UNIVERSITY OF MINNESOTA
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UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
Cooperating

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A Preliminary Report of Data Secured in 1935 on the FARM ACCOUNTING ROUTE in STEVENS COUNTY, MINNESOTA

By

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SOURCE OF DATA

This report is a summary of data secured from records kept in 1935 by fifteen farmers in Stevens County, Minnesota. A detailed farm accounting route study of farms in Stevens County was started March 1, 1932 by the Division of Agricultural Economics of the University of Minnesota, the West Central Agricultural Experiment Station at Morris and the Bureau of Agricultural Economics of the United States Department of Agriculture. Farms which were representative of the area were selected in cooperation with the county agricultural agent, Mr. Frank Douglass, and Mr. Allen W. Edson of the West Central Experiment Station. Because of abnormal conditions resulting from the drouth, labor records were discontinued in 1934 and each farmer cooperating in this study was given a Minnesota Farm Records and Accounts book in which to keep his records. In this book, records of inventories, cash receipts, cash expenses, feed for livestock, farm produce used in the house, crop production, and births and deaths of livestock are kept. The books are checked three times during the year and again at the end of the year.* Previous to July, 1934 the records were checked by Mr. Robert H. Loreaux and since that time by Mr. Allen W. Edson.

CROP SEASON OF 1935

The crop season of 1935 marked a return, after four years of drouth, to normal rainfall. In fact, the amount of rainfall in 1935 was 4.11 inches more than normal (see Table 1).

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*For a description of the soil, climate and type of farming found in the area, see Division of Agricultural Economics Mimeographed Report Number 69. This report also contains a discussion of effect of the drouth upon the production of these farms and the income of the operators. For a summary of the detailed cost data secured in 1932 and 1933, see Mimeographed Report Number 65.

Table 1

Normal Rainfall and Departure from Normal Rainfall, in Inches, at Morris, Minnesota*

Year	Jan. Feb. Mar.	April	May	June	July	Aug.	Sept.	Oct. Nov. Dec.	Annual
Normal	2.35	2.27	2.98	3.95	3.76	2.84	2.37	3.08	23.60
				Departure from Normal, in Inches+					
1931	-.58	-1.66	-1.01	-1.12	-1.38	+.38	-1.15	+2.14	-4.38
1932	+.35	-.97	-.03	-1.97	-.44	+.09	-1.74	+.81	-3.90
1933	+.14	-1.18	-.11	-1.16	-2.54	-.42	-.98	-2.04	-8.29
1934	-1.69	-1.17	-1.80	-.29	-2.77	-.83	+.58	+.24	-7.73
1935	+.81	+.89	-.76	+.48	+2.76	+3.73	-1.94	-1.86	+4.11

*Data from reports of United States Weather Bureau.
+A minus (-) indicates a rainfall below normal. A plus (+) indicates a rainfall greater than normal.

As a result of favorable moisture conditions, crops yielded well (see Table 2).

Table 2

Yield per Harvested Acre of Specified Crops
Stevens County

	1932		1933		1934		1935	County
	County*	Farms studied	County	Farms studied	County	Farms studied	farms studied	average 1923-32
Spring wheat, bu.	12	13.5	6	5.4	2	3.6	13.2	12.4
Oats, bu.	31	45.2	9	11.1	3	9.4	45.5	32.8
Barley, bu.	22	25.6	5	7.5	3	6.3	25.3	25.6
Flax, bu.	7	7.8	4	3.2	2	2.2	9.9	8.5
Husked corn, bu.	27	28.8	6	9.2	4	8.8	28.1	28.1

*Yields for Stevens County were obtained from the State Department of Agriculture. The county yields for 1933 and 1934 are preliminary.

Generally speaking, the 1935 crop was not harvested in time to affect, to any great extent, the scale of livestock production in 1935. However, with an adequate supply of feed on hand, the farmers are in a favorable position to increase livestock production. Nevertheless, even with very favorable circumstances, it is likely to be some time before the scale of livestock production existing previous to the drouth is regained.

DESCRIPTION OF THE FARMS

The organization and production of the farms studied in 1935 are shown in the following table. Averages are given for all farms, for the four farms with the highest earnings and for the four farms with the lowest earnings. A comparative statement of the organization of the farms studied in each of the four years is presented on page 4. The average size of the farms studied in 1935 was 395 acres. Approximately 82 per cent of the farm acreage was in crops. Oats, corn, barley, flax and wheat were the crops occupying the largest acreage. Six of the fifteen farms were owned by the operators and the other nine farms were partly

Facts About the Organization and Production of the Farms, 1935

	Your farm	All farms	Four high earnings farms	Four low earnings farms
Number of farms		15		
Acres in:				
Corn	____	64.5	65.4	55.8
Oats	____	71.4	86.1	61.8
Barley	____	49.6	61.5	38.0
Wheat	____	36.1	23.0	23.6
Wheat and oats	____	9.1	19.5	-
Flax	____	38.8	56.9	27.0
Other grains and grain mixtures	____	5.7	11.5	-
Alfalfa	____	14.3	16.7	5.2
Timothy and clover	____	-	-	-
Wild hay	____	14.9	6.2	16.5
Other hay	____	14.6	14.2	11.8
Other crops	____	6.8	.8	15.0
Total crop acres	____	325.8	361.8	254.9
Pasture	____	41.5	33.3	56.7
Farmstead, road, waste	____	27.9	43.5	17.4
Total acres per farm	____	395.2	438.6	329.0
Number of cows	____	12	8	14
Pounds of hogs produced	____	4729	7774	2794
Number of sheep	____	21	39	14
Number of all chickens	____	128	78	84
Number of laying hens	____	91	63	55
Number of work horses	____	5.3	3.7	5.4
Yield per acre:				
Corn, husked, bu.	____	28	27	29
Oats, bu.	____	45	55	44
Barley, bu.	____	25	31	24
Wheat, bu.	____	13	20	11
Flax, bu.	____	10	10	11

owned and partly rented. Seventy-six per cent of the land included in the fifteen farms studied was owned by the operators.

FINANCIAL STATEMENTS

Average earnings and inventories for 1935 are presented on the following pages for all farms, for the four farms having the highest earnings and for the four farms having the lowest earnings. A comparative statement of earnings and inventories for 1932 to 1935 also is shown. A number of the farms were partly rented. The rental contracts varied from farm to farm. In order to have the data for all farms on a comparable basis, the statements have been adjusted to a full ownership basis. The inventories include all of the farm property regardless of ownership, except that the value of the house occupied by the operator was omitted from the value of the farm buildings. (The value of the house and the expense on it are included in the household and personal statement.) The landlord's share of crops is included in receipts and the landlord's expenses for taxes, insurance and repairs, and for seed, twine and threshing are included in the expenses. All

Comparative Statement of the Organization of the Farms

	1932	1933	1934	1935
Number of farms	24	22	22	15
Acres in:				
Corn	79.2	81.6	75.6	64.5
Oats	57.5	47.8	44.5	71.4
Barley	37.1	37.7	35.6	49.6
Wheat	30.7	41.3	26.8	36.1
Wheat and oats	12.6	14.0	6.7	9.1
Flax	26.1	31.9	37.1	38.8
Other grain and grain mixtures	5.6	6.9	2.4	5.7
Alfalfa	15.5	15.9	15.5	14.3
Timothy and clover	7.3	9.3	.5	-
Wild hay	14.7	14.9	16.9	14.9
Other hay	.6	5.1	24.4	14.6
Other crops	2.2	1.8	22.2	6.8
Total crop acres	289.1	308.2	308.2	325.8
Pasture	44.8	47.1	44.8	41.5
Farmstead, road, waste	17.7	19.2	19.1	27.9
Total acres per farm	351.6	374.5	372.1	395.2
Number of cows	14	15	13	12
Pounds of hogs produced	14515	9791	5546	4729
Number of sheep	20	21	16	21
Pounds of turkeys produced	1328	1734	1140	226
Number of chickens	204	228	159	128
Number of laying hens	114	118	107	91
Number of work horses	6.0	6.2	5.9	5.3

interest and cash rent actually paid have been omitted and interest charged on the total inventory at five per cent. The value of farm produce used in the house was credited as part of the farm income and board furnished hired labor was considered as a farm expense. Board for hired labor was charged at $15 per month. In arriving at the operator's labor earnings, the unpaid family labor was charged at $40 per month. This wage was estimated on the basis of wages paid to hired laborers, including board.

The Returns to Capital and Family Labor is what is left to pay interest on the investment and for the labor of the farm operator and his family after cash expenses have been paid and an allowance made for differences in inventories. Family Labor Earnings is the amount left after an interest charge of five per cent on the average inventory has been deducted from the Returns to Capital and Family Labor. The Operator's Labor Earnings is what is left for the operator after estimated wages for the unpaid family labor are deducted from the Family Labor Earnings. It is the amount left as pay for the operator's labor and management after all farm expenses, interest on the investment and wages for the unpaid family labor have been paid. A minus (-) Operator's Labor Earnings indicates a failure to meet all of the charges involved.

In 1935 cash receipts exceeded cash expenses by $566. When allowance is made for changes in inventory and the other non-cash items, the operator had $761 left for his labor and management. A substantial part of the earnings was due to a large increase in the inventory of grain and hay. Because of the drouth, farmers had very little feed on hand at the beginning of the year. As a result of favorable crop yields in 1935, the amount of feed on hand at the end of the year was much larger than at the beginning. The earnings in 1935 were much higher than in any of the preceding three years.

Summary of Farm Earnings, 1935

Item	Your farm	All farms (15)	Four highest earnings	Four lowest earnings
Receipts:				
Cattle	____	225	280	195
Hogs	____	265	459	151
Sheep and wool	____	121	297	34
Poultry and eggs	____	238	130	111
Dairy products	____	515	443	299
Horses	____	91	94	11
Flax	____	445	664	236
Wheat	____	172	204	115
Other grains	____	369	798	166
Other crops	____	30	15	14
A.A.A. payments	____	362	317	323
Work off farm	____	139	213	114
Miscellaneous	____	343	738	75
Total Cash Farm Receipts	____	3315	4652	1844
Farm Produce Used in House	____	255	214	249
Increase in Farm Inventory	____	1362	2112	1018
(1) Total Farm Receipts	____	4932	6978	3111
Expenses:				
Hired labor	____	192	314	71
Cattle bought	____	124	341	18
Hogs bought	____	22	43	12
Sheep bought	____	9	14	1
Poultry bought	____	19	8	10
Horses bought	____	41	63	74
Other livestock expense	____	26	25	17
Feed bought	____	511	814	268
Crop expense (twine, threshing, etc.)	____	435	549	346
Buildings, fences, etc.	____	155	61	374
Machinery	____	638	1033	198
Auto, farm share	____	65	82	45
Gas, kerosene, oil, etc. (farm share)	____	270	358	152
Taxes	____	203	232	164
Insurance	____	23	23	29
Miscellaneous	____	16	22	10
Total Cash Farm Expenses	____	2749	3982	1789
Decrease in Farm Inventory	____	-	-	-
Board for Hired Labor	____	67	97	17
(2) Total Farm Expenses	____	2816	4079	1806
(3) Return to Capital and Family Labor (1 - 2)	____	2116	2899	1305
(4) Interest on Farm Inventory at 5%	____	874	935	776
(5) Family Labor Earnings (3 - 4)	____	1242	1964	529
(6) Estimated Wage for Unpaid Family Labor	____	481	325	688
Operator's Labor Earnings (5 - 6)	____	761	1639	-159

Summary of Average Farm Earnings

Item	1932	1933	1934	1935
Receipts:				
Cattle	$713	$575	$449	$225
Hogs	376	453	212	265
Sheep and wool	84	88	56	121
Poultry and eggs	331	409	428	238
Dairy products	304	348	397	515
Horses	40	16	23	91
Flax	220	117	34	445
Wheat	102	116	51	172
Other grains	111	92	46	369
Other crops	39	24	40	30
A.A.A. payments	-	-	479	362
Work off farm	133	204	322	139
Miscellaneous	65	64	80	343
(1) Total Cash Farm Receipts	2518	2506	2617	3315
(2) Farm Produce Used in House	188	216	213	255
(3) Increase in Farm Inventory	-	-	-	1362
(4) Total Farm Receipts	2706	2722	2830	4932
Expenses:				
Hired labor	132	84	61	192
Cattle bought	201	50	26	124
Hogs bought	11	16	5	22
Sheep bought	22	7	1	9
Poultry bought	17	31	14	19
Horses bought	28	2	30	41
Other livestock expense	48	40	23	26
Feed bought	168	258	592	511
Crop expense (twine, threshing, etc.)	143	98	189	435
Buildings, fences, etc.	57	85	56	155
Machinery	173	164	182	638
Auto (farm share)	24	22	60	65
Gas, kerosene, oil, etc. (farm share)	186	186	180	270
Taxes	280	238	224	203
Insurance	26	37	34	23
Miscellaneous	20	26	13	16
(5) Total Cash Farm Expenses	1536	1344	1690	2749
(6) Decrease in Farm Inventory	1098	290	471	-
(7) Board of Hired Labor	74	64	54	67
(8) Total Farm Expenses	2708	1698	2215	2816
(9) Returns to Capital and Family Labor (4 - 8)	-2	1024	615	2116
(10) Interest on Farm Inventory at 5%	854	865	824	874
(11) Family Labor Earnings (9 - 10)	-856	159	-209	1242
(12) Est. Wage for Unpaid Family Labor	297	356	352	481
(13) Operator's Labor Earnings (11 - 12)	-1153	-197	-561	761

Average Farm Inventories 1935

	Your farm	All farms	Four high earnings	Four low earnings
Land	_____	$10193	$10929	$9282
Buildings (excluding house operator lives in)	_____	2114	2142	1868
All horses	_____	418	281	338
Cattle	_____	1041	804	1168
Hogs	_____	221	327	164
Sheep	_____	124	241	115
Poultry	_____	78	48	57
Machinery	_____	1862	2607	1241
Auto (farm share)	_____	81	66	50
Feed	_____	1354	1262	1242
Total	_____	17486	18707	15525

Average Farm Inventories

	1932	1933	1934	1935
Land	$9626	$9975	$9540	$10193
Buildings (excluding house operator lives in)	2349	2484	2501	2114
All horses	425	422	413	418
Cattle	1080	1023	802	1041
Hogs	170	106	110	221
Sheep	72	81	78	124
Poultry	119	107	104	78
Machinery	2199	2129	1890	1862
Auto (farm share)	98	57	92	81
Feed	939	921	943	1354
Total	17077	17305	16473	17486

Farm Produce Used in the House, 1935

	Your Farm		All Farms		Four High Earnings Farms		Four Low Earnings Farms	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Cream, pt.			351	$35.67	247	$25.65	353	$42.47
Farm churned butter, lb.			75	23.87	78	24.84	52	16.76
Whole milk, qt.			1020	27.42	1327	35.65	767	20.62
Skimmilk, qt.			674	2.47	-	-	1182	4.32
Hogs, lb.			515	37.57	545	44.88	620	42.44
Cattle, lb.			392	20.78	162	5.00	388	19.75
Sheep, lb.			7	.50	-	-	25	1.88
Poultry, lb.			102	12.50	50	6.28	90	12.67
Eggs, doz.			142	30.88	148	34.64	67	13.01
Potatoes, bu.			23	11.39	14	7.00	22	11.00
Fruits and vegetables				19.20		12.50		23.25
Farm produced fuel				32.87		17.50		40.75
Total				255.12		213.94		248.92
Size of family (man equivalent)				4.42		3.95		4.11

Summary of Farm Produce Used in the House (per farm)

	1932		1933		1934		1935	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Cream, pt.	400	$24.88	480	$34.39	405	$34.39	351	$35.67
Farm churned butter, lb.	76	14.32	97	21.11	86	19.67	75	23.87
Whole milk, qt.	876	16.40	604	12.99	647	16.41	1020	27.42
Skimmilk, qt.	508	1.68	728	1.84	923	2.98	674	2.47
Hogs, lb.	712	19.58	694	21.78	833	33.20	515	37.57
Cattle, lb.	483	15.30	484	16.16	452	20.98	392	20.78
Sheep, lb.	14	.43	-	-	5	.10	7	.50
Poultry, lb.	162	13.52	188	13.32	116	11.32	102	12.50
Eggs, doz.	175	19.47	181	20.37	155	24.26	142	30.88
Potatoes, bu.	22	7.28	20	8.92	17	9.22	23	11.39
Fruits and vegetables		10.96		7.91		5.23		19.20
Farm produced fuel		44.04		58.86		35.00		32.87
Total		187.86		217.65		212.76		255.12
Size of family (man equivalent)		3.96		4.23		4.47		4.42

Average Household and Personal Expenses, 1935

	Your farm	All farms	Range
Size of family (man equivalent)	_____	4.31	1.58 to 7.05
Expenses:			
Food	$_____	$228	129 to 361
Operating and supplies	_____	50	9 to 133
Furnishings and equipment	_____	38	1 to 80
Clothing and materials	_____	104	21 to 206
Health	_____	19	0 to 100
Development and recreation	_____	59	2 to 149
Personal	_____	27	4 to 77
Life insurance and savings	_____	80	0 to 352
Housing	_____	6	0 to 23
Personal share of auto	_____	117	7 to 668
Personal share of electricity	_____	3	0 to 20
Total	_____	731	222 to 1145
Decrease in inventory value:			
House	_____	59	10 to 150
Personal share:			
Auto	_____	-31*	50 to -450*
Electric equipment	_____	3	0 to 15
Investment:			
House	_____	1624	580 to 1935
Personal share:			
Auto	_____	70	14 to 275
Electric equipment	_____	32	0 to 137

*A minus (-) indicates an increase in inventory value resulting from purchases.

Household and Personal Expenses

The household and personal expenses per family (exclusive of farm produce used in the house) and the range in each item of expense for 1935 are presented in the above table. The auto expense is high because of purchases of new cars. The car expense is partly offset by an increase in the inventory value. The comparative statement of household and personal expense is presented on the following page.

LIVESTOCK STATEMENT

Feed costs, returns and returns over feed costs for each of the different classes of livestock maintained are presented on the following pages. The average for all farms for each of the four years during which records were obtained and the range in 1935 in each item of cost and income are shown. All data are shown on the basis of a standard unit such as one head or 100 pounds gain in weight. The amounts of feed, with the exception of pasture, are given in pounds rather than in bushels or tons. All corn has been adjusted to a shelled corn basis. Local prices were used, in so far as possible, in determining feed costs. Marketable feeds were charged at local prices and non-marketable feeds on a comparative feeding-value basis. No charge was made for straw or for corn-stalk pasture.

The weight of livestock produced was obtained by adding the weight on the closing inventory to the weight sold and used in the house and then deducting from

Comparative Statement of Household and Personal Expenses

	1932	1933	1934	1935
Size of family (man equivalent)	3.96	4.23	4.47	4.31
Expenses:				
Food	$172	$191	$201	$228
Operating and supplies	49	30	36	50
Furnishings and equipment	34	36	28	38
Clothing and materials	76	94	88	104
Health	32	49	35	19
Development and recreation	48	47	73	59
Personal	58	62	46	27
Life insurance and savings	55	67	52	80
Housing	7	16	9	6
Personal share of auto	140	41	91	117
Personal share of electricity	5	8	4	3
Total	676	741	663	731
Decrease in inventory value:				
House	63	56	57	59
Personal share:				
Auto	45	54	11	-31*
Electric equipment	-2*	2	4	3
Investment:				
House	1744	1820	1739	1624
Personal share:				
Auto	174	174	82	70
Electric equipment	37	45	42	32

*A minus (-) indicates an increase in inventory value resulting from purchases.

this total the sum of the weight bought and the weight on the opening inventory. The value of livestock production was determined in the same manner except that values instead of weights were used. Transfers of cattle from one class to another were handled in the same manner as purchases and sales.

Cows. The cow herds were divided into two groups upon the basis of method of management. Herds of cows of dairy breeding which were handled with particular emphasis on butterfat production, were called dairy herds. Herds composed of mixed breeds which were kept for raising calves as well as producing butterfat were classed as milk-and-beef herds. Because the major emphasis with both the dairy and the milk-and-beef herds was on butterfat production, the costs and returns are for cows only. They neither include any feed or expense for the bull nor any credit for calves born. Due to the fact that in some cases calves were allowed to nurse for a few days or weeks, it was necessary, for purposes of comparison, to estimate their consumption of whole milk while nursing. It was assumed that the calves that were nursing received an average of two gallons of milk per head per day. The value of dairy products fed includes all milk and skimmilk fed to calves as well as that fed to other classes of livestock. The butterfat per cow was calculated by dividing the total pounds of butterfat utilized (sold, used in the house, and fed to livestock) by the average number of cows in the herd.

Feed Cost and Return for Dairy Cows
(per cow)

	1935			Average All Farms		
	Range	Your farm	All farms	1934	1933	1932
No. of farms			6	6	6	8
Cows per farm	3.5 to 17.7		12.3	14.0	16.1	13.6
Butterfat per cow, lb.	155 to 293		215	220	249	225
Feed:						
Corn, lb.	20 to 522		153	402	593	339
Small grain, lb.	247 to 1047		725	427	1106	2235
Other concentrates, lb.	84 to 430		302	524	275	149
Legume hay, lb.	118 to 1840		785	357	1747	2148
Other hay, lb.	385 to 4720		2320	1552	843	984
Fodder and stover, lb.	0 to 2880		1215	1697	1862	1905
Silage, lb.	0 to 7792		3736	3677	4895	2154
Total concentrates, lb.	652 to 1999		1180	1353	1974	2723
Total roughage, lb.*	3324 to 9672		5565	4832	6084	5755
Pasture, days	111 to 159		137	112	124	142
Feed cost	$36.10 to $68.81	$	$49.07	$42.98	$31.18	$32.29
Income:						
Dairy products, sold	$39.63 to $80.09	$	$62.85	$56.30	$49.26	$41.16
Dairy products, used	3.72 to 10.22		7.13	6.55	4.13	4.21
Dairy products, fed	5.20 to 17.78		10.64	11.20	9.88	12.08
Appreciation+	-13.23 to -.25		-4.29	-6.34	-3.05	-3.11
Total income	30.76 to 101.09		76.33	67.71	60.22	54.34
Return over feed	$-18.05 to $50.74	$	$27.26	$24.73	$29.04	$22.05
Feed cost per lb. B.F.	$.17 to $.44	$	$.24	$.20	$.13	$.14
Price received per lb. B.F.	.31 to .43		.34	.30	.22	.21

*Three pounds of silage considered equal to one pound of hay or fodder.
+A minus (-) denotes depreciation.

Feed Cost and Return for Milk-and-Beef Cows
(per cow)

	1935			Average All Farms		
	Range	Your farm	All farms	1934	1933	1932
No. of farms			7	12	11	12
Cows per farm	9.9 to 20.7	_____	13.3	12.3	12.1	9.6
Butterfat per cow, lb.	52 to 153	_____	108	125	156	154
Feed:						
Corn, lb.	0 to 121	_____	37	17	65	291
Small grain, lb.	0 to 371	_____	130	152	677	998
Other concentrates, lb.	0 to 158	_____	32	43	11	11
Legume hay, lb.	33 to 1372	_____	657	565	1040	1133
Other hay, lb.	886 to 4839	_____	2093	985	1007	759
Fodder and stover, lb.	0 to 4536	_____	1504	1441	2379	2099
Silage, lb.	796 to 9483	_____	4972	4202	3419	2296
Total concentrates, lb.	8 to 569	_____	199	212	753	1300
Total roughage, lb.*	3374 to 7674	_____	5911	4314	5566	4756
Pasture, days	22 to 155	_____	119	129	133	143
Feed cost	$21.05 to $43.83	$_____	$34.06	$29.90	$17.60	$19.80
Income:						
Dairy products sold	$19.54 to $36.81	$_____	$27.50	$23.05	$20.32	$20.26
Dairy products, used	2.11 to 18.82	_____	9.08	7.42	7.39	6.92
Dairy products, fed	2.83 to 7.50	_____	5.45	9.87	10.90	8.63
Appreciation+	-2.43 to 2.90	_____	.62	-3.00	-2.05	-1.00
Total income	26.37 to 59.87	_____	42.65	37.34	36.56	34.81
Return over feed	$-17.46 to $27.16	$_____	$8.59	$7.44	$18.96	$15.01
Feed cost per lb. B.F.	$.19 to $.49	$_____	$.30	$.24	$.11	$.13
Price received per lb. B.F.	.28 to .31	_____	.29	.27	.21	.18

*Three pounds of silage considered equal to one pound of other roughage.
+A minus (-) denotes depreciation.

Feed Cost and Return per Head of Other Cattle
(Dairy Herd)

	1935			Average All Farms		
	Range	Your farm	All farms	1934	1933	1932
No. of farms			6	6	6	8
Head per farm	4.4 to 15.7	_____	10.7	11.7	14.9	14.0
Feed:						
Corn, lb.	0 to 285	_____	70	84	128	272
Other grain, lb.	0 to 452	_____	113	60	211	482
Legume hay, lb.	0 to 571	_____	213	185	528	676
Other hay, lb.	0 to 1790	_____	799	523	427	477
Fodder and stover, lb.	0 to 2837	_____	844	1074	948	1025
Silage, lb.	0 to 3064	_____	810	1281	1472	432
Total concentrates, lb.	0 to 582	_____	183	144	339	754
Total roughage, lb.*	472 to 3647	_____	2126	2209	2394	2322
Whole milk, lb.+	0 to 457	_____	257	367	328	334
Skimmilk, lb.	755 to 4288	_____	1913	1429	1674	1745
Pasture, days	84 to 130	_____	110	111	100	114
Feed cost	$11.48 to $28.82	$_____	$19.95	$17.94	$13.33	$16.39
Income:	15.66 to 45.23	_____	26.65	18.76	12.97	7.02
Return over feed	-9.42 to 21.57	_____	6.70	.82	-.36	-9.37

*Three pounds of silage considered equal to one pound of hay or fodder.
+Includes estimated amount calves received while nursing.

Other cattle include the bull and all young cattle. This class represents, primarily, the bull and the heifers that are being raised for replacement, altho in some cases one or more calves being fattened for sale or home butchering also are included.

Feed Cost and Return per Head of Other Cattle
(Milk-and-Beef Herds)

	1935			Average All Farms		
	Range	Your farm	All farms	1934	1933	1932
No. of farms			7	12	11	10
Head per farm	6.8 to 40.5	_____	18.0	13.7	16.1	16.1
Feed:						
Corn, lb.	0 to 1058	_____	224	15	239	163
Other grain, lb.	0 to 355	_____	158	53	290	467
Legume hay, lb.	0 to 439	_____	204	140	416	400
Other hay, lb.	64 to 878	_____	323	594	494	351
Fodder and stover, lb.	0 to 1521	_____	607	471	864	666
Silage, lb.	363 to 4530	_____	1923	1504	1246	857
Total concentrates, lb.	48 to 1213	_____	382	69	529	630
Total roughage, lb.*	449 to 2555	_____	1775	1706	2189	1703
Whole milk, lb.+	0 to 411	_____	144	410	649	259
Skimmilk, lb.	417 to 1939	_____	935	1006	1193	1367
Pasture, days	2 to 131	_____	79	105	73	124
Feed cost	$9.39 to $20.92	$_____	$14.16	$14.91	$14.74	$12.32
Income	14.48 to 46.16	_____	24.05	14.85	11.90	8.89
Return over feed	1.25 to 33.18	_____	9.89	-.06	2.84	3.43

*Total dry roughage plus one-third the weight of silage.
+Includes estimated amount calves received while nursing.

Feed Cost and Return per Animal Unit of Dairy Cattle

	1935			Average All Farms		
	Range	Your farm	All farms	1934	1933	1932
No. of farms			6	6	6	8
Animal units per farm	7.1 to 26.1	_____	18.0	20.2	24.8	21.4
Feed:						
Corn, lb.	13 to 432	_____	145	322	558	410
Small grain, lb.	244 to 923	_____	562	1190	876	1757
Mill feeds, lb.	47 to 350	_____	212	281	188	104
Legume hay, lb.	82 to 1659	_____	673	369	1461	1800
Other hay, lb.	532 to 4424	_____	2017	1687	823	955
Fodder and stover, lb.	267 to 2738	_____	1300	1784	1818	1745
Silage, lb.	0 to 6863	_____	3042	3247	3899	1821
Total concentrates, lb.	466 to 1705	_____	919	1000	1622	2271
Total roughage, lb.*	3410 to 8980	_____	5004	4922	5402	5107
Pasture, days	6 to 186	_____	140	117	139	167
Feed cost	$26.43 to $62.13	$_____	$41.04	$38.37	$25.90	$27.64
Income:						
Livestock	$5.63 to $22.13	$_____	$12.69	$29.76	$6.56	$4.62
Dairy products	27.84 to 65.07	_____	50.07	45.69	38.20	32.99
Total income	43.26 to 87.20	_____	62.76	75.45	44.76	37.61
Return over feed cost	$-9.56 to $47.56	$_____	$21.72	$37.08	$18.86	$9.97

*Total dry roughage plus one-third of weight of silage.

The data for dairy cows and other dairy cattle were combined and the feed costs and income per animal unit for the entire dairy cattle enterprise are presented above. One cow, one bull or two head of young stock were considered as one animal unit. Milk and skimmilk consumed by calves were not considered in calculating the data for this table.

Feed Cost and Return per Animal Unit of Milk-and-Beef Cattle

	Range		Your farm	All farms	Average All Farms 1934	1933	1932
No. of farms				7	12	11	12
Animal units per farm	13.8 to	41.2	_____	22.7	19.5	22.1	24.7
Feed:							
Corn, lb.	0 to	1039	_____	227	19	410	897
Small grain, lb.	34 to	377	_____	194	139	687	1070
Mill feeds, lb.	0 to	104	_____	21	30	7	9
Legume hay, lb.	68 to	1102	_____	539	500	1014	1008
Other hay, lb.	524 to	3182	_____	1507	1420	978	689
Fodder and stover, lb.	0 to	3829	_____	1406	1408	2094	1689
Silage, lb.	1077 to	8619	_____	4300	3523	2797	1839
Total concentrates, lb.	63 to	1195	_____	442	188	1104	1976
Total roughage, lb.	2336 to	6609	_____	4885	4502	5018	3999
Pasture, days	15 to	191	_____	132	113	134	150
Feed cost	$18.13 to	$34.22	$_____	$28.55	$29.06	$17.51	$19.10
Income:							
Livestock	$10.26 to	$44.11	$_____	$19.17	$43.30	$13.93	$14.11
Dairy products	13.25 to	33.75	_____	23.22	21.52	16.46	13.50
Total income	29.74 to	57.36	_____	42.39	64.82	30.39	27.61
Return over feed cost	$4.94 to	$28.51	$_____	$13.84	$35.76	$12.88	$8.51

The feed costs and returns for the entire milk-and-beef cattle enterprise, calculated on an animal unit basis, are presented in the above table. The value of milk and skimmilk consumed by calves is omitted from the feed cost and also from the income in the data presented above.

Feed Cost and Return per Sheep*

	1935 Range		1935 Your farm	1935 All farms	Average All Farms 1934	1933	1932
No. of farms				6	7	7	9
Sheep per farm	12 to	86	_____	53	49	65	53
Feed:							
Grain, lb.	4 to	106	_____	40	27	47	63
Legume hay, lb.	0 to	151	_____	41	48	51	25
Other hay, lb.	0 to	71	_____	22	16	10	30
Fodder and stover, lb.	0 to	267	_____	101	131	260	283
Silage, lb.	0 to	302	_____	81	104	103	64
Total roughage, lb.	46 to	313	_____	191	230	355	359
Pasture, days	0 to	181	_____	127	166	113	163
Feed cost	$.66 to	$2.93	$_____	$1.86	$1.22	$1.07	$1.30
Income:							
Sheep	$2.67 to	$8.95	$_____	$4.84	$2.20	$3.31	$.48
Wool	.72 to	1.87	_____	1.31	1.01	1.42	.83
Total income	3.57 to	10.51	_____	6.15	3.21	4.73	1.31
Return over feed	$.93 to	$7.58	$_____	$4.29	$1.99	$3.66	$.01
Wool per sheep shorn, lb.	6.0 to	11.1	_____	9.0	9.1	8.5	9.2
Lambs per ewe	.8 to	1.4	_____	1.0	.7	.8	.7
Per cent death loss:							
Sheep	2 to	20	_____	10	19	15	8
Lambs	10 to	33	_____	23	32	28	25

*Two lambs under six months considered equal to one sheep.

In the data for sheep, the number of head is the average number of mature head for a year when two lambs under six months of age are considered equal to one mature sheep. The fleece weight was calculated by dividing the total clip by the number of sheep sheared. The lambs raised per ewe is the number of lambs raised to six months of age divided by the number of ewes at lambing time. The per cent of death loss was arrived at by dividing the number of deaths by the total number of individual sheep or lambs, regardless of the length of time that they were on the farm.

Feed Cost and Return per 100 Pounds of Hogs Produced

	1935			Average All Farm		
	Range	Your farm	All farms	1934	1933	1932
No. of farms			15	20	20	24
Pounds of hogs per farm	737 to 10043	_____	4729	6088	10749	14516
Feed:						
Corn, lb.	119 to 859	_____	320	198	245	261
Small grain, lb.	27 to 972	_____	254	131	189	197
Mill feeds, lb.	0 to 44	_____	8	14	4	1
Total concentrates, lb.	278 to 1845	_____	582	393	-	-
Skimmilk equivalent, lb.*	21 to 1517	_____	446	310	190	155
Pasture, days	0 to 43	_____	23	21	26	23
Feed cost	$3.45 to $24.88	$_____	$7.51	$5.86	$3.30	$2.03
Average selling price	6.57 to 9.55	_____	8.20	3.87	3.59	2.62
Return over feed cost	-16.63 to 5.41	_____	.69	none	.29	.59
Pigs per litter	1.0 to 10.0	_____	6.1	5.6	5.9	6.0
Average market weight, lb.	169 to 443	_____	271	185	179	225

*One pound of tankage considered equivalent to ten pounds of skimmilk.

The data for hogs include the feed and gain in weight for the breeding herd. The average selling price is based on the weight and value of all pigs and hogs sold. In 1933 it includes the premium received for the sows and pigs sold in the emergency hog reduction program. It does not include the A.A.A. hog adjustment payment received in 1934 and 1935. The pigs per litter is the number of pigs raised to six months of age plus the pigs sold or butchered at less than six months of age, divided by the number of farrowings. The average market weight is the average weight for all pigs and hogs sold.

Turkeys. The turkey flocks on the farms studied were kept primarily for the production of meat. The production of turkey eggs for sale, relatively, was of no importance. For this reason, the data for turkeys are presented on the basis of one hundred pounds gain in weight. The value of product includes sales, used in the house, and the change in inventory valuation. The selling price is based upon the weight and value of all turkeys sold.

Feed Cost and Return per 100 Pounds of Turkeys Produced

	1935 Range	1935 Your farm	1935 All farms	Average All Farms 1934	1933	1932
No. of farms			5	11	13	14
Pounds produced per farm	161 to 1985	____	677	2274	2942	2280
Feed:						
Corn, lb.	33 to 429	____	207	730	308	311
Small grain, lb.	0 to 446	____	189	270	233	562
Mill feeds and commercial feeds, lb.	0 to 119	____	50	53	24	43
Meat scraps and tankage, lb.	0 to 20	____	4	17	11	21
Skimmilk, lb.	0 to 635	____	59	434	202	470
Total concentrates, lb.	70 to 994	____	446	1053	615	916
Skimmilk equivalent, lb.*	0 to 635	____	127	757	389	827
Feed cost	$1.29 to $13.18	$____	$6.22	$14.75	$5.63	$5.71
Income of product	15.39 to 25.04	____	20.53	24.07	13.37	9.13
Return over feed	4.68 to 21.00	____	14.31	9.32	7.74	3.42
Selling price per lb.	.18 to .26	____	.21	.19	.14	.12

*Skimmilk plus 17 times meat scraps and tankage.

Feed Cost for Work Horses*

	1935 Range	1935 Your farm	1935 All farms	Average All Farms 1934	1933	1932
No. of farms			13	13	13	14
No. of horses per farm	1.6 to 12.0	____	5.4	6.3	6.7	7.0
Per horse:						
Grain, lb.	642 to 3153	____	1763	1333	2188	3314
Hay and fodder, lb.	3896 to 17031	____	7380	4778	4215	4310
Pasture, days	12 to 159	____	66	83	84	70
Feed cost	$42.66 to $71.39	$____	$55.78	$38.26	$21.99	$23.72
Crop acres	33.2 to 231.2	____	81.4	60.3	56.8	52.4

*Only the records from farms using tractors for drawbar work are included in the above data.

Feed Cost and Return per 100 Chickens

	1935			Average All Farms		
	Range	Your farm	All farms	1934	1933	1932
No. of farms			15	22	20	22
Laying hens per farm	7 to 214	_____	91	107	123	118
Other chickens per farm	0 to 138	_____	37	51	117	93
Feed:						
Corn, lb.	0 to 3294	_____	1369	2195	2096	1589
Small grain, lb.	0 to 6000	_____	2423	2938	3348	3938
Mill feeds, lb.	0 to 2460	_____	748	742	358	211
Meat scraps and tankage, lb.	0 to 500	_____	76	160	152	98
Skimmilk, lb.	0 to 10285	_____	3505	2995	3155	3170
Total concentrates, lb.	160 to 9588	_____	4540	5875	5802	5738
Skimmilk equivalent, lb.*	0 to 10633	_____	4797	5715	5739	4836
Feed cost	$2.63 to $168.12	$_____	$76.98	$92.23	$53.92	$36.13
Income:						
Eggs	$36.64 to $229.12	$_____	$121.39	$85.23	$46.50	$45.80
Poultry	-36.88 to 87.34	_____	28.06	40.28	20.15	29.60
Total income	32.01 to 219.10	_____	149.45	125.51	66.65	75.40
Return over feed	$19.55 to $180.77	$_____	$72.47	$33.28	$12.73	$39.27
Eggs per hen	54 to 216	_____	106	99	95	88
Feed cost per dozen eggs, cents	2 to 19	_____	10	11	10	6
Selling price per dozen eggs, cents	19 to 23	_____	21	15	12	12

*Skimmilk plus 17 times meat scraps and tankage.

The data for chickens are presented on the basis of one hundred chickens. Some ducks or geese were raised on a few farms. In such cases, the data include that for ducks and geese and the number of chickens is adjusted accordingly. In arriving at the cost per dozen eggs, the feed cost was divided between the production of birds and the production of eggs on the basis of the receipts from each source. Then the cost of feed chargeable against the production of eggs was divided by the number of dozens of eggs produced.

TREND IN LIVESTOCK COSTS AND RETURNS

The trend in feed costs and returns over feed costs is shown for 1932 to 1935 in the following table. The lowest feed costs for hogs and poultry were incurred in 1932 and the highest costs in 1935. The feed cost for dairy cattle and sheep was lowest in 1933 and highest in 1935. The feed cost for milk-and-beef cattle was lowest in 1933 and highest in 1934, but it was practically as high in 1935 as in 1934.

The return over feed cost fluctuated from year to year more than the feed cost. The return over feed cost for both dairy and milk-and-beef cattle was lowest in 1932 and highest in 1934. The lowest return for sheep was received in 1932 and the highest in 1935. The lowest return for hogs was obtained in 1934 and the highest in 1935. For chickens, it was lowest in 1933 and highest in 1935.

These data show that a high return over feed cost does not always accompany a low feed cost and, conversely, a low return does not, necessarily, accompany a high feed cost. The price for the product may increase or decrease more than the feed cost. This does not mean to say that high costs bring high returns. For the individual farmer, quite the contrary is true. With any given price, the farmer with the lowest cost will receive the greatest return over cost.

In none of the four years were the feed costs or the returns over feed costs the highest or the lowest for all classes of livestock. This indicates one advantage of raising more than one class of livestock.

Trend in Feed Cost and Returns Over Feed Cost for Livestock

	1932	1933	1934	1935
Feed Cost:				
Dairy cattle, per animal unit	$27.64	$25.90	$38.37	$41.04
Milk-and-beef cattle, per animal unit	19.10	17.51	29.06	28.55
Sheep, per head	1.30	1.07	1.22	1.86
Hogs, per 100 pounds produced	2.03	3.30	5.86	7.51
Chickens, per 100 chickens	36.13	53.92	92.23	149.45
Return Over Feed Cost:				
Dairy cattle, per animal unit	9.97	18.86	37.08	21.72
Milk-and-beef cattle, per animal unit	8.51	12.88	35.76	13.84
Sheep, per head	.01	3.66	1.99	4.29
Hogs, per 100 pounds produced	.59	.29	none	.69
Chickens, per 100 chickens	39.27	12.73	33.28	72.47