should be made in the account book. The supervision resulted in uniformity in the type of records secured, in the inventory valuations and in the prices at which feed and farm produce were charged.

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

Table 2. Summary of Farm Inventories, 1944*

Table 2. Summa:	ry of Farm	n Inventor		
Items	Your farm	Average of 161 farms	32 most profitable farms	32 least profitable farms
	T C/T III	Tarms .	TETHIA	Tarms
Size of farm (acres) Size of business (work units)**		229 666	280 855	21.5 513
Begi	inning of	Year		
Productive livestock (total)		\$4449	1 de la com	h=dod
Dairy and dual purpose cows		1412	\$6092 1642	\$3828. 807
Other dairy & dual pur. cattle		808	1001	893 673
Beef cattle (incl. feeders)		1+52	1027	673 559
Hogs	***************************************	1258	1401	1277
· Sheep (including feeders)	*******************	189	1455	141
· Poultry (including turkeys)		. 330	566	285
Horses	4	325	334	321
Crop, seed, and feed	•	3911	5360	3350
Mach. & equipment (total)		3306	4227	3024
Power mach. (f. share)		1132	1421	980
Crop & gen. mach. (f. share)	* 2	1501	1853	1467
· Livestock equip. & supplies Buildings, fences, etc.		673	953	577
Land	***	7327	8745	6948
• Control of the second of the	***************************************	8971	10907	9202
Total farm capital	Art or the section of	\$28289	\$35665	\$26673
	End of Yea	ar -	tier was some of the	***
Productive livestock (total)		\$4075	¢E700	¢2)100
Dairy & dual purpose cows	****	1385	\$5302 1478	\$3409
Other dairy & dual pur. cattle .		791	945	90 1 629
Beef cattle (incl. feeders)		420	746	562
Hogs	-	954	1125	903 '
Sheep (including feeders)	******	íśs	446	123
Poultry (including turkeys)		337	562	291
Horses		286	282	281
Crop, seeds, and feed		3782	5575	2741
Mach. & equipment (total)	***	3286	3976	3168
Power mach. (f. share)		1085	, 1287	1033
Crop & gen. mach.		1541	1781	1569
Livestock equipment & supplies Buildings, fences, etc.		660	908	566
Land		7378 8971	. 8673 . 10907	6996 9202
Total farm capital	3 9 000	\$27778	\$34715	\$2579 7

^{*} For the purpose of comparison the inventories as shown in this table and the earnings as shown elsewhere in this report with the exception of pages 8 and 9 are presented on a full-owner basis. The assets, expenses and receipts of the landlord were included in the statements for rented farms.

^{**}See page 13 for an explanation of "work units".

	Table 3	. Famil:	y Living	From the	Farm,	1944		
and the second s	 	Average	32 most	32 least profit-		Average	32 most profit-	32 least profit-
	Your	Average 161	able	able	Your	161	able	able
Items	farm	farms	farms	farms	farm	farms	farms	farms
No.of persons(Fam.) adult equiv.(Other		3.0 .8	3.1 1.0			^		
Wholemilk Skim milk Cream Farm made butter Eggs Cattle Hogs Sheep Poultry Potatoes Vegetables & fruit Farm fuel Rental vl. of house		1326 qt 189 qt 160 pt 14 lb 202 do 515 lb 512 lb 6 lb 138 lb 15 bu	s. 168 s. 124 s. 3 z. 222 s. 641 s. 525 s. 150 s. 190	426 209 6 192 599 423 0 142		\$77.39 1.62 35.42 2.05 63.99 50.10 67.93 .72 29.30 20.21 54.99 26.81 215.27	\$95.32 1.32 .25.64 69.34 61.66 70.55 1.68 39.14 24.50 67.63 38.53 253.20	0 30.30 17.25 47.41 30.91
Total						\$645.80	\$750.18	\$621.81

Table 4. Household and Personal Expenses for Those Farms Which Kept Complete Accounts of These Expenses, 1944 20 least 20 most profitprofit-Average able able of 99 Your farms farms farm farms Items 3.5 4.5 3.9 Number of persons - family 2.8 3.1 3.5 Number of persons, (Family •9 • 7 adult equivalent (Other* \$435 \$408 \$419 Food and meals bought 140 140 158 Operating and supplies 181 197 63 216 Clothing and clothing materials 65 73 Personal care, personal spending 106 27 77 Furnishings and equipment 97 73 70 Education, recreation and development 141 130 130 Medical care and health insurance 135 65 154 185 Church, welfare, gifts 273 130 Income tax .84 60 Personal share of auto expense 41 50 Household share of elect. & gas eng. exp. 23 છ H.H.&pers.shr.of new auto, gas eng.&motors bot. 1751 1009 Life insurance and other investments \$1884 \$3543 \$2516 Total household and personal cash expenses \$ 366 412 488 Food furnished by the farm 32 27 Fuel furnished by the farm 208 209 House rental \$2490 \$31.64 Total household and personal expenses

^{*} Hired help or others boarded.

Tems	Table 5. Swmary of Farm Ea	arnings	(Cash Star Average	32 most	32 least
Dairy and dual-purpose cows bought \$ 151		Your			profitable
Deliver and Guel-purpose cows bought Stat Stat State Cherr dairy & dual-purpose cattle bot. 102 126 East cattle bot. 102 121 1 1 1 1 1 1 1 1		farm	farms	farms	farms
Other dairy & dual-purpose cattle bot. 102	*				
Beef cattle bot. (incl. feeders) 104 254 Hogs bought 1822 131 1 Sheep bought (including feeders) 80 255 Poultry bought (including turkeys) 194 395 1 Horses bought 30 14 Misc. livestock expenses 155 294 1 Misc. crop expenses 1750 2513 11 Custom work hired 246 285 28 Mech. power mach. (farm share) (new) 167 157 2 Mech. power mach. (farm share) (maker.) 164 192 1 Mech. power (farm share) (gas.cil.etc.) 467 563 4 Mech. power (farm share) (gas.cil.etc.) 302 328 3 Crop and general mach. (new) 302 328 3 Crop and general mach. (upkeep) 138 178 1 Livestock equipment (new) 52 110 Livestock equipment (new) 382 328 3 Suildings and fencing (upkeep) 70 91 Buildings and fencing (upkeep) 365 257 2 Bird labor 366 267 2 Chiral farm and insurance 110 155 2 Chiral farm purchases 36672 35072 355 Chiral farm purchase 36672 35072 35			_	· ·	
Hogs bought 182					97
Sheep bought (including feeders) 19th 355 1			·	254	60
Poultry bought Including turkeys 19th 395 14th 150 14th 150 14th 150 15th 15	Hogs bought	,	182	131	142
Horses bought 30	Sheep bought (including feeders)			255	6
Misc. crop expenses 155 294 Misc. crop expenses 472 608 3 Feed bought 1730 2513 11 Custom work hired 240 285 2 Mech. power mach. (farm share) (new) 187 157 2 Mech. power farm share) (gas, oil, etc.) 467 563 4 Crop and general mach. (new) 302 323 3 Crop and general mach. (upkcep) 138 178 1 Livestock equipment (new) 52 110 Livestock equipment (upkcep) 70 91 Buildings and fencing (new) 322 325 3 Buildings and fencing (upkcep) 236 267 2 Hired labor 805 1252 4 Taxes 259 365 2 General farm and insurance 10 155 2 (1) Total farm purchases \$6572 \$9072 \$53 (2) Decrease in farm capital 51 95 2 (3) B			194		J _j †5
Misc. crop expenses 472 608 5 Feed bought 1730 2513 11 Custom work hired 240 285 2 Mech. power mach. (farm share) (new) 187 157 2 Mech. power (farm share) (gas,oll,etc.) 467 563 4 Crop and general mach. (new) 302 328 3 Livestock equipment (new) 52 110 Livestock equipment (new) 32 328 3 Buildings and fencing (new) 32 328 3 Buildings and fencing (upkeep) 70 91 1 Hired labor 365 125 4 Taxes 229 365 2 General farm and insurance 110 155 125 4 (1) Total farm endital 511 950					¹⁵
Feed bought					118
Custom work hired 240 285 2 Mech, power mach. (farm share) (new) 167 157 2 Mech, power mach. (farm share) (upkp.) 164 192 1 Mech, power farm share) (gas, oil, etc.) 467 563 4 Grop and general mach (new) 302 328 3 Crop and general mach (new) 302 328 178 1 Livestock equipment (new) 82 110 1 Livestock equipment (upkeep) 70 91 91 Buildings and fencing (new) 382 328 3 Buildings and fencing (wpkeep) 236 267 2 Hired labor 805 1252 4 Taxes 259 365 2 General farm and insurance 110 155 2 (1) Total farm purchases \$6672 \$9072 \$53 (2) Deofease in farm capital 511 950 8 (3) Board furnished hired labor 156 192 1 (4) Inter			`		383
Mech, power mach. (farm share) (new) 187 157 2 Mech, power mach. (farm share) (upkp.) 164 192 1 Mech, power (farm share) (upkse) 467 563 44 Crop and general mach. (new) 302 328 3 Crop and general mach. (upkeep) 138 178 1 Livestock equipment (upkeep) 70 91 91 Buildings and fencing (new) 382 325 3 Buildings and fencing (upkeep) 236 267 2 Hired labor 805 1252 4 Taxes 289 365 2 General farm and insurance 110 155 (1) Total farm purchases \$6672 \$9072 \$53 (2) Decrease in farm capital 156 192 1 (3) Board furnished hired labor 156 192 1 (4) Interest on farm capital 1402 1,759 13 (5) Unpaid family labor 395 424 3 (6) Total farmlexy & dual-purpose cow		9 . /			1141
Mech. power mach. (farm share)(upkp.) 16H 192 1 Mech. power (farm share)(gas,oil,etc.) 467 563 4 Crop and general mach. (new) 302 328 3 Crop and general mach. (upkeep) 138 17g 1 Livestock equipment (upkeep) 70 91 Buildings and fencing (new) 382 328 3 Buildings and fencing (upkeep) 266 267 2 Hired labor 805 1252 4 Taxes 269 365 2 General farm and insurance 269 365 2 (1) Total farm purchases 5672 \$9072 \$53 (2) Decrease in farm capital 511 950 8 (3) Board furnished hired labor 176 192 1 (4) Interest on farm capital 1402 1759 13 (5) Unpaid family labor 395 424 3 (6) Total farm exp. (Sum of (1)to(5) \$9136 \$12397 \$80 FARM RECEIFTS <t< td=""><td></td><td></td><td></td><td></td><td>201</td></t<>					201
Mech. power (farm share)(gas,oil,etc.) 467 563 44 Crop and general mach. (new) 302 328 3 Crop and general mach. (upkeep) 138 178 1 Livestock equipment (new) 52 110 Livestock equipment (upkeep) 70 91 Buildings and fencing (upkeep) 236 267 2 Buildings and fencing (upkeep) 236 267 2 Hired labor 305 1252 4 Taxes 269 365 2 General farm and insurance 110 155 (1) Total farm purchases 5 6672 \$ 9072 \$ 53 (2) Decrease in farm capital 511 950 8 (3) Board furnished hired labor 156 192 1 (4) Interest on farm capital 1402 1759 13 (5) Unpaid family labor 395 424 3 (6) Total farm exp.(Sum of (1)to(5) \$ 9136 \$12397 \$ 80 FARM RECEIPTS Dairy and	Mech. power mach. (farm share) (new)				256
Crop and general mach. (new) 302 328 3					158
Crop and general mach. (upkeep) 138 178 1					451
Livestock equipment (new) Livestock equipment (upkeep) To 91 Buildings and fencing (new) Buildings and fencing (upkeep) Buildings and fencing buildings fence and fence an		-			369
Livestock equipment (upkeep) 70 91 Buildings and fencing (new) 382 325 3 Buildings and fencing (upkeep) 236 267 2 Hired labor 305 1252 4 Taxes 229 365 2 General farm and insurance 110 155 (1) Total farm purchases 36572 \$9072 \$53 (2) Decrease in farm capital 511 950 8 (3) Board furnished hired labor 156 192 1 (4) Interest on farm capital 1902 1759 13 (5) Unpaid family labor 395 424 3 (6) Total farm exp.(Sum of (1)to(5) \$9136 \$12397 \$80 FARM RECEIPTS Dairy and dual-purpose cows \$554 \$962 \$3 Dairy products Other dairy & dual-purpose cattle 415 597 3 Beef cattle (including feeders) 493 1151 3 Beef cattle (including feeders) 493 1151 3 Beeg Sheep and wool (including feeders) 214 503 1 Faggs Horses 28 28 Corn 143 209 1 Small grain 0ther crops 762 1287 5 Machinery & equip. sold 43 Agricultural adjustment payments 51 106 Income from work off the farm 230 251 1 Misc. 46 58 (7) Total farm sales (10) Total farm receipts(7)+(8)+(9) \$12027 \$16534 \$522					120
Buildings and fencing (new) Buildings and fencing (upkeep) Buildings and fencing (upkeep) Buildings and fencing (upkeep) Both ired labor Taxes General farm and insurance General farm and insurance General farm purchases General farm purchases General farm purchases General farm capital (1) Total farm purchases (2) Decrease in farm capital (3) Board furnished hired labor (4) Interest on farm capital (5) Unpaid family labor (6) Total farm exp. (Sum of (1) to(5) FARM RECEIPTS Dairy and dual-purpose cows Dairy and dual-purpose cows Dairy and dual-purpose cattle Beef cattle (including feeders) Hogs Sheep and wool (including feeders) Hogs Sheep and wool (including feeders) Fags Horses Corn Shall grain Other crops Machinery & equip. sold Agricultural adjustment payments Income from work off the farm Misc. (7) Total farm sales (8) Increase in farm capital (9) Family living from the farm Guil Total farm receipts(7)+(8)+(9) Signal Basis and Sold 1552 Sep Sold 12022 Signal Signal 1500 Sold 1500 So					73
Buildings and fencing (upkeep)					
Hired labor Taxes					374
Taxes General farm and insurance (1) Total farm purchases (2) Decrease in farm capital (3) Board furnished hired labor (4) Interest on farm capital (5) Unpaid family labor (6) Total farm exp.(Sum of (1)to(5) TARM RECEIPTS Dairy and dual-purpose cows Dairy products Other dairy & dual-purpose cattle H45 Sheep and wool (including feeders) Poultry (including turkeys) Eggs Horses Corn Small grain Other crops Machinery & equip. sold Agricultural adjustment payments Income from work off the farm (5) Increase in farm capital (1) Total farm sales (296 (6) Total farm sales (7) Total farm sales (8) Increase in farm capital (9) Family living from the farm (10) Total farm receipts(7)+(6)+(9) Eggs FSC 100 110 110 110 115 110 115 125 126 127 126 127 127 128 129 129 129 120 127 128 129 129 120 127 128 129 120 127 128 128 129 129 128 129 129 128 129 129 129 129 120 129 120 129 120 120 120 120 120 120 120 120 120 120		-			236
General farm and insurance	· · · · · · · · · · · · · · · · · · ·	-			484
(1) Total farm purchases (2) Decrease in farm capital (2) Decrease in farm capital (3) Board furnished hired labor (4) Interest on farm capital (5) Umpaid family labor (6) Total farm exp.(Sum of (1)to(5) FARM RECEIPTS Dairy and dual-purpose cows (5) Dairy products (6) Total farm exp.(Sum of (1)to(5) FARM RECEIPTS Dairy products (6) Total farm exp.(Sum of (1)to(5) Dairy products (7) Each time of the farm of					252
(2) Decrease in farm capital (3) Board furnished hired labor (4) Interest on farm capital (5) Unpaid family labor (6) Total farm exp.(Sum of (1)to(5) FARM RECEIPTS Dairy and dual-purpose cows Dairy products Other dairy & dual-purpose cattle H15 597 3 Beef cattle (including feeders) Hogs Sheep and wool (including feeders) Poultry (including turkeys) Eggs Horses Corn Small grain Other crops Machinery & equip. sold Agricultural adjustment payments Income from work off the farm Misc. (7) Total farm sales (8) Increase in farm capital (9) Family living from the farm (10) Total farm receipts(7)+(8)+(9) Income from work off the farm (10) Total farm receipts(7)+(8)+(9) Income from work off the farm Income from work off the farm (10) Total farm receipts(7)+(8)+(9) Income from work off the farm (10) Total farm receipts(7)+(8)+(9) Income from work off the farm (10) Total farm receipts(7)+(8)+(9) Income from work off the farm (10) Total farm receipts(7)+(8)+(9) Income from work off the farm (10) Total farm receipts(7)+(8)+(9) Income from work off the farm (10) Total farm receipts (7)+(8)+(9) Income from work off the farm (10) Total farm receipts (7)+(8)+(9) Income from work off the farm (10) Total farm receipts (7)+(8)+(9) Income from work off the farm (10) Total farm receipts (7)+(8)+(9) Income from work off the farm (10) Total farm receipts (7)+(8)+(9) Income from work off the farm (10) Total farm receipts (7)+(8)+(9) Income from work off the farm (10) Total farm receipts (7)+(8)+(9) Income from work off the farm (10) Total farm receipts (7)+(8)+(9) Income from work off the farm (10) Total farm receipts (7)+(8)+(9) Income from work off the farm work					93
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(10) Total farm receipts(7)+(8)+(9) \$12027 \$18534 \$ 82			- 616	750	622
					\$ 8284
					\$008°
		-			276

Items	Your farm	Average of 161 farms	32 most profitable farms	32 least profitable farms
The state of the s	Tr Ch 17 171	1011110	TOTHER	19,1119
EXPENSES AND NET DECREASES				
Total power	\$	\$1090	\$1266	\$ 1 033
Horses		233	250	230
Tractor		3 7 ¹ +	409	384
Truck		125	246	91
Auto (farm share)		155	122	171
Gas engine (farm share)		4	2	5
Elec. plant or current (farm share)	85	109	68
Hired power		114	128	87
Crop and general machinery		340	14314	345
Livestock equipment Buildings, fencing and tiling	indicatorias an in in	154	229	131
Misc. productive livestock expense		453	531	⁴³⁷
Labor		150	283	116
Real estate taxes		1429	1959	1052
Personal property tax		23 7	296 60	212 40
Insurance	-	52 43	.69 78	24
General farm		67	77	69
Interest on farm capital		1402	1759	1312
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	*****************		±1,79	
(1) Total expenses & net decreases		5417	6981	4771
RETURNS AND NET INCREASES				
All productive livestock		\$9072	\$13675	\$5896
Dairy and dual purpose cows	**************************************	3413	4654	1635
Other dairy & dual pur. cattle		668	ē36	455
Beef breeding herd	Annual processing the second s	134	66	320
Feeder cattle		166	542	39
Hogs	March - At - At between tweet	2813	3640	2183
Sheep - farm flock		100	97	93
Sheep - feeders		36	1.43	0
Turkeys		1437	1924	. j
Chickens		1305	1773	1171
Crops, seed and feed	****	-1131	-1001	-115 ¹
Income from labor off the farm		145	171	106
Agricultural conservation payments	****	- gl	106	78
Miscellaneous	-	141	167	121
(2) Total returns & net increases	water the same of	8308	13118	5047
(1) Total expenses & net decreases		5 ¹ 41 7	6981	4771
(3) Oper. labor earnings (2) - (1)	-	2891	6137	276

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

Table 7. Net Worth Statement for Those Farmers Who Kept a Complete Record of All

Assets and Liabilities* 22 part Your renters*** farm owners** owners January 1, 1944 243.0 185.7 178.8 Total acres in farm 158.5 178.8 Owned 84.5 Rented \$7623 \$22490 Total farm capital 161 120 362 Accounts receivable 511 ¹²³ 986 Stocks and bonds 390 . 502 793 279 - 1119 123 213 139 2181 1114 2389 Life insurance Outside real estate Other outside investments 351 Total outside investments 544 • 330 Cash on hand and in bank 967 1063 Other household & personal assets 1408 1511 1393 Total cash, household & pers. assets . 26561 25158 Total assets .885 2459 Federal Land Bank Mortgage 303 Land Bank Commissioner 2662 Other mortg. on land operated Mortgages on other real estate 125 109 Production Credit Assoc. 131 271 102 Other chattel mortgages 502 866 279 229 5707 1796 1105 Notes payable 160 Accounts payable 5245 Total liabilities 21316 Farmer's net worth \$\frac{1}{5}, 1944 \$\frac{\$22188}{121}\$\$\$ \$22584 121 162 December 31, 1944 \$22584 Total farm capital Accounts receivable 1355 438 1225 1978 Stocks and bonds 538 8,140 Life insurance Outside real estate 1119 324 230 157 117 Other outside investments 3259 3039 2023 tal outside investments
Cash on hand and in bank Total outside investments 691 263 964 - 2 - 6 - 967 - 6 - 6 Other household & personal assets. 1345 1655 1353 Total cash, household & pers. assets 26122 Total assets 808 1878 Federal Land Bank Mortgage Land Bank Commissioner Other mortg. on land operated Mortgages on other real estate 194 maio 1041 diale. Production Credit Assoc.412.... 116 Other chattel mortgages 763 180 Notes payable 254 Accounts payable Total liabilities 4559 4874 21248 4 11266 Farmer's net worth +1280 Gain in net worth

^{*}Only operator's share of the assets and liabilities is included.

**13 rented for cash, 2 cash and crop share, 5 crop share and 2 livestock share.

***8 farms were rented for cash, 2 cash and crop share and 4 livestock share.

Table 8. Summary of Farm Earnings by Tenure, 1944

	Your farm	38 owners	22 part- owners	14 renters
FARM EXPENSES				
Dairy and dual purpose cows bot. \$	<u> </u>	\$ 61	\$ 286	\$ 57
Other dairy and dual pur cattle bot.		78	98	87
Beef cattle bot. (including feeders)			157	2
Hogs bot.	1.	96	134	103
Sheep bot. (including feeders)		16	1	-
Poultry bot. (including turkeys)		143	298	122
Horses bot.		6	54	31
Misc. livestock expenses	**************************************	1014	161	106
Misc. crop expenses		405	617	243
Feed bought		1237	2205	1292
Custom work hired		219	289	205
Mech. power mach. (farm share) (new)		119	237	185
Mech. power mach. (farm share) (upkeep)	 	1.47	227	155
Mech. power (farm share) (gas, oil, etc.)	***************************************	377	474	357
Crop and general mach. (new)		260	299	395
Crop and general mach. (upkeep)		99	190	104
Livestock equipment (new)		82	116	111
Livestock equipment (upkeep)		61	69	47
Buildings and fencing (new)		351	718	
Buildings and fencing (upkeep)		191	246	29 46
Fired labor	 	499	1009	456
Taxes (real estate & pers. property)		209	198	36
General farm and insurance	 	101	109	61
Cash ront	,		346	660
Interest paid		186	241	53
(1) Total farm purchases \$		\$ 5047	\$ 8779	इ मर्वार्ड
(2) Decrease in farm capital		561	9 0115	4 ())
(3) Board furnished hired labor		111	230	121
(4) Interest on farm capital			889	337
		93 7 451	214	213
(5) Unpaid family labor			\$10112	\$ 5614
(6) Total farm exp. (Sum of (1) to (5) \$_	-	\$ 7107	ゆすのエエス	Ф 20 т. .
PATM PROBLETS	v	ماد ا	A	
baily and dual purpose cows \$		\$ 340	\$ 567	\$ 313
Dairy products		2321	2825	2125
Other dairy and dual purpose cattle	· · · · · · · · · · · · · · · · · · ·	399	450	225
Beef cattle (including feeders)		153	383	227
Hogs The second of the second		2716	3220	2011
Sheep and wool (including feeders)		55	130	100
Poultry (including turkeys)		355	1192	237
Eggs - Mark of the sound of the second		1049	912	913
Horses		16	53	12
Com.		166	109	15
Small grain	-	145	236	129
Other crops was a series, a series of a general value		699	1,411	290
Machinery & equipment sold	 	62	93	1214
Agricultural adjustment payments	**************************************	66	ି ଓଁଟ	34
Income from work off the farm		215	299	326
Misc.		18	128	10
(7) Total farm sales \$		\$ 8775	\$12096	\$ 7091
(8) Increase in farm capital	· 		94	370
(9) Family living from the farm		618	6314	518
(10) Total farm receipts (7) + (8) + (9) \$	************	\$ 9393	<u> </u>	\$ 7979
(6) Total farm expenses		7107	10112	5614
(11) Operator's labor earnings (10) - (6)		2886	2712	2365
				2915
(12) Ret. cap. & family lab. (4)+(5)+(11)		3674	3815	ペプエク

ANALYSIS OF THE REASONS FOR DIFFERENCES IN OPERATOR'S EARNINGS

The operator's labor earnings varied widely among the farmers included in this study. The average labor earnings of those farmers ranking in the upper 20 per cent in the range according to earnings was \$6137 and of those in the lower 20 per cent was \$276. This is a range of \$5861 between the average earnings of these two groups. Some of the causes for these differences in earnings may be beyond the control of the farmer. However, all of these farmers could make some changes in their farming operations which would increase earnings. A farmer can secure some ideas as to changes that could profitably be made on his farm by studying the facts about his business as presented in this report and comparing his accomplishments with other farmers following the same general type of farming. The more important management factors affecting earnings and their relationships with earnings are presented in the following tables. These factors vary from year to year in their relative influence on earnings.

		Crop Yiel	ds to Farm Earnings
Per cent cro			
were of the		$\mathcal{F}^{(1)} = \{ (x_1, x_2, \dots, x_n) \in \mathbb{N} \mid x \in \mathbb{N} \}$	2.0
for all 161		No. of	Average operator's
Group	Average	farms	Labor earnings
Below 85 85-114 115 and abo	72 99 ve 128	¹⁴⁵ 70 46	\$1799 3022 3760

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

Table 10. Rela			Crops to	Farm Earnings
Per cent of till in high return		. No.	Ave	age operator's
Group	Average	farms		or earnings
Below 41.0 41.0 - 54.9 55.0 and above	34.7 48.1 64.0	35 84 42		\$2300 3023 3120

^{*}Crops are marked on page 16 as (A), (B), (C), and (D).

All of acres in (A) crops, one-half of acres in (B) crops and one-fourth of acres in (C) crops are used in calculating per cent of tillable land in high return crops.

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

Table 11. Relation of Returns From Productive Livestock to

	Farm Earn	ings		
Index of returns for \$1	LOO feed	No.	and the visit of	
fed to productive lives	stock*	of	Average of	perator's
Group	Average	farms	labor e	arnings
				*
Below 85	75	33	\$16:	25
85 - 114	100	96	30!	5 7
115 and above	127	32	36	9 8 -

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

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

Table 12. Relation of Amount of Productive Livestock to

Militer (1997), a service 👍 early recht.

and the section		and the same of th		rnings		
	Productive	livestock				
THE WAR	units per	100 acres*	No.	of A	verage oper	ator!s
	Group	Average	fa	rms	labor earn	ings
	18.0 - 29.	14.6 9 23.2 ve 35.7) "

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

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

Table 13. Relation of Size of Business (Work Units)

Control of the second of the second

		to Farm	Earnings		
Days of p	roductiv	e work	No. of	Average	operator
Group	A	verage	farms	labor	
Below 500		¹ +10	78		\$1)+64
500 - 799		624	84		2823
800 and a	bove	1008	39	War in the second	141427
500 - 799	15 1 1 1 P	624	84 39	, et es, i ved en telepe en et es	2823

Average farm earnings tend to increase with an increase in size of business. For farmers operating their farms at a loss, the larger the volume of business, the larger will be the loss, but a farmer who is making a profit could make a larger profit if he increased his size of business, providing that in so doing he does not lower materially the efficiency in some one or more important branches of his business. Those farmers who have large businesses usually have more flexibility of their organization than does the man with a small business, and can utilize more efficiently and to better advantage available labor, power, machinery and buildings.

Table 14. Relation of Amount of Work Accomplished per Worker

Work un: per work	-	No. of		e operator's	\$
Group	Average	farms	labo:	r earnings	
Below 250 250 - 349 350 and above	220 299 410	35 82 ԴԴ		\$1604 3023 3669	

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

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

	iraing Ex	pense to	Farm Barn:	ings*	_
Expense per work unit		No. of	Average	operator!	~
Group	Average	farms	labor		· .
\$3.90 and above \$2.30 - \$3.89 Below \$2.30	\$4.79 3.10 1.91	32 98 31		\$1872 3059 3414	

^{*}Includes building, fencing, all crop machinery and livestock equipment, power, horse feed, and miscellaneous horse expense.

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

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

EFFECT OF WELL BALANCED EFFICIENCY ON FARM PROFITS

It is quite evident from this report that few farmers have a monopoly on efficiency. Quite often farm operators show efficient management in one part of the farm business, which is offset by poor results in other phases. These farmers get medium returns while those who fall down all along the line get the lowest returns, and on the other hand those few who can manage to attain high efficiency in all parts of their organization receive returns well above average. This is well illustrated in Table 16.

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

No. of factors in which farmer excels	No. of farms	Your farm	The length of the shaded lines is in proportion to the average operator's labor earnings	Average operator's labor earnings
None or one Two or three Four or five Six or seven	21 70 55 15		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	\$1241 2306 3701 4590

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

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 17.

Table 17. 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	14.5 per cow	Small grain	.8 per acre
Other dairy & du.pur.cattl	e 4.4 per an.unit*	Sugar beets	3.0 per acre
Beef breeding herd	4.0 per an.unit*	Sweet com	2.3 per acre
Feeder cattle	•4 per 100 lbs•	Corn, husked	1.2 per acre
Sheep - farm flock	2.0 per an.unit*	Corn, hogged	.7 per acre
Sheep - feeders	.5 per 100 lbs.	Corn, shredded	2.4 per acre
Hogs	.3 per 100 lbs.	Corn silage	1.9 per acre
Turkeys	.7 per 100 lbs.	Corn fodder	1.1 per acre
Hens	28.0 per 100 hens	Alfalfa hay	1.0 per acre
Canning peas	2.0 per acre	Soybean hay	1.4 per acre
Soybeans for grain	1.0 per acre	Other hay crops	.6 per acre

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

Table 18. Measures of Farm Organization and Management Efficiency, 1944 32 most 32 least Average profitprofit-Measures used in chart Your of 161 able able on page 15 farm farms farms farms Operator's Labor Earnings \$2891 \$6137 \$276 (1) Crop yields* 112 100 87 (2) % of tillable land in high ret.crops** 49.3 50.6 46.7 (3) Ret.for \$100 feed to prod.livestock*** 100 106 91 (4) Prod. livestock units per 100 acres**** 23.8 27.2 20.3 (5) Size of business - work units 666 855 513 (6) Work units per worker 303 329 270 (7) Pow., mach., equip., & bldg.exp.per work \$3.21 \$2.91 \$3.98 unit Measures and items related to some of the above measures: (3) Index of return for \$100 feed from -Dairy cattle 104 100 87 Dual purpose cattle 119 96 100 Beef breeding herd 100 Feeder cattle 107 100 Hogs Native sheep Turkeys 100 113 85 100 89 93 100 98 Chickens 100 113 89 (5) Work units on crops : 208 · 159 171 Work units on productive livestock 458 596 332 Other work units 51 22 (6) Total number of workers 2.2 2.6 Number of family workers 1.4 Number of hired workers •8 1.2 (7) Power expense per work unit \$1.52 \$2.10 \$1.73 Crop mach. expense per work unit .51 .70 Livestock equip. exp. per work unit .27 .27 Bldgs.& fencing exp.per work unit .91

^{*}Given as a percentage of the average.

^{**}Crops are marked on page 16 as (A), (B), (C), and (D). All of acres in (A) crops, one-half of acres in (B) crops, and one-fourth of acres in (C) crops are used in calculating per cent of tillable land in high return crops.

^{***}An index weighted by the animal units of livestock.

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

Thermometer Chart

Using your figures from page 14, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the 161 farms included in this summary are located between the dotted lines across the center of this page.

		¥ **					
Oper.			Return	Pr.	1.s.	Work	Pow., mach.,
labor		High	from p			units	eq., & bldg.
earn -	\mathtt{Crop}	return	ductiv		Work		exp. per
ings	yields	crops	livest	ock 100	A. unit	s worker	r work unit
	=		-	_			
\$6900	1.40	73.0	140	40.0	1065	475	\$1.20
						=	
C400	7.65	~~ ^ =	-	-	2025		
6400	135	70.0	135	38.0	1015	455	1.45
-			1176				=
5900	130	67.0	130	36.0	965	435	1.70
=:			esperi.	vinner vinner			
5400	125	64.0	125	34.0	915	415	7 05
0-±00	120	04.0	100	34.0	310	410	1.95
			especially graphics	Japane 1			
4900	120	61.0	120	32.0	865	395	2.20
4400	115	58.0	115	30.0	815	375	2.45
E	7 (37) (37) (48)	-		America compression			
3900	110	55.0	110	28.0	765	355	2.70
3400	105	52.0	105	26.0	715	335	2.95
3400	105	02.0	105	20.0	/15 =	330	2.95
2900	100	49.0	100	24.0	665	315	3.20
2001		oren a					
2400	95	46.0	95	22.0	615	295	3.45
orac				-1900mg make-a-1			
1900	90 =	43.0	90	20.0	565	275	3.70
	==						
1400	85	40.0	0.5	700E	5,5	255	3.95
T.#00	05 =	40.0	85	18.0	515	200	3.95
J. April 100		- American					
900	80 =	37.0	80 =	16.0	465 =	235	4.20
10-104 10-104			resource .		E		
400	75	34.0	75	14.0	415	215	4.45

-100	70	31.0	70	12.0	365	195	4.70
600	CE -	30	CE -	100	775	175	4.95
-600	65	28.0	65	10.0	315	1(0	± • 30
			AND 100-1				
	/	/ \		· -	·) () ()

Table 19. Distribution of Acres in Farm, 1944 Crop: (A) (B) (C) and (D) refer No. 32 most 32 least to ranking used in calculating growing Average profitprofit-% of tillable land in High this Your able of 161 able farms Return Crops (see page 14) crop farm farms farms Canning peas (A) 16 1.1 2.0 1.0 (C) 18 1.7 1.0 Flax 2.3 3.4 Barley (D) 27 1.9 1.1 4.3 Oats and barley (D)30 8.3 2.5 56 3.7 -5.7 Wheat (D) 3.0 25 (D) 2.2 2.3 Oats and wheat 1.6 144 Oats (D) 36.9 26.3 21.1 Soybeans for grain (D) 40 2.8 3.0 3.5 Rye (D) 5 .8 •3 Millet .1 (D) 10 .9 1.5 Buckwheat 1.4 8 (D) .2 Hemp 10 2.1 1.7 47.3 40.6 Total small grain and peas 157 64.3 Sugar beets, hybrid seed corn, 3.4 potatoes and truck crops 69 (A) 2.8 2.9 Corn grain (A) 160 42.2 56.4 37.2 Corn silage (B) 141 13.1 13.7 12.8 Sweet corn (B) 1.4 2.4 18 1.4 (D) 45 Corn fodder 2.0 1.3 3.0 Total cultivated crops 161 75.6 62.1 58.3 Alfalfa hay (A)129 15.0 20.0 11.5 Red clover hay (B) 46 3.4 3.3 5.2 49 Soybean hay (C) 2.5 2.7 2.5 Mixed legumes & non-legumes (0)46 5.2 5.9 3•5 Legumes for seed (C) 2.4 7 .2 .1 40 Timothy and/or brome (D) 2.7 1.9 Timothy seed (D)5 Other annual hay (D) 19 1.1 1.7 1.0 Total tillable land in hay 26.4 161 35.9 30.1 Alfalfa and mixtures incl.alfalfa(A) 62 5.0 3.6 4.1 Sweet clover pasture (B) 27 2.0 .9 1.8 Other legumes and mixtures (C) 50 6.8 10.9 40 Sudan grass or rape pasture (C) 1.4 .8 1.0 67 Other tillable pasture (D) 6.6 7.8 5.1 Total tillable land in pasture 143 21.8 12.2 27.2 Tillable land not cropped (D) 6.4 7.8 13.9 151.4 Total tillable land 169.1 209.4 Phalaris hay (non-tillable) 2.7 1.6 4.3 Wild hay (non-tillable) .47 1,4 7.3 134 68 Non-tillable pasture 30.2 34.8 29.7 Timber (not pastured) 6.6 11.4 5.8 Roads and waste 10.5 13.8 11.3 6.II Farmstead 7.0 8.2 Total acres in farm 229.3 214.6 279.5 land tillable 73.7 74.9 70.5 49.3 tillable land in high return crops 50.6 46.7

Table 20. Crop Yields Per Acre. 1944

Crop	Your farm	Average 161 farms	32 most profitable farms	32 least profitable farms
Canning peas, value above seed cost Flax, bu. Barley, bu. Oats and barley, bu.	\$	\$22.75 6.0 9.8 31.4	\$23.23 5.9 14.0 36.0	\$8.46 4.5 6.8 25.4
Wheat, bu. Oats and wheat, bu. Oats, bu. Soybeans for grain, bu.		14.3 27.3 39.1 14.0	13.5 32.6 46.6 16.6	12.3 20.5 31.9 16.9
Rye, bu. Millet, bu. Buckwheat, bu. Hemp, tons	525 C S S S	7.7 7.7 14.3 1.9	2.5	8.0 20.4 -
Corn, grain, bu. Corn and cane silage, tons Sweet corn, tons Corn and cane fodder, tons		51.6 7.3 2.4 2.3	57•2 8•6 2•2 2•2	44.2 6.2 2.5 2.5
Alfalfa hay, tons Red clover hay, tons Soybean hay, tons Mixed legume & non-legume hay, tons Legumes for seed, lbs.		2.1 2.2 1.5 1.7 84.	2.1 2.5 1.8 1.5	1.9 2.2 1.5 1.7
Timothy and/or brome hay, tons Timothy seed, lbs. Other annual hay, tons Phalaris hay or non-tillable land, ton Wild hay, tons	18	1.7 177. 1.0 1.7 1.0	1.7 1.5 2.0	2.0 .4 1.7 1.0
Item Valu	16	e of Feeds,		Value
Wheat, per bu. 1.1 Rye, per bu. 1.0 Soybeans, per bu. 1.0 Bran, per cwt. 2.2 Linseed oilmeal, per cwt. 2.8	58 92 40 94 93 20	Soybean hay, Timothy, per Sweet clover Wild hay, per Corn fodder, Corn silage,	e clov.hay,per per ton ton per ton r ton per ton per ton per ton	12.75 9.00 8.75 7.50 6.75 5.00
Soybean oilmeal, per cwt. 3.0 Tankage, per cwt. 4.1		Pasture, per Skin milk, p	mo, per an. un er cwt.	1.10 .26

Table 22. Summary of Amount of Livestock, 1944

Items	Your farm	Average of 161 farms	32 most profitable farms	32 least · profitable farms	-
No. of horses		3.5	3.5	3.4	
No. of colts		• 7	•8	• 14	
No. of dairy & dual purpose cows	***	17.9	21.8	11.2	
Head of other dairy & dual pur. cattle		18.3	21.7	14.8	
Head of cattle in beef breeding herd		3.5	1.9	6.7	•
Pounds of feeder cattle produced		1059	3612	158	
Litters of pigs	***************************************	12.1	15.3	11.0	
Pounds of hogs produced		20398	25861	16476	
Head of sheep (2 lambs = 1 head)	· 	12.7	12.5	14.1	
No. of hens		250	310	241	
Total no.of prod.lvstk.animal units		46.8	63.9	37.2	
% of total that are:		At a 4	*,*	, + +	
Dairy cows		37.3	3 7 • 9	25.1	
Other dairy cattle	,	19.2	18.4	16.2	
Dual purpose cows		2.9	•8	7.2	A GARAGE
Other dual purpose cattle		2.3	•8	5.4	r built
Beef breeding herd		4.1	1.8	10.0	أرادي المحادثات
Feeder cattle		2.8	8.3	.6	
Hogs		19.8	17.1	23.1	777651
Sheep		4.0	3.9		material.
Turkeys	· · · · · · · · · · · · · · · · · · ·	1.3	5•5	7 (127) _12	ul geliki
Hens		6.3	5•5	- 2 - 2 - 7 - 1 - 2	tite of the
and the second s				فارات والمعاجوج	Applied to the state of the sta

Table 23. Feed Costs for Horses and Misc. Power and Machinery Expense,

Items	Your farm	Average of 157 farms*	31 most profit- able farms*	31 least profit- able farms*
Feed per horse, ** lbs.:	TSTH	TG/TIID.	rains.	rearing,
Grain Hay Fodder and stover		1237 3826 452	1350 3765 125	1351 4313 504
Feed costs per horse: Grain Roughage Pasture TOTAL FEED COSTS	\$\$	\$23.59 21.67 4,34 \$49.60	\$25.28 22.64 5.03 \$52.95	\$25.95 22.98 4.29 \$53.22
Number of work horses Number of colts	- The second sec	3.6 • 7	3.6 .8	3. ¹ 4
Crop acres per farm Tractor and horse exp. per cro Crop & gen. mach. exp. per cro		145.4 \$4.46 \$2.49	177.7 \$3.67 \$2.69	135.3 \$4.88 \$2.71

^{*}Four farmers did not have horses. The crop acres and expenses per crop acre are averages of 161 farms.

^{**}Two colts equal one horse.

Table 24. Feed Costs and Returns from Hogs. 1944

Table 24. Feed Costs	Your farm	Average of 156 farms	31 farms highest in returns above feed	31 farms lowest in returns above feed
Feed per cwt. hogs produced, lbs.: Corn Small grain Com. feeds - under 25% protein Com. feeds - over 25% protein		413 91 15 26	29 ¹⁴ 71 11 18	616 136 11 27
Total concentrates Skim milk, buttermilk and whey	specific control of co	5 ¹⁴ 5 1 ¹⁴ 7	39 ¹⁴ 165	790 247
Feed cost per cwt. hogs produced: Concentrates Skim milk, buttermilk and whey Pasture TOTAL FEED COSTS	\$	\$10.39 .38 .16 \$10.93	\$7.51 .41 .12 \$8.04	\$14.86 .66 .21 \$15.73
Net increase in value per cwt.hogs p	rod.\$	\$13.70	\$14.22	\$13.25
RETURNS ABOVE FEED COST PER CWT.HOGS PROD. RETURNS FOR \$100 OF FEED Price received per cwt. hogs sold	\$	\$2.77 \$134 \$13.08	\$6.18 \$178 \$13.32	\$-2.48 \$87 \$12.77
No. of spring litters raised No. of fall litters raised Total no. of litters raised No. of pigs born per litter No. of pigs weaned per litter Pounds of hogs produced		8 12 7.8 6.1 20925	9 4 13 8.5 6.8 25459	9 2 11 7.2 5.4 13728

High returns are associated with high quality management. The combined effect on return over feed from excelling in a number of hog management factors is shown in Table 25. The factors included are: (1) pounds of concentrates required to produce 100 pounds of hogs including skim milk and buttermilk on a grain equivalent basis, (2) price received for hogs sold, (3) number of pigs born per litter, (4) number of pigs weaned per litter, and (5) sanitation (pigs raised on clean ground). The 13 farmers who were below the average of the group in all five factors failed to receive a return large enough to cover the cost of the feed. The 16 farmers who were above average in all five factors had an average return over feed of \$4.99 per 100 pounds. The difference between the two extremes amounts to \$7.95 per 100 pounds or \$1664 for the average production of 20,925 pounds of hogs on these farms.

Table 25. Relation of Return Over Feed Per 100 Pounds of Hogs to the Number of

	Manage	ment Factors in Which Farmers Excelled
No. of factors	No.	The length of the shaded lines are in Average
in which farmer	of	proportion to the average return over return
excels	farms*	feed per 100 pounds of hogs over feed
0	13	XXXXXXXXXXXXX \$-2.96
1 . 1 . 1	31	1. ⁴ 0
2	36	XXXXXXXXXX 2.70
3	30	**************************************
4	23	4.5. H XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
#mile 32 + 20 - 7	16.	XXXXXXXXXXXXXXXX 4.99

*The data from 7 farmers who purchased feeder pigs or who did not supply information on sanitation practices were omitted from this table.

Table 26. Factors of Cost and Returns From Dairy Cows. 1944

Table 26. Factors of Cost and I	Average ur of 141	28 farms highest in butterfat per cow	28 farms lowest in butterfat per cow
Pounds of butterfat per cow	237	320	162
Feeds per cow, lbs.: Corn Small grain Com. feeds - under 25% protein Com. feeds - over 25% protein	1000	1238	771
	644	1088	365
	195	282	75
	145	257	81
Legume hay Other hay Fodder and stover	3214	331 ¹ 4	2995
	727	525	916
	312	- 123	47 ⁴
Total concentrates Total dry roughage Silage	1984	2865	1292
	4253	3962	4385
	6094	6357	6082
Total digestible nutrients* T.D.N. per 1b. B.F. % T.D.N. that is protein	4658	5246	4181
	19.7	16.4	25.8
	13.6	14.2	13.0
Feed cost per cow: Concentrates \$ Roughages Pasture TOTAL FEED COSTS	\$39.67	\$58.21	\$25.06
	41.95	42.48	41.02
	5.82	5.52	5.84
	\$87.44	\$106.21	\$71.92
Value of produce per cow: B.F. Sales Dairy produce used in house Milk to livestock Net increases in value of cows TOTAL VALUE PRODUCED	\$160.23	\$236.01	\$92.43
	8.22	6.13	13.01
	14.29	14.15	13.00
	6.01	5.70	9.37
	\$188.75	\$261.99	\$127.81
RETURNS ABOVE FEED COST PER COW \$	\$101.31	\$155.78	\$55.89
RETURNS FOR \$100 OF FEED \$	\$222	\$253	\$196
Price rec. per lb. B.F. sold (cts.) As manufacturing cream (cents) Other (cents)	73.8	79.4	67.4
	61.4	62.9	60.7
	84.2	83.6	81.0
Feed cost per lb. B.F. (cents)	36.9	33.2	7-1-1-
% fall freshening	51.6	56.8	49.1
Number of cows**	18.7	23.8	13.5

^{*} 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 27. Feed Costs and Returns From Other Dairy Cattle, 1944

Your Items farm	Average of 140 farms*	28 farms highest in butterfat per cow	28 farms lowest in butterfat per cow
Feeds per head, 1bs.: Concentrates Hay and fodder Silage Skim milk Whole milk	475 1587 2067 547 365	642 1569 2114 486 448	377 1703 2354 373 261
Feed cost per head: Concentrates \$ Roughages Milk Pasture TOTAL FEED COSTS \$	\$10.18 14.16 10.22 2.03 \$36.59	\$13.92 14.94 10.70 1.88 \$41.44	\$5.65 14.10 6.70 2.27 \$31.72
Net inc. in value of other dairy cattle	\$37.07	\$48.23	\$28.39
RETURNS ABOVE FEED COST PER HEAD \$	\$.48	\$6.79	\$-3.33
RETURNS FOR \$100 OF FEED \$	\$108	\$131	\$96
Number of head of other dairy cattle	18.2	21.3	16.0

Table 28. Feed Costs and Returns From All Dairy Cattle, 1944 28 fams 28 farms highest in lowest in Average Your of 141 butterfat butterfat Items farm farms per cow per cow Feeds per animal unit, lbs.: 1633 Concentrates 1146 2299 Hay and fodder 3836 3600 3971 5477 Silage 53**71** (6) 5575 Feed cost per animal unit: Concentrates \$33.02 \$47.21 \$22.94 37.46 36.01 Roughages 36.82 Pasture 5.21 TOTAL FEED COSTS Value of produce per animal unit: \$66.38 Dairy products \$115.21 \$165.28 Net increase in valoof dairy cattle 26.66 31.26 \$141.87 \$196.54 TOTAL VALUE PRODUCED \$28.54 \$106.90 RETURNS ABOVE FEED PER ANIMAL UNIT \$66.82 RETURNS PER \$100 OF FEED \$219 \$15**1** \$191 Animal units of dairy cattle 28.1 35.0

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

Factors of Cost and Returns from Dual Purpose Cows. 1944 7 farms 7 farms Average highest in lowest in Your of 15 butterfat butterfat Items farm farms per cow per cow Pounds of butterfat ner cow 169 199 :--Feeds per cow, lbs.: 672 Corn 674 Small grain 682 596 Com. feeds - under 25% protein 45 54 18 Com. feeds - over 25% protein 66 96 40 Legume hay. 3516 2983 3153 Other hay 539 376 667 **7**08 Fodder and stover 357 352 Total concentrates 1206 1568 1381 4177 Total dry roughage 4431 4043 Silage 4139 4783 5099 3643 3945 Total digestible nutrients* 4272 T.D.N. per lb. B.F. 21.5 26.2 23.3 % T.D.N. that is protein 13.8 12.9 Feed cost per cow: Concentrates \$27,20 \$23.40 \$31.06 37.97 35.01 Roughages 41.15 Pasture 6.25 6.02 6.15 TOTAL FEED COSTS \$64.43 Value of produce per cow: B.F. sales \$88,90 \$107.36 \$70.21 8.48 Dairy produce used in house 8.12 8.10 : 29.84 Milk to livestock 19.27 24.12 Net increases in value of cows 10.54 6.70 9.14 TOTAL VALUE PRODUCED \$131.68 \$107.10 \$152.00 RETURNS ABOVE FEED COST PER COW \$42.67 \$60,36 \$73.54 1887 · 100 6 8 6 RETURNS FOR \$100 OF FEED \$193 \$199 \$180 Price received per 1b. B.F. sold(cts.) 65.0 66.3 As manufacturing cream (cents) 61.0 60.6 61.7 Other (cents) 92.4 87.1 39.4 Feed cost per 1b. B.F. (cents), 42.2 % fall freshening

16.0

Number of cows

^{*} Not including nutrients received from pasture.

Table 30. Feed Costs and Returns From Other Dual Purpose Cattle, 1944

Items	Your farm	Average of 15 farms	7 farms highest in returns above feed	7 farms lowest in returns above feed
Feeds per head, lbs.: Concentrates Hay and fodder Silage Skim milk Whole milk		576 1759 1597 828 501	653 1546 1347 1098 247	514 1869 1942 509 783
Feed cost per head: Concentrates Roughages Milk Pasture TOTAL FEED COSTS	\$	\$10.82 14.28 14.89 1.92 \$41.91	\$12.29 11.82 9.33 2.12 \$35.56	\$9.62 16.64 21.06 1.81 \$49.13
Net increase in value	\$	\$37.42	\$43.65	\$32.14
RETURNS ABOVE FEED COST PER HEAD	\$	\$_4.49	\$8.09	\$-16.99
RETURNS FOR \$100 OF FEED	\$	\$93	\$126	\$62
Number of head		26.6	29•3	24.9

Table 31. Feed Costs and Ret	turns From	All Dual P	urpose Cattle	Э
Items	Your farm	Average of 15 farms	7 farms highest in returns above feed	returns
Pounds of butterfat per cow Feeds per animal unit, lbs.: Concentrates		169 1289	188 1 ⁾ 115	143 1249
Hay and fodder Silage		372 7 4020	4237 369 ¹ 4	3139 4245
Feed cost per animal unit: Concentrates Roughages Pasture TOTAL FEED COSTS	\$	\$24.90 32.49 5.06 \$62.45	\$27.64 33.35 5.58 \$66.57	\$23.62 30.42 4.79 \$58.83
Value of produce per animal unit: Dairy products Net increase in value TOTAL VALUE PRODUCED	\$	\$58.50 36.66 \$95.16	\$76.67 39.96 \$116.63	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
RETURNS ABOVE FEED PER ANIMAL UNIT	\$	\$32.71	\$50.06	\$15.33
RETURNS FOR \$100 OF FEED	\$. \$156	\$181	\$130
Animal units		30.1	28.1	31.9

The farmer who excels in all phases of the management of the dairy herd receives a larger return than one who excels in none or only a few of the management factors. The combined effect on return over feed per cow in the dairy herd from excelling in a number of management factors is shown in Table 32. The factors included are (1) pounds of butterfat per cow, (2) total digestible nutrients per pound of butterfat, (3) percentage of protein in the T.D.N., (4) price received for butterfat, (5) feed cost per pound of butterfat, and (6) percentage of fall freshening. Five farmers were below the average of the group in all six factors; their return over feed amounted to \$47.50 per cow. Ten farmers who were above the average of the group in all six factors received a return over feed of \$162.44 per cow. The difference between these two extremes amounts to \$114.94 per cow or \$2149 for the average herd of 18.7 cows.

Table 32. Relation of Return Over Feed per Dairy Cow to Number of Management Factors in Which Farmers Excelled

No. of factors		No.	-	The leading the season the	
•			,	The length of the shaded lines is in	Average
in which		of		proportion to the average return over	return
farmer excels		farms		feed per milk cow	over feed
. 0	•	5		XXXXXXXX	\$47.50
1		20		XXXXXXXXXXX	70.10
₹• 2		35	`.	XXXXXXXXXXXXX	74.07
3		23		XXXXXXXXXXXXXXX	97.57
[H] [H]		26		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	128.00
5	1.4	22		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	129.85
6	٠. '	10		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	162.44

and the second of the second o

Table 33.	Feed Costs and	Return	s for Tur	keys, 1944	n Na nanasi na atausa
	r in a vil.	Your	Average of S	4 farms highest in returns	4 farms lowest in returns
Items		farm	fa.rms	above feed	above feed
Grain Com. feeds - under 25% p Com. feeds - over 25% p	protein		436 112 109	1426 133 116	447 92 101
Total concentrates Skim milk	e de Million de la companya de la c La companya de la co		657 8	675 20 20 1 5	6 ⁴ 0 1
Feed cost per cwt. turkeys	produced \$	· · · · · · · · · · · · · · · · · · ·	\$16.35	\$17.93	\$14.77
Value of produce per cwt. t Eggs and poults Net increases in turkeys TOTAL VALUE PRODUCED	\$		\$5.45 : 30.14 \$35.59		\$1.44 27.82 \$29.26
RETURNS ABOVE FEED COST PER TURKEYS PRODUCED	R CWT.		\$19.24	\$23.98	\$14.49
RETURNS FOR \$100 FEED	\$		\$223	\$240	\$205
Price rec'd per 1b. turkey	sold (cts.)		33.5	314.0	33.0
Pounds of turkeys produced	And the second s		26799	22830	30769

Table 34. Feed Costs and Returns from Chickens, 1944

Table 34. Feed Costs and Returns fr	on Chicke	ns, 1944	<u> </u>
Your Items farm	Average	31 farms	71 farms lowest in return above feed
Feed per hen, lbs.: Grain Commercial feeds Total concentrates Skim milk and buttermilk	103	118	104
	37	<u>35</u>	39
	140	153	143
	10	6	.7
Feed cost per hen: Concentrates Skim milk TOTAL FEED COST \$	\$3.39	\$3.63	\$3.42
	.03	.02	002
	\$3.42	\$3.65	\$3.44
Value of produce per hen: Eggs sold and used in house Net increase in value of chickens TOTAL VALUE PRODUCED \$	\$4.22	\$4.99	\$3.14
	1.02	2.16	.45
	\$5.24	\$7.15	\$3.59
RETURNS ABOVE FEED COST PER HEN \$	\$1.82	\$3.50	\$.15
RETURNS FOR \$100 OF FEED \$	\$159	\$208	\$106
Price rec'd. per doz. eggs sold (cents) % of eggs sold on grade basis Eggs laid per hen	32•5	33.6	31.1
	59	61	45
	157	181	119
Ave. no. of hens on farm during the yr. % of hens that are pullets % death loss	264	274	253
	89	94	84
	14	10	20

Superior management leads to high returns. The combined effect on return over feed from excelling in a number of poultry management factors is shown in Table 35. The factors included are (I) pounds of concentrates per hen including skim milk on a grain equivalent basis, (2) price received per dozen of eggs sold, (3) number of eggs laid per hen, (4) percentage of the hens that are pullets, and (5) per cent death loss of hens. Three farmers were below the average in all the factors; their average return over feed was \$0.46 per head. The 8 farmers who excelled in the five factors had an average return over feed of 33.06 per hen. The difference between the two extremes amounts to \$2.60 or \$684 for the average flock of 263 hens.

Table 35. Relation of Return Over Feed Per Hen to the Number of Management Factors in Which Farmers Excelled

No. of factors No. in which farmer of excels farms	The length of the shaded lines is in proportion to the average return over feed per hen	Average re- turn over feed per hen
None 3 1 17 2 43 3 47 4 35 5 8	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	\$.46 1.02 1.37 2.00 2.36 3.06

Table 36. Feed Costs and Returns From Beef Cattle, 1944								
Your	Average of all	Farms highest in returns	Farms lowest in returns					
Items farm	farms	above feed	above feed					
Beef breeding herd: no. of farms:	16	8	8					
Teeds per animal unit, lbs.:	_							
Concentrates	1236	938	1535					
Legume hay	1581	1 1 08	2053					
Other hay	566	692	441					
Fodder and stover Silage	433 2866	291 2604	576					
Skim milk*	79	2004	31.28 157					
Whole milk*	- 9		19					
'eed cost per animal unit:	-		in the second se					
Concentrates \$	\$24.10	\$18.14	\$30.06					
Roughages	21.76	17.64	25.88					
Milk*	.41	-	•83					
Pasture	14.83	5.32	<u>14.33</u>					
TOTAL FEED COSTS	\$51.10	\$41.10	\$61.10					
Value of produce per animal unit:	\$2.88	\$3,43	¢0.77					
Net increase in value of animals	-4		\$2.33 45.12					
TOTAL VALUE PRODUCED \$	50.55 \$53.43	55•99 \$59•42	\$47.45					
And the second s	_	*JJ• 12						
ETURNS ABOVE FEED COST PER ANIMAL UNIT \$	\$2.33	\$18.32	\$-13.65					
eturns for \$100 of feed \$\$	\$113	\$150	\$77					
Sumber of cows and herd bulls	14.7	17.3	12.2					
Tumber of animal units in the herd	25.4	28.6	22.1					
ceder cattle: no. of farms:	19	9	9					
leeds per cwt. beef produced, lbs.:		٠.٣١.						
Com	570	564	582					
Small grain Com. feeds - under 25% protein	70	53	25					
Com. feeds - over 25% protein		al-						
	30	и <u>140</u> г. н	19					
	30 201		19 291					
Legume hay Other hay	201	126	291					
Legume hay								
Legume hay Other hay Fodder and stover	201 102 38	126 63 0	291 91 46					
Legume hay Other hay Fodder and stover Total concentrates	201 102 38 670	126 63 0	291 91 46 654					
Legume hay Other hay Fodder and stover	201 102 38 670 341	126 63 0	291 91 46 654 428					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage 'eed cost per cwt. beef produced:	201 102 38 670 341 518	126 63 0 658 189	291 91 46 65 ⁴ 428 .593					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage eed cost per cwt. beef produced: Concentrates	201 102 38 670 341 518	126 63 0 658 189 407	291 91 46 654 428 593 \$11.54					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage eed cost per cwt. beef produced: Concentrates Roughages	201 102 38 670 341 518 \$12.11 3.20	126 63 0 658 189 407 \$12.23 2.18	291 91 46 65 ⁴ 428 .593					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage eed cost per cwt. beef produced: Concentrates Roughages Pasture	201 102 38 670 341 518 \$12.11 3.20	126 63 0 658 189 407 \$12.23 2.18 .27	291 91 46 654 428 593 \$11.54 3.99					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage eed cost per cwt. beef produced: Concentrates Rouglages Pasture TOTAL FEED COSTS	201 102 38 670 341 518 \$12.11 3.20 .56 \$15.87	126 63 0 658 189 407 \$12.23 2.18 .27 \$14.68	291 91 46 654 428 593 \$11.54 3.99 .92 \$16.45					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage 'eed cost per cwt. beef produced: Concentrates Roughages Pasture TOTAL FEED COSTS storease in value of feeders	201 102 38 670 341 518 \$12.11 3.20 .56 \$15.87 \$16.12	126 63 0 658 189 407 \$12.23 2.18 .27 \$14.68 \$20.14	291 91 46 654 428 .593 \$11.54 3.99 .92 \$16.45 \$11.42					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage Teed cost per cwt. beef produced: Concentrates Roughages Pasture TOTAL FEED COSTS SETURNS ABOVE FEED COST PER CWT.BEEF PROD.	201 102 38 670 341 518 \$12.11 3.20 .56 \$15.87 \$16.12 .25	126 63 0 658 189 407 \$12.23 2.18 .27 \$14.68 \$20.14 5.46	291 91 46 654 428 593 \$11.54 3.99 .92 \$16.45 \$11.42 -5.03					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage Feed cost per cwt. beef produced: Concentrates Rouglages Pasture TOTAL FEED COSTS Set increase in value of feeders ENTURNS ABOVE FEED COST PER CWT.BEEF PROD.	201 102 38 670 341 518 \$12.11 3.20 .56 \$15.87 \$16.12 .25 \$105	126 63 0 658 189 407 \$12.23 2.18 .27 \$14.68 \$20.14 5.46 \$138	291 91 46 654 428 593 \$11.54 3.99 .92 \$16.45 \$11.42 -5.03 \$72					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage Feed cost per cwt. beef produced: Concentrates Rouglages Pasture	201 102 38 670 341 518 \$12.11 3.20 .56 \$15.87 \$16.12 .25 \$105 \$13.54	126 63 0 658 189 407 \$12.23 2.18 .27 \$14.68 \$20.14 5.46	291 91 46 654 428 593 \$11.54 3.99 .92 \$16.45 \$11.42 -5.03 \$72 \$12.46					
Legume hay Other hay Fodder and stover Total concentrates Total dry roughages Silage Seed cost per cwt. beef produced: Concentrates Rouglages Pasture TOTAL FEED COSTS Set increase in value of feeders SETURNS ABOVE FEED COST PER CWT.BEEF PROD. SETURNS FOR \$100 OF FEED Sprice reed. per cwt.beef sold in 1943	201 102 38 670 341 518 \$12.11 3.20 .56 \$15.87 \$16.12 .25 \$105	126 63 0 658 189 407 \$12.23 2.18 .27 \$14.68 \$20.14 5.46 \$138 \$11.87	291 91 46 654 428 593 \$11.54 3.99 .92 \$16.45 \$11.42 -5.03 \$72					

^{*} One farmer had both dairy cows and beef cows and fed considerable amounts of milk produced by the milking herd to beef calves.

Table 37. Feed Costs and Returns from	a Farm Flo		1944
Your Items farm	Average of 49 farms	10 farms highest in returns above feed	10 farms lowest in returns above feed
Feeds per head, * lbs.:		1	
Concentrates	76	5/1	133
Legume hay	139	81.	230
Other hay	41	38	47
Fodder and stover	31	g Street	118
Silage	_ 114	149	194
Feed cost per head:	\$1.42	\$.45	\$2.41
Concentrates \$		1.14	2.65
Roughages	1.53 1.01	1.01	•95
Pasture TOTAL FEED COSTS \$	\$3.96	\$2.60	\$6.01
Value of produce per head:	_	3, 3, 2, 0, 0	
Wool \$	\$2.78	\$2.95	\$2.48
Net increase in value of sheen	5.16	9.144	1.72
TOTAL VALUE PRODUCED \$	\$7.94	\$12.39	\$4.20
RETURNS ABOVE FEED COST PER HEAD \$	\$3.98	\$9.79	\$-1.81
RETURNS FOR \$100 OF FEED \$	\$278	\$559	\$76
Price per cwt. of lambs sold \$	\$12.84	\$12.71	\$12.20
Price per lb. wool sold (cts.)	43.0	44.8	42.6
Pounds of wool per sheep sheared	- g.7	9,4	7.5
Number of ewes kept for lambing	27	11	26
% lamb crop**	99	124	86
% death loss**	9.0	7.6	13.7
No. of head of sheep*	41.0	18.6	1,0.1

^{*} Two lambs under six months of age considered as one head.

Superior management in the sheep enterprise results in a comparatively high return over feed just as superior management in the dairy herd or poultry flock resulted in a high return over feed per cow or per hen. The effect on return over feed from excelling in 6 factors is shown in Table 38. The factors included are (1) feed cost per head, (2) price received per 100 lbs. of lambs sold, (3) price received per 1b. of wool sold, (4) lbs. of wool per sheep sheared, (5) per cent lamb crop, and (6) per cent death loss. The 3 farmers who were above the average in only one failed to receive a return large enough to cover the cost of feed while 10 farmers who excelled in 5 of the 6 factors received a return of \$6.34 per head. The difference between the two extremes is \$6.90 or \$283 for the average flock of 41 head.

Table 38. Relation of Return Over Feed Per Head of Sheep to Number of

	Management Factors in Which F	armers Excelled	
No. of factors in which farmer	No. Length of shaded line of portion to the average farms feel per head of shoe	e return over	Average return over feed
S T excels	farrs feel per head of shoe 3 XXX 10 XXXXXXXXXXX		\$56 2.12
3	15	XXXXXXXXXXX	3.16 5.88
5	10 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXX	6.34

^{**}Lambs which die during month of birth are not included.

Table 39. Summary of Farm Earnings by Counties, 1944

	Dodge & Mower	Free- born .	Goodhue & Dakota	Nicollet	Olmsted, Wabasha & Winona	Rice & Scott	Steele	Waseca & LeSueur
FARM EXPENSES				A 77.	d . 700	# 07C	¢ 500	ė ogo
Cattle bought	\$ 712	\$ 485	\$ 199	\$ 116	\$ 328	\$ 216	\$ 598	\$ 222 107
Hogs bought	449	127	102	102	274	59	1711	
Sheep bought	. 400	219	9.	7.7.6	5	1	7(7	17 277
Poultry bought	. 121	133	132	116	255	362	167	237 206
Other livestock expense	172	92	112	1 39	135	184 -	213	
Crop expense	696	451	632	407	416	321	387	429
Feed	2399	1110	1397	1738	1688	2105	1635	1815
Power mach. and equipment	1570	1360	1353 · ·	1361	1401	1125	1708	1624 204
Custom work hired	238	210	314	175	232	375	155	
Buildings	916	540	735	455	365	409	1016	611
Hired labor	1,254	665	93 1 443	6 4 4	649	670	715	873
Taxes, insurance and misc.	437	347		313	439	347	425	397
(1) Total purchases	\$ 9364	\$ 5739	\$ 6359	\$ 5566	\$ 6187	\$ 617!	\$ 7193	\$ 6742
(2) Decrease in capital	320	627	291		100	253	1459	1259
(3) Board to hired labor	. 82	117	155	505	130	209	138	226
(4) Unpaid family labor	382	- 309	599	37 ¹ :	429	422	387	2 ¹ 10 1 1457
(5) Int. on farm capital	1519	1336	1400	1478	1302	1152	1632	··· / L
(6) Total expenses	\$11667	\$ 8128	\$ 8804	\$ 7620	\$ 8148	\$ 8210	\$10809	\$ 9924
	* *						The second second	
FARM RECEIPTS				•			±	A 7.05A
Cattle sales	\$ 2026	\$ 1534	\$ 1313	\$ 1233	\$ 1531	\$ 1204	\$ 2134	\$ 1050
Dairy products	4709	2549	3418	1 7 67	3272	353,7	2045	1945
Hogs	355 7	3481	2396	3579	2671	5517	4302	3586
Sheep and wool	777	341	226	11	102	, 36	65	115
Poultry and eggs	1673	1096	1383	1160	1845	2472	1706	3068
Crops	1307	784	1775	753	726	611	1313	1910
AAA payment	67	116	98	47	82	,26	165	50
Income from work off farm	236	156	241	188	398	149	146	209
Misc. cash receipts	5 _{11)†}	200	231	188	<u>346</u>	286	187	133
(7) Total farm sales	\$14596	\$10257	\$11081	\$ 8926	\$10973	\$10535	\$12063	\$12066
(8) Increase in capital	-	-	-	132	-			
(9) Family living from farm	589	569	701	732	638	649	679	633
(10) Total receipts	\$15185	\$10826	\$11782	\$ 9790	\$116,11	\$11154	\$12742	\$12699
(6) Total expenses	11667	8128	8804	7620	81,48	8210	10809	9924
(11) Oper. labor earnings	3518	2698	2978	2170	3 ¹ 163	2974	1933	2775
(TT) Ohors Topor continues			- ·					

Table 40. Miscellaneous Information - Averaged by Counties, 1944

				<u></u>	Olmsted,			
	Dodge &		Goodhue		Wabasha	Rice &		Waseca &
	Mower	born	& Dakota	Nicollet	& Winona	Scott	Steele	LeSueur
FARM INVENTORIES (Beginning of year)	A = = = =	A Mann	A =077	ф 1,	t Wina	d =111:0		& 707 6
Productive livestock	\$ 5885	\$ 4290	\$ 3911	\$ 4575	\$ 4478	\$ 3440	\$ 5165	\$ 3978
Horses	371	283	332	260	316	3,62	305	357
Crop, seed and feed	4600	4217		3404	3332	2463	4875	4159
Mach. and equipment	3386	3163	3339	3484	3079	2827	3760	3526
Buildings	6819	6614	7812	7628	6780	6394	10128	7129
Land	9471	.8460	8466	10141	310 5	7671	9140	10614
Tetal farm capital	\$30532	\$27027	\$28144	\$29492	\$26090	\$23157	\$33373	\$29763
MEAS. OF FARM ORG. AND MANAGEMENT EFFIC.				i de la companya de La companya de la co				
Crop yields - % of ave.	, 92	97	98	107	115	<u>,</u> 199	. 93	92
% high return crops	47.1	52.1	47.4	48.9	49.1	44.3	53.5	52.4
Index ret. from livesteck	107	9,7	107	79 -	100	113	94	99
A. U. livestock per 100 A.	25.0	25.4	22.7	20.4	28.7	22,2	22.8	20.7
Work units	756	660	676	667	685	581	622	657
Work units per worker	325	332	291	309	344	265	31 ¹ +	302
Exp. per work unit	\$3.06	\$3.04	\$3.10	\$2.99	\$2.73	\$3.39	\$3.87	\$3.76
DISTRIBUTION OF ACRES IN FARM			-			31.3		\$3.76
Small-grain	49.2.	42.8	58.5	47.2	47.3	3 ⁴ •2	42.2	52 .1
Cultivated crops	71.8	68.0	52.2	78.4	56.5	49.9	62.9	63.1
Tillable hay land	36.1		37.6	24.9	29.6	29.1	36.1	21.4
Tillable pasture	29.4	17.9	29.6	16.6	23.1	15.4	19.8	12.8
Total acres in farm	245.0	224.8	224.6	249.8	214.3	210.5	232.3	241.5
% land tillable	80.3	75.0	81.5	73-5	75.6	68.1	77.7	- ୧୯ - ୧୯
CROP YIELDS PER ACRE		W1 4,						
Oats, bu.	36.5	31.5	44.2	31.8	49.1	39•3	36.2	35.1
Corn, grain, bu.	45.4	54.1	50.7	55•3	57 . 5	50.2	th+ 5	52.3
Corn silage, tons	5•9	7.6	g . 4	6.4	9.0	6.7	6.5	7.2
Alfalfa hay, tons	2.2	2.2	1.8	2.5	2.1	2.5	2.1	1.7
AMOUNT OF LIVESTOCK	· · · · · · · · · · · · · · · · · · ·	•	*** · · · · · · · · · · · · · · · · · ·					
Total animal units	55.8	50.7	45•3	43.2	48.8	38.4	47.2	43.2
% dairy and du. pur. cattle	61.7	57.8	64.9	59.0	64.4	71.9	60.9	53.2
% in beef breeding herd	4.0	6.5	4.6	59 • 0 4 • 7	5.7	2.1		ર્3•ેલ
6 feeder cattle	5•8	•9	4.6		3.9	•5	3.6	1.8
% hogs	17.2	23.6	12.3	28.1	15.0	15.8	24.9	25.9
% sheep	6.1	5.6	6.7	•5	4.1	1.0	1.5	4.3
% turkeys	4		-	~	2.2	3.1		3. 7
% hens	4.g	5.6	6.9	7.7	4.7	5.6	9.1	7 • 3
		J. J.		1 - 1				

المراكب والمعترضين والمعترضين		Table 1	1. Summai	ry by Ye	ars			•			
	Average	Average	Average							3.1	
	1928-29	1930-32	1933-37	1938	. 1939	1.940	1941	1942	1943	1944	•
	148	7 = 7	. 139 .	122	154	148	197	201	17.7	161	
Number of farms		157	207		225	225	227	230.	55 _{/†}	229	
Acres in farm	170 116	19 ¹ 4 13 ¹ 4	140	164	147	148	147	150	148	145	
Crop acres in farm		\$21767	\$18440.		\$20480	\$24044	\$24117	\$25088	\$27278	\$28034	
Farm inventory	\$24574	SCT[D]	, φ10-7-10 -	ψ <u>ς</u> ε _ξ υ-ι	₩20100	95.000	ψ <u>ε</u> (<u>τω</u>)	4 = 0000	7-1-1-		
Farm Earnings (See page 33)									÷ ,	*	
THE THE PARTY OF T		•							**		
FARM EXPENSES	\$ 36	\$ 32	.\$ 44	\$ 36	\$ 28	\$. 28	\$ 32	\$ 34	\$ 34	\$ 30	
Horses bought	141	79	145.	217	299	607	421	\$ 3 ¹ 4 14144	374	35 7	
Cattle	85	69	57	65	62	60	121	203	205	182	
Hogs bought Sheep bought	6	. 10	61.	110	- 98	. 82	45	53	62	30 ∘	
Poultry bought	37	39	59	100	95	100	118	132	167	194	
Misc. livestock expense	66	. 72	. 66	130	110	78	101	123	161	155	
Misc. crop expenses	186	177	173	278	235	182	202	284	36 ⁾ :	472	
Feed bought	440	3 <u>2</u> 4	438	603	475	600	820	1416	1799	1730	
Power mach. (new & exp.)	399	340	456	578	530	£0 4	821	696	6117	818	بني
Custom work hired	, , , , , , , , , , , , , , , , , , ,				-	123	115	164	185	₹ 2.50	P.
Mach, and equipment (new)	. 190	132	205.	330	. 261	. 296	470	4,64	348	38 ¹ 4	
Mach. and equipment (upkeep)	72	57	59	78	65	68	90	166	188	208	
Bldgs., fencing (new)	130	98	161	282	250	352	313	245	361	352	
Bldgs., fencing (upkeep)	52	29	56	114	. 69	- 84	16)i	226	228	236	
Hired labor	272	252	318	519	340	7+074	1154	574	693	g0 5	
Taxes and insurance	298	. 338	. 270	322	. 285	276	280	313	312	332	
General farm	30	31	30	j+0	36	42	143	46	63	67	
- Total farm purchases	\$2,440	\$2,079	\$2 , 598	\$3,802	\$3,238	\$3,966	\$4,610	\$5 , 580	\$6,191	\$6,672	
Decrease in farm capital	-	755		22	· · · · · · · · · · · · · · · · · · ·	-		• -	.	511	
Board furnished hired labor	102	93	11 5	174	128	141	145	177	171	156	
Interest on farm capital	1,228	1,089	922	. 1,135	1,024	1,202	1,206	1,304	1,364	1,402	
- Unpaid family labor	358	292	232	231	236	269	278	304	386	395	
Total farm expenses	\$4,128	\$4,308	\$3,867	\$5,364	\$4,626	\$5,598	\$6,239	\$7,365	\$8,112	\$9,136	

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Table 41. Surmary by Years (Continued)

	Tabl	e 41. St	mnary by	rears (C	ontinued	<i>)</i>	11. 1	7	`	
	Average 1928-29	Average 1930-32	Average 1933-37	1938	1939	1940	1941	ं े 1942	1943	1944
FARM RECEIPTS Cattle	\$ 753	\$ 467		\$ 838	\$ 813	\$1176	\$1215	\$1514	\$1280	\$1492
Dairy products Hogs	1662 1164	1209 950	1377	1509 1248	1170 926	1454 984	1720 1778	2078 3 1 04	2475 3551	2961 3168
Sheep and wool	52	39	151	217	216	162	173	177	203	21,4
Poultry	° 140 275	139 232	290 340	520 378	344 301	339. 405.	583 523	722 765	688 1 040	814 1022
Eggs Horses	30	30	⁴ 5	51	45	48	31	34	31	28
Corn Small grain	37 241	39 140	126 3 ¹ 47	190 244	142 274	128 235	88 - 262	111 312	137° 320°	143 261
Other crops Income from labor off farm	163 102	170 112	159 148	185 219	15 7 ` 136	250 148	287 146	457 119	520 1 46	762 145
Agric. Adjustment payments Misc.	0 13 ¹ 4	0 151	192 18 <u>5</u>	223 314	336 231	32 ⁴ 295	331 342	34 <u>3</u> 269	190 214	81. 290
(7) Total farm sales (8) Increase in farm capital	\$4,753 617 325	\$3,678 248	\$4,756 573 254	\$6,136 252	\$5,091 891 260	\$5,948 1,017 458	\$7,479 1,432 505	\$10,005 1,498 576	1,167 643	\$11,381 646 .
(9) Family living from farm(10) Total farm receipts(6) Total farm expenses(11) Operator's labor earnings	5,695 4,128 1,567	3,926 4,308 - 382	5,583 3,867 1,716	6,388 5,364 1,024	6,242 4,626 1,616	7,423 5,598 1,825	9,416 6,239 3,177	12,079 7,365 4,714	12,605 6,112 4,493	12,027 9,136 2,891
MISCELLANEOUS ITEMS Yield per acre, corn (bu.) Yield per acre, barley (bu.) Yield per acre, oats (bu.) Yield per acre, alfalfa (tons)	44.8 36.0 46.0 3.0	143.5 30.1 48.1 2.6	142.14 2 ¹ 4.14 37.7 2.2	51.7 28.2 35.9 2.1	59.0 33.5 48.5 2.2	56.3 41.0 58.2 2.3	57.6 29.0 31.5 2.6	61.2 28.1 49.3 2.7	51.8 16.2 42.7 2.4	51.6 9.8 39.1 2.1
% high return crops A.U. livestock per 100 A. No. of work units Work units per worker Expenses per work unit No. of work horses No. of colts	31.9 19.2 599 310 \$1.76 5.4	34.1 20.7 729 339 \$1.34 5.4	39.9 19.9 763 333 \$1.26 5.0	41.3 19.7 866 360 \$1.44 4.4	40.8 18.5 759 349 \$1.41 4.1	41.4 23.4 658 292 \$1.66 4.1	41.0 24.6 664 301 \$1.87 4.0	43.5 25.2 690 316 \$2.23	41.1 25.4 671 305 \$2.79 3.8 .7	49.3 23.8 666 312 \$3.21 3.5
No. of milk cows	14.2	17.1	18.2	18.6	17.2	17.1	17.4	18.1	17.5	17.9

Table 41. Summary by Years (Continued)

	Tabl	e 41. Su	mmary oy	rears (O	ontinued	L)				
		Average	Average			 				
Misc. items (Cont.)		1930-32		1938	1939	1940	1941	1942	1943	1944
No. of litters of pigs	9.3	11.7	8.8	11,1	11.5	12.1	13.8	15.7	18.1	12,1
Lbs. of hogs produced	12,706		12,467	15,948	16,014		20,330	24, 383	25,149	20,398
No. of head of sheep	7.0		17.5	23.3	16.2	18.6	16.1	16.2	15.2	12.7
No. of hens	136	156	185	187	177	197	197	219	2,46	250
Lbs. B.F. per dairy cow	5/1/1	241	236	5,10	245	260	261	253	2147	237
Lbs. B.F. per dual pur. cow		241 6.2	- المعاون المادية الم - المادية الم			181	203	189	182	. 169
No. of pigs per litter	6.3	6.2	6.2	6.7	6.3	6.3	6.3	6.3	6.0	6.1
No. of eggs laid per hen	95	112	126	135	126	131	1/+2	146	147	158
PRICE RECEIVED PER:				13.5						
Lb. B.F. sold	\$.52		\$.32	\$.31	\$28	\$ •33	\$.39	\$:45	\$.55	\$.61
Cwt. hogs sold	8.92	5.82	6.98	7.69	6.17	5.27	9.20	13:24	13.88	13.08
Cwt. feeder cattle sold						8.67	9.72	11.69	13.84	13.84
Lamb sold	9.78	4.64	6.20	6.04		6.69		-		·
Lb. wool sold	•36	- 13	• 25	.18	•26	•31	40	.41	.42	•43
Doz. eggs sold	.28	.17	.18	.18	•15	•17	•22	.29	•36	•32
Lb. turkey sold			•20	•20	• 17	.16	2.1	•29	•33	• 34
RETURN ABOVE FEED COST PER:								12 m		
Dairy cow	\$76.50	\$28.16	\$42.62	\$47.89	\$45.05	\$58.05	\$71,65	\$84.86		\$101.31 🕹
Dual purpose cow	e de la co	-		-		31.69	52.01	55.88	57.81	60 . 36 🏱
Cwt. hogs prod.	1.50	•30	2.22	3.47	1.82	1.50	5.41	7.09	2.90	2.77
Head of sheep	5.50		2.78	1,28	3.18	3. 4 3	5.48	5-77	4.51	3.98
Hen	1.82	1.13	1.01	1.12	•97	•92	1.66	2.16	2.55	1.82
Cwt, turkeys prod.	-		10.59	12.38	g . 27	6.30	10.72	16.56	14.89	19.24
FEED COST PER:		المارية والمتارية	500		- 1					
Dairy cow	\$69.50	\$52.27	\$45.02	\$40.55	\$38.67	\$43.22	\$49.10	\$58.29	\$77.61	\$87.44
Dual purpose cow	<u> </u>	-2-2	-	-		36.29	39.50	50.39	62.90	71.32
Cut. hogs produced	7.66	4.50	5•1 ⁴	3.86	3.51	4.11	5. 17	7.16	10.21	10.93
Head of sheep	2.82	2.26	2.55	2.37	2.33	2.61	2.57	3.01	4.34	3.96
Hen	1.62	1.09	1.55	1.30	1,23	1.36	1,80	2.27	3.03	3.44
Cwt. turkeys prod.	 ,	-	8.28	7.75	7.09	9.06	9.33	11.90	17.66	16.35
Horse	55.09	36.13	38.42	29.94	27.61	31.33	35.49	40.25	50.93	49.60
PRICE OF FEED:										
Shelled corn (per bu.)	\$.70	\$.49	\$.59	\$.43	\$.36	\$.46	\$.52	\$.69	\$.91	\$.98
Barley (per bu.)	-60	•36	•56	•39	•30	•31	•38		•79	•92
Oats (per bu.)	-148	• 25	•30	•22	•23	•26	•32	•57 •44	.62	•68
Bran (per cwt.)	1.70	1.00	1.18	1.05	1.10	1.20	1.45	1.95	2.10	2.20
Oilmeal (per cwt.)	3.00	2.00	1.97	2.30	2.15	1.75	2.00	2.30	2.55	2.82
Alfalfa (per ton)	14.75	12.00	10.30	7.50	7.00	7.50	8.00	g.00	11.00	15.00

Footnote for pages 30, 31 and 32.

The values of farm real estate in 1931 were reduced approximately 25 per cent from 1928-1930 values. The values in 1932 were reduced about 29 per cent from the 1931 values. Only land was affected by the reduction in 1931, but in 1932 buildings and improvements were cut 25 per cent. In 1936 the values of land were adjusted upward 10 per cent. The value of dairy cows was also adjusted downward in 1932 and upward in 1936. These capital losses were not included in the inventory decreases in the financial statement but the changes in valuation resulted in variations in the interest charge. No changes in the basis of inventory valuations were made in the years 1933 to 1935 and 1937 to 1944.

The financial statements differ also in that the unpaid family labor rate was \$60 per month for the 1928 to 1930 period, \$40 in 1931, \$30 in 1932 to 1934, \$40 in 1935, \$43 in 1936, \$45 in 1937 to 1940, \$50 in 1941, \$60 in 1942, \$75 in 1943 and \$85 in 1944; and the board for hired labor was figured at \$20 per month in the 1928 to 1930 period, \$15 per month in 1931, \$10 per month in 1932, 1933 and 1934, \$15 per month in 1935, \$18 per month in the years 1936 to 1940, \$20 in 1941 and \$25 in 1942, 1943 and 1944.

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

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

These adjustments should be considered in comparing 1944 results with previous years.