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Department of Agriculture
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Soil Conservation Service

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Annual Report of the Soil Conservation Farm Management Service 1939

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INDEX

Fifth Annual Report of the Soil Conservation Farm Management Service for the Year 1939

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

INTRODUCTION

The Department of Agriculture of the University of Minnesota and the Soil Conservation Service of the United States Department of Agriculture have for the past five years been maintaining a complete farm record service for farmers in the Soil Conservation Demonstration Areas of Minnesota. For the first year only farmers who were cooperating with the Soil Conservation Service and operating their farms under a complete erosion control program in the Gilmore Creek Area at Winona and the Deer-Bear Creek Area at Spring Valley were included. The service was extended to include the Beaver Creek Area at Caledonia in 1936. In 1939 the service was further extended to include cooperators in the Houston and Caledonia Camp Areas and also a considerable number of farmers in Houston county who were not cooperating in erosion control with the Soil Conservation Service. The total number of farmers included in 1939 were as follows:

Gilmore Creek Demonstration Area	6
Deer-Bear Creek Demonstration Area	25
Houston County (cooperators with S.C.S.)	21
Houston County (not cooperating in a soil erosion control program)	39
Total	91

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 for the various classes of livestock, and a record of the farm produce used by the farm family. Complete household and personal records were also kept by 50 cooperators. Supplementary information was secured during the year regarding crop and livestock and production practices.

The cooperators were assisted and supervised during the year by the fieldman, Mr. James C. Jensen of the Operations Division, Soil Conservation Service, who checked the records several times during the year for accuracy, completeness, and comparability. At the end of the year the records were completed and closed by C. Herman Welch, Jr., and H. O. Anderson of the Economics Division, Soil Conservation Service, and George V. Bowers, Austin B. Sanford, and J. E. Russell of the Operations Division. The records were then brought to University Farm where they were checked and summarized under the direction of T. R. Nodland and G. A. Pond of the Division of Agricultural Economics of the University of Minnesota, who prepared this report.

The account books were furnished by the Agricultural Extension Division of the University of Minnesota. S. B. Cleland of this division handled the field organization and was assisted in securing the cooperation of the record-keeping farmers by Francis Brady, county agricultural agent of Houston county.

Note: Completion of this project was made possible by workers supplied on Federal Students' Work Project, 1939-40, Projects 70-100 and 833-60, and Official Project No. 65-1-71-140, Sub-project 468, Minnesota Work Projects Administration. Sponsor: University of Minnesota.

TYPE OF FARMING

Agriculture in the three areas covered by this report centers primarily around the dairy enterprise with smaller proportionsof hogs, poultry and sheep included. In the Deer-Bear Creek Area and in Houston county a few farmers have both dairy cattle and beef cattle enterprises. Dairy products were sold principally as cream, although a few farmers had an outlet for whole milk. In those cases where cream was sold, the skim milk was fed to the calves, hogs and poultry.

The principal crops grown are oats, barley, hay and corn. The proportion of total farm land devoted to crop production and rotation pasture land varies from 40 per cent on some of the rougher farms in the Gilmore Creek Area to more than 80 per cent on some of the Deer-Bear Creek farms, with an average of 60 per cent for all farms studied. Approximately 28 per cent of the areas is devoted to permanent pasture, with twice as much woodland in the Gilmore Creek Area as in the Deer-Bear Creek Area, and an average of 9 per cent of all the farms being handled as protected timber areas.

TOPOGRAPHY, SOILS AND WEATHER

The Gilmore Creek Area, in which 6 records were completed, is located at the southwestern edge of the city of Winona in Winona county. The valley and side coulees are very narrow with steep sides. The ridges are narrow, varying from a few rods to usually less than one-fourth of a mile in width. The upland soils fall mainly into two types, Clinton silt loam, a forest soil developed on loess, and Dubuque silt loam, a forest soil developed on residual limestone. The valley soils consist mostly of Jackson silt loam and Chariton silt loam. A considerable portion of the steep valley slopes is classified as rough, stony land. Serious sheet and gully erosion has taken place over the area.

The Deer-Bear Creek Area, in which 25 records were completed, is located in Fillmore and Mower counties and is drained by the middle branch of the Root River. The topography varies from very gently rolling to almost level land, in the upper part of the area, to very steep, hilly and rough land in the lower end. In many cases the upper end of the area lacks sufficient undulation of surface to allow proper drainage, in contrast to the lower, where creeks have cut deeply into the underlying limestone. The entire area has been glaciated almost equally between soils composed of drift material and of loessial mantle overdrift. Carrington, and Lindley, silt loam soils with glacial drift derivation and Tama, Clinton, silt loams with loess derivation are among the more important soil types of the area. Erosion varies from slight amounts of sheet erosion in the upper reaches of the drainage areas to severe sheet and gully erosion in the middle and lower parts of the area.

Houston county, in which 60 records were completed, is located in the southeastern corner of the state. Most of the southwestern quarter of the county, in which somewhat more than one-half of the cooperating farmers are located, is undulating to moderately rolling. Productive forest and prairie soils (Fayette silt loam and Tama silt loam), mostly tillable, occupy about 75 per cent of this area. These areas are subject to some erosion. The remaining land in this area is generally too steep to till, but is satisfactory for grazing. Some of the hillsides are wooded.

The remainder of the county is undulating to hilly. The farmers keeping records are located largely in the Root River watershed. The Root River and other streams have cut numerous deep valleys with shallower tributaries. The soil on the ridges (Fayette silt loam) is quite productive. The soil below the most level part of the ridges (Dubuque silt loam) is less productive and is more subject to erosion. The valley floors represent excellent corn land, but frequent overflows reduce its value

for other crops. Considerably more than half of the land is too steep to be tillable, much so steep as to be of limited value for grazing. The steepest north-facing slopes are covered with woods. The lime content of the soils throughout the county is too low for the satisfactory production of alfalfa and sweet clover. Outcrops of limestone of suitable quality for application to the soil occur in many parts of the county.

The farms operated by men who are not cooperating with the S.C.S. in a program of erosion control are, in general, more level than the other farms in this county included in this study and present a less serious erosion problem. This fact must be kept in mind in comparing the figures for Houston county in previous years with those for 1939.

The average mean temperature in these areas is approximately 45°. For the three summer months, June, July, and August, the average mean is 70°, and for the three winter months, December, January, and February, it is 18°. The average frost-free season is 150-160 days. The temperature was above normal every month except April of the growing season in 1939. The only large excess was 7 degrees in May. Data concerning precipitation are given in the following table. An annual deficit of from 9 to 12 inches was registered in 1939. Rainfall was below normal during each of the growing months except August, and in the Gilmore Creek Area in June. A large deficit in May coupled with high temperatures served to reduce hay yields materially and small grain yields somewhat less. A large reserve of soil moisture resulting from the heavy precipitation in 1938 made the drought somewhat less serious than would otherwise have been the case. High summer temperatures and heavy precipitation in August resulted in high corn yields.

Table 1. Monthly and Annual Precipitation

	1939 Precipitation			
	Gilmore Creek Area	Deer-Bear Creek Area	Beaver Creek Area	30-Year mean, Caledonia
	Inches	Inches	Inches	Inches
January	.50	1.11	.77	1.08
February	1.40	1.36	2.10	1.02
March	.40	.60	.37	1.71
April	2.50	1.96	1.98	2.88
May	1.80	1.56	1.15	4.18
June	4.90	3.68	2.28	4.81
July	1.60	1.98	1.22	3.78
August	5.50	4.62	6.45	3.44
September	.60	.80	1.05	3.92
October	1.10	1.26	1.50	2.57
November	.30	trace	.38	1.47
December	.50	.59	.33	1.22
Annual Total, 1939	21.10	19.52	19.58	32.08
Deficit from 1935-1939 mean, 1939	10.06	12.25	9.38	-
Annual total, 1938	45.60	37.78	43.21	-
Annual total, 1937	27.80	26.51	23.52	-
Annual total, 1936	26.10	24.98	27.94	-
Annual total, 1935	35.20	33.27	30.54	-
Mean annual, 1935-1939	31.16	31.77	28.96	-

Summary of Farm Inventories (Beginning of Year)

Items	Your farm	Average of 91 farms	18 most profitable farms	18 least profitable farms
Size of farm (acres)	$_____	217	289	197
Size of business (days of prod.work) (1)	_____	646	939	485
Total farm inventory (without house)	_____	$15,441	$21,031	$12,692
Land	_____	6,869	8,814	5,641
Farm improvements	_____	3,253	4,197	2,686
Machinery and equipment (total)	_____	1,627	2,508	1,421
General machinery and equipment	_____	1,023	1,556	841
Tractor	_____	350	606	305
Truck	_____	62	64	72
Auto (farm share)	_____	150	214	168
Gas engine (farm share)	_____	12	15	7
Electrical equipment (farm share)	_____	30	53	28
Miscellaneous supplies	_____	24	58	17
Feeds and seeds	_____	1,138	1,805	875
Horses (total)	_____	431	557	369
Horses	_____	357	450	321
Colts	_____	74	107	48
Productive livestock (total)	_____	2,099	3,092	1,683
Cows	_____	794	945	658
Other cattle	_____	654	946	586
Hogs	_____	405	679	256
Sheep	_____	150	366	105
Poultry	_____	96	156	78

(1) Explanation of term: "Days of Productive Work".

The total "Days of Productive Work" for any one farm are a measure of size of that farm business. The average number of "ten-hour days" of man labor required per head of productive livestock and per acre of crops is used in combining the crops and the livestock in one single measure of size of business.

The number of days of productive work for each animal and each acre of crops, computed from data presented in Minnesota Technical Bulletin 44, "A Study of Dairy Farm Organization in Southeastern Minnesota", are listed as follows:

Item	Per	No. of days of prod.work	Item	Per	No. of days of prod.work
Cows	Cow	16.6	Corn for grain (husked)	Acre	2.1
Other cattle	Animal unit*	7.6			
Sheep	Animal unit*	2.7	Corn for grain (husk. & shred.)	Acre	2.8
Poultry	100 hens	20.1			
Hogs	100 lbs. hogs produced	.55	Corn for silage	Acre	2.6
			Corn hogged	Acre	1.25
Alfalfa	Acre	1.5	Corn for fodder	Acre	1.8
Tame & wild hay	Acre	.6	Sweet corn	Acre	3.0
Small grain & flax	Acre	1.0	Potatoes	Acre	6.4
Small grain hogged	Acre	.4	Sugar beets	Acre	4.0
Canning peas	Acre	2.5			

*Animal Unit represents one cow, one bull, two head of young cattle, seven head of sheep, fourteen lambs, five hogs, ten pigs, 100 hens, or 1400 pounds of turkeys.

Summary of Farm Inventories (End of Year)

Items	Your farm	Average of 91 farms	18 most profitable farms	18 least profitable farms
Total farm inventory (without house)	$_____	$15,546	$21,576	$12,283
Land	_____	6,869	8,814	5,641
Farm improvements	_____	3,267	4,391	2,609
Machinery and equipment (total)	_____	1,704	2,767	1,323
General machinery and equipment	_____	1,043	1,702	804
Tractor	_____	404	640	276
Truck	_____	66	119	64
Auto (farm share)	_____	153	243	148
Gas engine (farm share)	_____	11	14	7
Electrical equipment (farm share)	_____	27	49	24
Miscellaneous supplies	_____	25	61	16
Feeds and seeds	_____	1,212	2,062	730
Horses (total)	_____	395	516	360
Horses	_____	324	407	314
Colts	_____	71	109	46
Productive livestock (total)	_____	2,074	2,965	1,604
Cows	_____	809	972	670
Other cattle	_____	683	975	518
Hogs	_____	356	558	237
Sheep	_____	130	314	89
Poultry	_____	96	146	90

Summary of Amount of Livestock

Items	Your farm	Average of 91 farms	18 most profitable farms	18 least profitable farms
No. of horses	_____	3.8	4.4	3.6
No. of colts	_____	1.0	1.6	.5
No. of cows	_____	14.4	16.8	13.2
No. of cows per worker	_____	7.4	7.9	5.9
Head of other cattle	_____	21.1	27.5	19.0
Litters of pigs raised	_____	11.8	17.6	8.1
Pounds of hogs produced	_____	16534	25080	11540
Head of sheep (2 lambs equal 1 head)	_____	22.4	47.4	19.4
No. of hens	_____	101	104	98
Total no. of prod.livestock animal units	_____	37.1	51.1	31.7
% of tot.prod.lvst.units that are cows	_____	42.9	37.9	47.1
% of tot.prod.lvst.units that are o. cattle	_____	28.8	27.3	29.1
% of tot.prod.lvst.units that are hogs	_____	18.2	20.1	14.3
% of tot.prod.lvst.units that are sheep	_____	6.4	9.5	6.1
% of tot.prod.lvst.units that are poultry	_____	3.8	5.3	3.4
Number of farms with tractors	_____	66	16	10

Summary of Farm Earnings

Items	Your Farm	Average of 91 farms	18 most profitable farms	18 least profitable farms
CASH EXPENSES				
Tractor (new & exp.)	$_____	$204	$282	$ 58
Truck (new & exp.)	_____	44	119	17
Auto (new & exp.) (farm share)	_____	114	190	87
Gas engine (new & exp.) (farm share)	_____	6	10	6
Electricity (new & exp.) (farm share)	_____	5	9	4
Machinery and equipment (new)	_____	129	284	59
Machinery and equipment (exp.)	_____	35	74	23
Buildings, fences, tiling (new)	_____	102	284	20
Buildings, fences, tiling (exp.)	_____	36	56	48
Hired labor	_____	183	376	113
Feed for livestock	_____	287	562	189
Other expense for livestock	_____	48	67	33
Horses bought	_____	25	12	27
Cows bought	_____	29	52	15
Other cattle bought	_____	51	104	24
Hogs bought	_____	45	54	24
Sheep bought	_____	31	135	9
Poultry bought	_____	25	37	17
Crop (seed, twine, spray)	_____	147	255	92
Taxes and insurance	_____	258	349	221
General farm	_____	9	11	7
(1) Total cash expense	_____	1,813	3,322	1,093
(2) Decrease in farm inventory	_____	-	-	409
(3) Board for hired labor	_____	81	134	58
(4) Total expense (sum of (1),(2),&(3)	_____	1,894	3,456	1,560
CASH RECEIPTS				
Horses	_____	48	60	9
Cows	_____	168	193	162
Dairy products	_____	629	909	489
Other cattle	_____	439	684	326
Hogs	_____	946	1,501	600
Sheep	_____	152	410	115
Poultry	_____	137	461	35
Eggs	_____	138	155	136
Small grain	_____	50	95	20
Corn	_____	106	438	41
Hay	_____	6	16	2
Root crops	_____	3	-	7
Other crops	_____	41	129	5
Miscellaneous	_____	141	258	57
Income from work off the farm	_____	166	375	39
Agricultural Conservation payments	_____	230	345	146
(5) Total cash receipts	_____	3,400	6,029	2,189
(6) Increase in farm inventory	_____	105	545	-
(7) Farm produce used in house	_____	270	328	238
(8) Total receipts (sum of (5),(6)&(7)	_____	3,775	6,902	2,427
Total expenses (4)	_____	1,894	3,456	1,560
(9) Ret. to cap. & fam. labor (8) - (4)	_____	1,881	3,446	867
(10) Interest on farm inventory	_____	775	1,065	624
(11) Family labor earnings (9) - (10)	_____	1,106	2,381	243
(12) Unpaid family labor	_____	336	318	552
(13) Oper. labor earnings (11) - (12)	_____	770	2,063	-309

Summary of Farm Earnings (A)

Items	Your farm	Average of 91 farms	18 most profitable farms	18 least profitable farms
EXPENSES AND NET DECREASES				
Total power	$	$418	$543	$388
Hired		63	75	45
Tractor		101	150	83
Truck		25	45	18
Auto (farm share)		73	112	85
Gas engine (farm share)		6	11	7
Elec. plant or current (farm share)		8	13	7
Horses		142	137	143
General machinery and equipment		125	148	113
Buildings, fencing, tiling		125	145	147
Productive livestock misc. expense		19	33	11
Crop		109	208	69
Real estate taxes		207	282	177
Personal property tax		26	34	24
Insurance		25	33	20
General farm		9	11	7
Hired labor & board, & unpaid fam.labor		600	828	723
Interest on farm inventory		775	1,065	624
(1) Total		2,438	3,330	2,303
RETURNS AND NET INCREASES				
All productive livestock	$	$2,720	$4,178	$1,969
Cows		885	1,221	702
Other cattle		561	760	384
Hogs		888	1,368	589
Sheep		103	224	91
Poultry		283	605	203
Crops, feed, vegetables and fuel		86	486	-168
Agricultural Conservation payments		230	345	146
Miscellaneous		6	9	8
Income from work off the farm		166	375	39
(2) Total		3,208	5,393	1,994
Total expenses (1)		2,438	3,330	2,303
(3) Oper. labor earnings (2) - (1)		770	2,063	-309

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

Analysis of the Reasons for Differences in Operator's Earnings

The financial statement on the preceding pages shows that there is a wide range in earnings. The average operator's labor earnings for the eighteen most profitable farms was $2,063, and for eighteen least profitable farms $ -309. The difference between the averages for these two groups was $2,372. Some of the causes for these differences in earnings may be beyond the control of the farmer. It is significant, however, that the data secured from the records on these 91 farms indicate that there are several very definite factors that enable some farmers to make substantial earnings on these farms that are subject to rather serious erosion, while others fail to meet expenses. These factors and their relationship with earnings are the following:

Table 2. Relation of Dairy Production to Farm Earnings.

Lbs. butterfat per cow Group	Average	No. of Farms	Average Earnings
Below 160	138	24	$326
160 to 219	189	46	738
220 and above	248	21	1,348

High production per cow tends to lower the cost of producing a pound of butterfat. This is very important on those farms on which butterfat sales are the major source of income.

Table 3. Relation of Returns Above Feed for Other Productive Livestock to Farm Earnings.

Returns above feed per animal unit of prod. livestock other than cows Group	Average	No. of Farms	Average Earnings
Below $15.00	$ 7	20	$351
$15.00 to 44.99	30	56	874
$45.00 and above	56	15	940

These farms have, in addition to the dairy herd, quite an investment in other classes of productive livestock, as young cattle, hogs, sheep, or poultry. Most or all of the feed raised is fed, and considerable additional feed is purchased. Feed is the major item of cost in livestock production. High returns from livestock above the value of feed usually accompany greater profits from the livestock. This means another addition to the farm earnings.

Table 4. Relation of Amount of Productive Livestock to Farm Earnings.

Productive livestock units per 100 A. Group	Average	No. of Farms*	Average Earnings
Below 16.0	13.8	15	$634
16.0 to 25.9	20.7	50	720
26.0 and above	29.1	12	792

*Farms with more than 15 per cent of the total productive work units from work off the farm 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 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 5. Relation of Crop Yields to Farm Earnings.

Per cent crop yields were of the average for all the 91 farms		No. of	Average
Group	Average	Farms	Earnings
Below 85	75	20	$570
85 to 114	99	55	764
115 and above	134	16	1,040

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. As a rule, plowing under legumes and manure and control of erosion tend to increase crop yields on these farms.

Table 6. Relation of Choice of Crops to Farm Earnings.

Per cent of tillable land in high return crops*		No. of	Average
Group	Average	Farms**	Earnings
Below 31	25.8	23	$684
31 to 39	34.7	32	782
40 and above	46.2	28	837

*Crops are marked on page 14 as (A), (B), (C), or (D). All of the acres in (A) crops, one-half of acres in (B) crops, and one-fourth of acres in (C) crops are used in calculating per cent of tillable land in high return crops.

**Farms with less than 10 per cent of the total productive work units expended on crops were not included.

As a rule, on these farms, such crops as alfalfa, sweet clover, red clover, 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 a greater percentage of the tillable land into these higher return crops.

Soil erosion and fertility maintenance are vital problems on the farms included in this study. Biennial and perennial legumes, especially alfalfa and sweet clover, form a sod that helps to check erosion, conserve humus and soil fertility. If properly inoculated they tend to increase the nitrogen content of the soil. Legume hays and pastures are also valuable for feed, for they lessen the necessity to purchase high-priced protein feeds. Alfalfa is undoubtedly the most profitable crop available for these farms.

Table 7. Relation of Size of Business (days of prod. work) to Farm Earnings.

Days of productive work Group	Average	No. of Farms	Average Earnings.
Below 475	379	24	$270
475 to 774	595	43	626
775 and above	1,006	24	1,527

Average farm earnings tend to increase with an increase in size of business where size of business is measured by days of productive work. However, for those farmers who are operating their farms at a loss, the larger the volume of business the larger will be the loss. On the other hand, 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 8. Relation of Amount of Work Accomplished per Worker to Farm Earnings.

Days of productive work per worker Group	Average	No. of Farms	Average Earnings
Below 250	197	22	$ 35
250 to 374	308	43	869
375 and above	450	26	1,228

More days of productive work accomplished per worker reduce 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 an efficient manner, 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, economical use of labor-saving machinery, etc., help to increase the work accomplished per worker.

Table 9. Relation of Power, Machinery and Building Expense to Farm Earnings*.

Expense per day of productive work Group	Average	No. of Farms	Average Earnings
$1.30 and above	$1.53	22	$270
$ .90 to $1.29	1.09	41	626
Below $ .90	.74	28	1,374

*Includes building, fencing, and all machinery expense, horse feed, and miscellaneous horse expense.

The expense factor shows a higher relation with earnings when prices are very low than when they are high. 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. Oftentimes 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 the average. This is well illustrated in Table 10.

Table 10. Relation of Operator's Labor Earnings to the Number of Factors in Which the Farmer Is Above the Average

No. of factors in which farm excels	No. of Farms	Your Farm	The length of the shaded lines are in proportion to the average operator's labor earnings	Average Operator's Earnings
Six or seven	14	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxxx	$1,466
Five	17	_____	xxxxxxxxxxxxxxxxxxxxxxxxxxx	1,383
Four	19	_____	xxxxxxxxxxxxxxxxxx	969
Three	22	_____	xxxxxxxx	385
One or two	19	_____ x		-44

The array in Table 10 indicates that it will be worth-while for each cooperator to study carefully his ranking on pages 12 and 13, and learn his standing in respect to each of the above factors and the elements of strength and weakness in his farm business.

Measures of Farm Organization and Management Efficiency

Measures used in chart on page 13.	Your farm	Average of 91 farms	18 most profitable farms	18 least profitable farms
Operator's Labor Earnings	$____	$770	$2,063	$ -309
(1) Pounds of butterfat per cow	____	189	216	172
(2) Return over feed (pr.lvst.other than cows)*	$____	$29	$39	$19
(3) Productive livestock units per 100 acres**	____	20.0	19.9	20.3
(4) Crop yields***	____	100	108	91
(5) % of tillable land in high return crops****	____	35.6	34.5	38.2
(6) Size of business--days of productive work	____	646	939	485
(7) Days of productive work per worker	____	321	396	217
(8) Power & eq. exp. per day of prod. work	$____	$1.09	$.92	$1.33
Measures and items related to some of the above measures:				
(2) Return over feed per head other cattle	$____	$10.98	$9.84	$6.48
Return over feed per 100 lbs. hogs prod.	____	1.16	1.96	.89
Return over feed per hen	____	.73	.72	.91
Return over feed per head sheep	____	2.91	1.72	2.69
(6) Days of productive work on crops	____	149	232	113
Days of productive work on prod. livestock	____	442	582	359
Days of other productive work	____	55	125	13
(7) Total number of workers	____	2.1	2.4	2.3
Number of family workers	____	1.6	1.6	2.0
Number of hired workers	____	.5	.8	.3
(8) Power expense per day of productive work	$____	$ .69	$,58	$ .81
Mach. & eq. exp. per day of prod. work	____	.20	.17	.23
Bldg. & fencing exp. per day of prod. work	____	.20	.17	.29

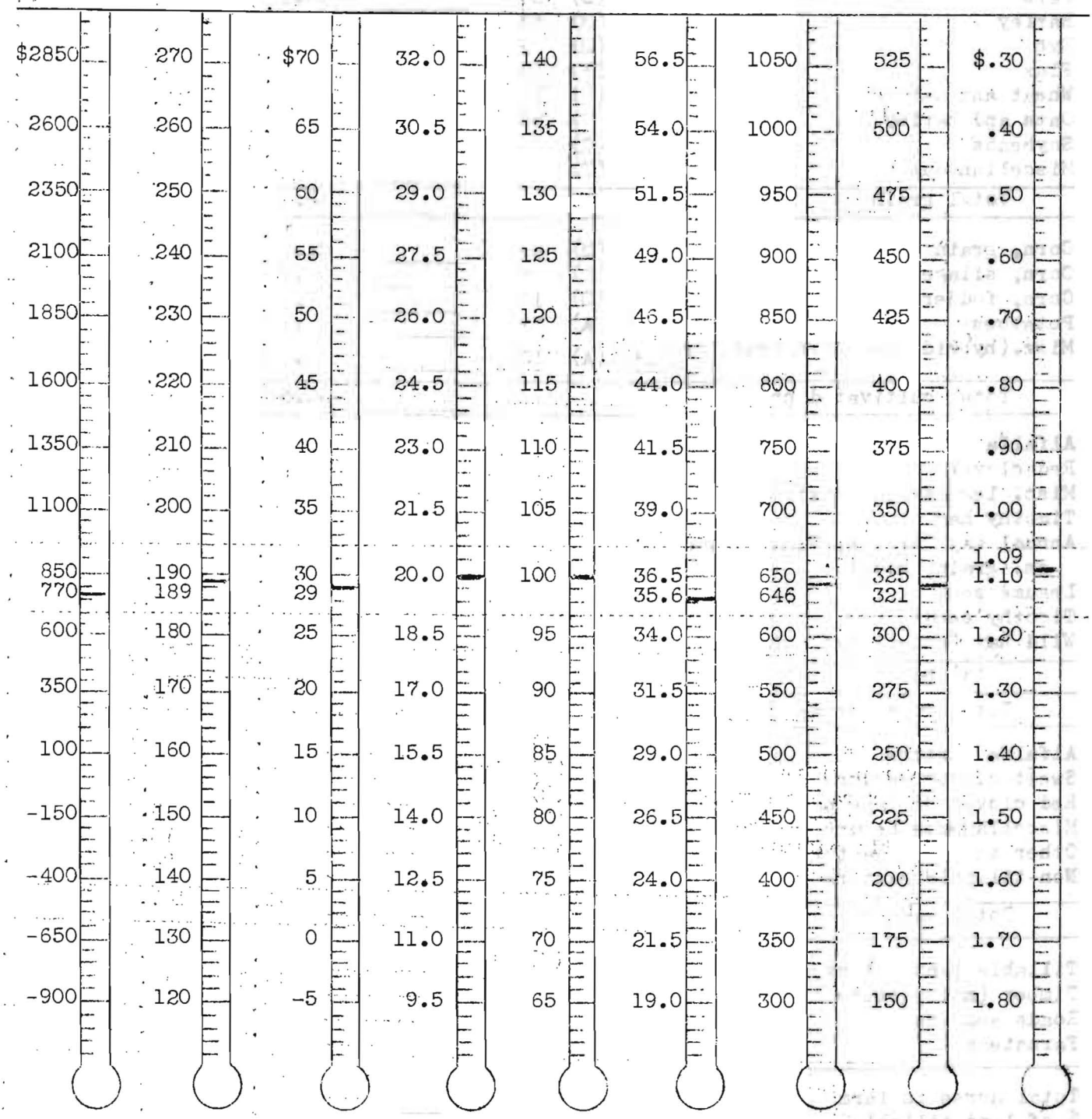
*Given as returns over feed cost per animal unit of productive livestock other than cows.

**Excluding acreage in protected woodlots.

***Given as a percentage of the average.

****Crops are marked on page 14 as (A), (B), (C), (D). All of the acres in (A) crops, one-half of acres in (B) crops, and one-fourth of acres in (C) crops are used in calculating per cent of tillable land in high return crops.

Using your figures from page 12, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for 91 farms included in this summary are located between the two dotted lines across the center of this page.



Distribution of Acres in Farm

Crop (A) (B) (C) (D) refer to ranking used in calculating % of tillable land in High Return Crops (see page 9).		No. of farms growing this crop	Your farm	Aver. of 91 farms	18 most profitable farms	18 least profitable farms
Winter wheat	(B)	9		.7	.9	1.2
Spring wheat	(C)	25		1.5	3.0	.6
Oats	(D)	56		12.0	16.8	12.3
Barley	(B)	53		10.0	20.2	5.3
Rye	(D)	3		.2	.5	.0
Flax	(B)	19		2.3	4.4	.7
Wheat and oats	(C)	15		2.3	5.7	.3
Oats and barley	(C)	50		12.6	13.1	8.0
Soybeans	(C)	10		1.3	4.2	.0
Miscellaneous	(D)	3		.2	.4	.1
Total grain				43.1	69.2	28.5
Corn, grain	(B)	89		21.1	29.2	15.1
Corn, silage	(C)	65		6.3	7.4	4.7
Corn, fodder	(D)	14		1.0	2.0	.4
Potatoes	(A)	37		.4	.2	1.0
Misc.(hybrid seed corn, truck crops, etc.)	(A)	13		.7	3.1	.1
Total cultivated crops				29.5	41.9	21.3
Alfalfa	(A)	67		9.9	10.3	11.5
Red clover	(B)	13		1.7	.0	1.8
Misc. legumes and mixtures	(C)	78		19.1	35.4	14.6
Timothy hay	(D)	25		2.5	2.9	2.9
Annual hay (millet, Sudan grass, sm. grain, etc.)	(D)	13		.9	.3	.3
Legume seed	(B)	3		.1	.0	.0
Timothy seed	(D)	2		.5	2.1	.0
Wild hay (non-tillable land)		6		.3	.0	.3
Total hay				35.0	51.0	31.4
Total crop acreage				107.6	162.1	81.2
Alfalfa pasture	(A)	13		.7	.7	.1
Sweet clover pasture	(B)	15		2.1	.8	2.1
Red clover or rape pasture (hogs)	(B)	6		.8	.2	2.9
Miscellaneous legume pasture	(C)	31		5.4	3.7	5.8
Other tillable pasture	(D)	40		9.0	13.0	6.6
Non-tillable pasture		88		61.4	83.0	66.7
Total pasture				79.4	101.4	84.2
Tillable land not cropped	(D)	15		.8	.0	.3
Timber (not pastured)		61		19.5	13.6	23.4
Roads and waste				5.0	5.3	4.1
Farmstead				4.3	6.2	3.8
Total acres in farm				216.6	288.6	197.0
% of land tillable				60.1	61.6	55.0
% of tillable land in high return crops				35.6	34.5	38.2

Yield of Crops per Acre

Crop	Your farm	Average of 91 farms	18 most profitable farms	18 least profitable farms
Winter wheat, bu.	_____	10.4	11.8	10.4
Spring wheat, bu.	_____	9.7	9.8	8.6
Oats, bu.	_____	32.2	35.0	29.9
Barley, bu.	_____	22.8	25.9	20.7
Rye, bu.	_____	14.8	12.0	-
Flax, bu.	_____	8.4	9.2	12.1
Wheat and oats, bu.	_____	30.5	33.6	16.5
Oats and barley, bu.	_____	31.0	35.9	30.5
Soybeans, bu.	_____	19.7	20.9	-
Corn, grain, bu.	_____	57.7	60.2	47.7
Corn, silage, tons	_____	9.2	9.9	8.0
Corn, fodder, tons	_____	3.2	3.3	3.6
Potatoes, bu.	_____	109.4	167.9	87.8
Alfalfa hay, tons	_____	1.5	1.9	1.7
Red clover hay, tons	_____	1.7	-	1.3
Misc. legume, tons	_____	1.5	1.7	1.3
Timothy hay, tons	_____	1.0	.8	.8
Annual hay, tons	_____	1.2	1.7	1.4
Wild hay, tons	_____	1.5	-	1.1

Feed Costs per Horse and Other Power Expense Items

	Your farm	Average* of 89 farms	18 most profitable farms	18 least profitable farms
Feed per horse,** bu.:				
Grain	_____	1,714	1,497	1,386
Tame hay and alfalfa	_____	3,713	3,831	4,251
Wild hay and fodder	_____	736	622	1,101
Feed costs per horse:				
Grain	$_____	$13.82	$12.13	$11.43
Roughage	_____	11.24	11.61	13.81
Pasture	_____	3.25	3.25	3.67
TOTAL	$_____	$28.31	$26.99	$28.91
Number of work horses	_____	3.9	4.4	3.6
Number of colts	_____	1.0	1.6	.5
Total acres in farm	_____	217.1	288.6	197.0
Crop acres per horse	_____	28.5	37.0	23.0
Tractor and horse exp. per crop acre	$_____	$2.56***	$1.98	$3.08
Farm power exp. per day of prod. work	_____	.69***	.58	.81

*Two farms had no horses.
**Two colts equal one horse.
***Average of 91 farms.

Factors of Cost and Return in Dairy Production

Items	Your farm	Average of 91 farms	18 farms highest in B.F. per cow	18 farms lowest in B.F. per cow
COWS				
Pounds of butterfat per cow	_____	189	252	132
Feeds per cow, lbs.:				
Corn	_____	411	687	169
Small grain	_____	597	888	408
Com. feeds - under 25% protein	_____	23	33	5
Com. feeds - over 25% protein	_____	48	86	12
Tame hay	_____	1,787	1,706	2,126
Alfalfa	_____	1,746	2,126	1,705
Wild hay	_____	101	132	27
Corn fodder	_____	506	430	329
Silage	_____	5,305	6,331	3,895
Total concentrates	_____	1,079	1,694	594
Total dry roughage	_____	4,140	4,394	4,187
Total digestible nutrients	_____	3,760	4,587	3,175
Total digest. nutrients per lb. B.F.*	_____	20.4	18.2	24.6
% protein in ration	_____	13.0	13.7	13.3
% cows fresh - Sept. to Dec., incl.	_____	40.2	56.6	19.8
Feed cost per cow:				
Concentrates	$_____	$8.97	$14.23	$4.70
Roughages	_____	16.73	19.16	15.65
Pasture	_____	5.46	5.38	5.46
TOTAL FEED COSTS	$_____	$31.16	$38.77	$25.81
Value of produce per cow:				
Butterfat sales	$_____	$42.64	$61.89	$28.54
Dairy produce used in the house	_____	5.28	4.79	4.02
Milk to other livestock	_____	11.21	13.33	8.94
Appreciation or depreciation	_____	1.85	1.92	3.35
TOTAL VALUE OF PRODUCT	$_____	$60.98	$81.93	$44.85
RETURNS ABOVE FEED COST PER COW	$_____	$29.82	$43.16	$19.04
Price received per lb. B.F. sold:				
As manufacturing cream (cents)	_____	26.5	26.3	26.6
As market milk and cream and cheese milk (cents)	_____	46.4	62.4	57.2
Feed cost per lb. B.F. (cents)	_____	16.8	15.3	19.9
Number of cows**	_____	14.4	16.0	15.6

*Not including nutrients secured from pasture.

**All 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 the farms.

Feed Costs and Returns for Other Cattle and Sheep

Items	Your farm	Average of all farms	Farms highest in returns above feed per head	Farms lowest in returns above feed per head
Other cattle: number of farms		91	18	18
Feeds used per head, lbs.:				
Concentrates	_____	317	320	382
Hay and fodder	_____	1,576	1,486	1,767
Silage	_____	1,578	1,359	2,179
Whole milk	_____	464	247	727
Skim milk	_____	1,149	1,073	1,270
Feed cost per head:				
Concentrates	$_____	$2.55	$2.59	$3.05
Roughages	_____	5.67	5.13	7.06
Milk	_____	7.33	4.68	10.35
Pasture	_____	1.93	1.47	1.98
TOTAL	$_____	$17.48	$13.87	$22.44
RETURNS PER HEAD	$_____	$28.46	$36.24	$21.32
RETURNS ABOVE FEED COST PER HEAD	$_____	$10.98	$22.37	$-1.12
Number of head of young cattle	_____	21.1	21.0	23.2
Sheep: number of farms		34	7	7
Feeds used per head,* lbs.:				
Concentrates	_____	48	45	87
Tame hay	_____	79	88	93
Alfalfa	_____	104	39	77
Corn fodder and wild hay	_____	81	29	67
Silage	_____	142	33	247
Feed cost per head:				
Concentrates	$_____	$ .37	$ .34	$ .68
Roughages	_____	.82	.44	.85
Pasture	_____	.84	.76	.90
TOTAL	$_____	$ 2.03	$ 1.54	$ 2.43
Value of production per head:				
Wool	$_____	$1.52	$1.43	$1.45
Mutton	_____	3.42	5.40	1.66
TOTAL	$_____	$ 4.94	$ 6.83	$ 3.11
RETURNS ABOVE FEED COST PER HEAD	$_____	$ 2.91	$ 5.29	$ .68
Price per lb. wool sold (cents)	_____	26.5	25.9	26.7
Value per lamb sold	$_____	$6.39	$6.80	$6.51
% lamb crop	_____	97	115	75
% death loss	_____	14	10	16
No. of head of sheep	_____	59.8	19.8	86.1

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

Feed Costs and Returns for Hogs and Poultry

Items	Your farm	Average of all farms	Farms highest in returns above feed	Farms lowest in returns above feed
Hogs: number of farms		89	18	18
Lbs. of feed per 100 lbs. hogs produced:				
Corn		320	241	433
Small grain		132	89	173
Commercial grain feeds		8	8	4
Total grain and commercial feeds		460	338	610
Tankage		4	2	1
Skim milk, buttermilk and whey		312	272	483
Cost of feed per 100 lbs. hogs produced:				
Grain and commercial feeds	$	$3.50	$2.58	$4.56
Tankage, skim milk, buttermilk & whey		.50	.48	.68
Pasture		.19	.21	.18
Total Feed Cost per 100 lbs. Hogs Prod.	$	$4.19	$3.27	$5.42
RETURNS PER 100 LBS. HOGS PRODUCED	$	$5.35	$5.99	$4.82
RET. ABOVE FEED COST PER 100# HOGS PROD.	$	$1.16	$2.72	$-.60
Price received per 100# hogs sold	$	$6.15	$6.55	$5.95
Total no. of litters		12.0	9.9	9.7
Total no. of pigs weaned per litter		6.1	7.1	4.9
% of two-litter system		42.5	45.9	43.3
Pounds of hogs produced		16,883	16,365	9,899
Poultry: number of farms		85	17	17
Lbs. of feed per hen:				
Concentrates		106	108	116
Skim milk, buttermilk and whey		50	52	55
Cost of feed per hen:				
Concentrates	$	$1.05	$1.09	$1.10
Skim milk, buttermilk and whey		.07	.08	.08
TOTAL	$	$1.12	$1.17	$1.18
Value of product per hen:				
Eggs sold and used in house	$	$1.38	$1.89	$ .81
Poultry sold and used in house plus appreciation or less depreciation		.47	1.26	.14
TOTAL	$	$1.85	$3.15	$ .95
RETURNS ABOVE FEED COST PER HEN	$	$ .73	$1.98	$-.23
Price received per dozen eggs sold(cts.)		14.5	15.3	13.7
Eggs laid per hen		115	149	72
No. of hens		107	116	83
% of hens that are pullets(at end of yr.)		57	64	57

Distribution of Farm Produce Used in House

	Quantities				Value			
	Your farm	Average 91 farms	18 most profitable	18 least profitable	Your farm	Aver. 91 farms	18 most profitable	18 least profitable
Whole milk	_____	999 qts.	1,195	915	$_____	$27.45	$32.11	$26.26
Skim milk	_____	217 qts.	660	41	_____	.70	2.13	.13
Cream	_____	360 pts.	512	258	_____	30.80	42.95	22.29
Farm-made butter	_____	25 lbs.	38	36	_____	7.26	11.27	10.36
Eggs	_____	166 doz.	195	159	_____	23.15	27.05	22.12
Poultry	_____	25 head	23	30	_____	11.03	10.17	13.50
Cattle	_____	335 lbs.	360	315	_____	21.04	23.61	19.81
Hogs	_____	589 lbs.	630	509	_____	36.74	40.78	32.11
Sheep	_____	14 lbs.	0	4	_____	.89	0	.33
Potatoes	_____	24 bu.	28	26	_____	12.28	14.78	13.32
Vegetables & fruit	_____	-	-	-	_____	49.66	63.24	34.92
Farm fuel	_____	11 cds.	13	10	_____	49.09	59.67	42.83
Total					$_____	$270.09	$327.76	$237.98
Average value of farm dwelling					$_____	$1898	$2411	$1479
Interest and depreciation on farm dwelling					_____	132	161	98

Distribution of Household and Personal Expenses for Those Farms which Kept Complete Accounts of These Expenses

	Your farm	Average 50 farms	10 most profitable	10 least profitable
Number of persons,) Family	_____	3.6	3.7	3.2
adult equivalent) Other*	_____	.3	.5	.1
Food and meals	$_____	$194.21	$236.56	$164.92
Operating and supplies	_____	59.68	97.04	34.48
Furnishing and equipment; house rep.	_____	49.18	74.34	6.33
Clothing and materials	_____	87.83	127.17	54.65
Health	_____	48.56	77.56	37.23
Development and recreation	_____	42.46	59.41	22.12
Personal care and personal spending	_____	44.91	43.10	45.68
New housing, life ins. and savings	_____	89.65	141.96	49.15
Personal share of auto expense	_____	56.80	69.67	34.07
Church, welfare and gifts	_____	36.30	40.09	20.22
Occasional events	_____	6.28	2.94	21.34
Total Household & Personal Cash. Exp.	$_____	$715.86	$969.84	$490.19
Food furnished by the farm	$_____	$208.97	$275.79	$153.19
Fuel furnished by the farm	_____	44.43	51.65	35.79
Interest and deprec.on farm dwelling	_____	130.67	149.38	79.15
Interest and deprec.on misc. items**	_____	55.67	61.14	28.47
Total Household and Personal Expenses	$_____	$1155.60	$1507.80	$786.79

*Hired help or others boarded.

**Personal share of auto, gas engine, electric plant, and household goods.

Summary of Farm Earnings

Items	Deer-Bear Creek Area	Houston County	Gilmore Creek Area
Number of farms	25	60	6
CASH EXPENSES			
Tractor (new & exp.)	$187	$218	$127
Truck (new & exp.)	8	62	12
Auto (new & exp.) (farm share)	195	87	45
Gas engine (new & exp.) (farm share)	6	5	14
Electricity (new & exp.) (farm share)	4	6	2
Machinery and equipment (new)	136	135	39
Machinery and equipment (exp.)	56	28	23
Buildings, fences, tiling (new)	160	81	75
Buildings, fences, tiling (exp.)	39	38	10
Hired labor	237	175	30
Feed for livestock	287	310	61
Other expense for livestock	64	45	13
Horses bought	28	26	2
Cows bought	22	35	0
Other cattle bought	69	48	1
Hogs bought	58	44	1
Sheep bought	100	5	0
Poultry bought	20	27	31
Crop (seed, twine, spray)	192	137	57
Taxes and insurance	281	261	129
General farm	14	7	12
(1) Total cash expense	2163	1780	684
(2) Decrease in farm inventory	-	-	-
(3) Board for hired labor	108	76	15
(4) Total expense (sum of (1),(2),& (3)	2271	1856	699
CASH RECEIPTS			
Horses	42	54	3
Cows	148	178	146
Dairy products	620	637	584
Other cattle	538	428	137
Hogs	997	1010	87
Sheep	409	61	0
Poultry	57	180	40
Eggs	198	104	231
Small grain	134	17	36
Corn	42	143	0
Hay	12	3	4
Root crops	2	2	23
Other crops	35	46	19
Miscellaneous	203	127	23
Income from work off the farm	138	194	2
Agricultural Conservation payments	294	214	131
(5) Total cash receipts	3869	3398	1466
(6) Increase in farm inventory	247	43	134
(7) Farm produce used in house	296	266	198
(8) Total receipts (sum of (5) & (6)	4412	3707	1798
Total expenses (4)	2271	1856	699
(9) Ret.to cap.& fam.labor (8) minus (4)	2141	1851	1099
(10) Interest on farm inventory	895	745	570
(11) Family labor earnings (9) minus (10)	1246	1106	529
(12) Unpaid family labor	240	364	465
(13) Oper. labor earnings (11) minus (12)	1006	742	64

Distribution of Acres in Farm and Average Yields per Acre

	Distribution of Acres			Crop Yields		
	Deer-Bear Creek Area	Houston County	Gilmore Creek Area	Deer-Bear Creek Area	Houston County	Gilmore Creek Area
Winter wheat	1.6 A.	.2 A.	1.7 A.	13.6 bu.	9.6 bu.	7.3 bu.
Spring wheat	3.7	.7	.3	8.5 "	11.7 "	-
Oats	16.5	10.5	7.9	35.3 "	31.8 "	26.2 "
Barley	19.4	6.2	8.5	20.4 "	24.8 "	16.8 "
Rye	.0	.3	.0	-	14.8 "	-
Flax	5.4	1.3	.0	7.5 "	9.2 "	-
Oats and wheat	3.6	1.8	.9	35.9 "	30.6 "	16.5 "
Oats and barley	13.8	13.0	3.3	26.2 "	31.4 "	41.1 "
Soybeans	4.4	.1	.0	21.7 "	11.4 "	-
Miscellaneous	.3	.1	1.4	-	-	-
Total grain	68.7	34.2	24.0			
Corn, grain	25.7	20.6	6.4	51.9 "	60.9 "	60.1 "
Corn, silage	8.9	5.2	5.3	9.3 tons	9.2 tons	8.2 tons
Corn, fodder	3.8	.0	.0	3.2 "	-	-
Potatoes	.2	.3	2.9	109.2 bu.	113.8 bu.	94.3 bu.
Misc. (hybrid seed corn, truck crops, etc.)	.5	.9	.0	-	-	-
Total cultivated crops	39.1	27.0	14.6			
Alfalfa	9.0	9.5	17.1	1.1 tons	1.7 tons	1.8 tons
Red clover	.4	2.4	.0	1.1 "	1.8 "	-
Misc. legumes & mixtures	29.4	15.4	13.4	1.5 "	1.5 "	1.3 "
Timothy	3.8	2.2	.7	.8 "	1.1 "	.5 "
Annual hay	1.1	.8	.7	1.3 "	1.2 "	1.7 "
Legume seed	.4	.1	.0	173.7 lbs.	166.7 lbs.	-
Timothy seed	1.9	.0	.0	137.4 "	-	-
Wild hay (non-tillable)	.5	.2	.0	1.7 tons	1.3 tons	-
Total hay and seed	46.5	30.6	31.9			
Total crop acreage	154.3	91.8	70.5			
Alfalfa pasture	.1	1.0	.0			
Sweet clover pasture	2.7	1.9	1.3			
Red clover	.0	1.2	.0			
Misc. legume pasture	6.1	5.5	2.0			
Other tillable pasture	13.5	8.1	.0			
Non-tillable pasture	50.5	67.4	46.6			
Total pasture	72.9	85.1	49.9			
Tillable land not cropped	.4	.9	.9			
Timber & brush (not pastured)	13.2	21.3	28.5			
Roads and waste	4.5	5.5	1.7			
Farmstead	6.2	3.7	2.5			
Total acres in farm	251.5	208.3	154.0			
Per cent of land tillable	72.1	56.8	52.0			

Measures of Farm Organization and Management Efficiency	Deer-Bear Creek Area	Houston County	Gilmore Creek Area
Operator's labor earnings	$1006	$742	$64
Pounds of butterfat per cow	202	185	182
Returns over feed (prod. livestock other than cows)	$29	$30	$23
Productive livestock units per 100 acres	18.3	20.5	21.1
Crop yields	95	104	91
Per cent of tillable land in high return crops	31.6%	36.3%	45.4%
Size of business - days of productive work	707	642	435
Days of productive work per worker	351	317	239
Power, machinery and building expense per day of productive work	$1.11	$1.08	$1.08
Returns over feed per head other cattle	$12.36	$10.74	$7.68
Returns over feed per 100 lbs. hogs produced	.92	1.31	.68
Returns over feed per hen	.67	.77	.60
Returns over feed per head sheep	2.81	3.02	-

Amount of Livestock			
No. of horses	4.5	3.5	4.0
No. of colts	1.1	1.1	.3
No. of cows	13.9	14.7	13.9
No. of cows per worker	7.2	7.4	7.8
Head of other cattle	23.3	21.0	13.0
Litters of pigs raised	12.4	12.6	2.5
Pounds of hogs produced	17334	17561	2929
Head of sheep	55.6	10.9	.0
No. of hens	118	89	146
Total number of productive livestock animal units	42.4	36.2	23.5
% of total prod. livestock units that were cows	37.7	43.4	59.4
% of total prod. livestock units that were other cattle	28.1	29.0	29.6
% of total prod. livestock units that were hogs	16.7	20.1	5.0
% of total prod. livestock units that were sheep	14.2	3.8	.0
% of total prod. livestock units that were poultry	3.3	3.7	6.0

Summary of Earnings by Years (see footnote, page 24)

	1935	1936	1937	1938	1939
No. of farms	40	81	57	55	91
CASH EXPENSES					
Tractor (new & expense)	$ *	$117	$166	$206	$204
Truck (new & expense)	*	42	76	40	44
Auto (new & expense) (farm share)	90	92	147	76	114
Gas engine (new & expense) (farm share)	*	5	12	6	6
Electricity (new & expense) (farm share)	*	9	9	8	5
Machinery and equipment (new)	132*	139	180	124	129
Machinery and equipment (expense)	136*	36	41	36	35
Buildings, fences, tiling (new)	152	96	128	55	102
Buildings, fences, tiling (expense)	28	39	37	40	36
Hired labor	162	167	217	196	183
Feed for livestock	184	271	369	253	287
Other expense for livestock	21	30	55	63	48
Horses bought	41	42	33	33	25
Cows bought	38	39	37	49	29
Other cattle bought	41	75	115	84	51
Hogs bought	31	51	42	32	45
Sheep bought	105	43	16	43	31
Poultry bought	27	30	19	18	25
Crop	99	108	141	145	147
Taxes and insurance	193	204	226	236	258
General farm	14	19	14	12	9
(1) Total cash expense	$1494	$1654	$2080	$1755	$1813
(2) Decrease in farm inventory	-	-	-	-	-
(3) Board for hired labor	88	87	95	78	81
(4) Total expense (sum of (1), (2) & (3)	1582	1741	2175	1833	1894
CASH RECEIPTS					
Horses	$ 18	$ 25	$ 39	$ 54	$ 48
Cows	130	122	152	181	168
Dairy products	700	812	919	800	629
Other cattle	438	258	504	492	439
Hogs	474	802	920	890	946
Sheep	247	159	161	128	152
Poultry	106	142	122	58	137
Eggs	136	136	135	162	138
Small grain	149	183	113	51	50
Corn	4	8	20	7	106
Hay	13	16	20	21	6
Root crops	46	24	16	5	3
Other crops	38	62	31	16	41
Miscellaneous	69	115	189	142	141
Income from work off the farm	101	82	137	177	166
Agricultural Conservation payments	68	131	149	168	230
(5) Total cash receipts	$2737	$3077	$3627	$3352	$3400
(6) Increase in farm inventory	160	254	66	50	105
(7) Farm produce used in house	311	361	317	315	270
(8) Total receipts (sum of (5), (6) & (7)	3208	3692	4010	3717	3775
Total expenses (4)	1582	1741	2175	1833	1894
(9) Returns to cap. & fam. labor (8) minus (4)	1626	1951	1835	1884	1881
(10) Interest on farm inventory	638	703	752	761	775
(11) Family labor (9) minus (10)	988	1248	1083	1123	1106
(12) Unpaid family labor	156	241	247	244	336
(13) Operator's labor earnings (11) minus (12)	832	1007	836	879	770

*Tractor, truck, gas engine and electricity (new & expense) were included with machinery and equipment.

Summary of Miscellaneous Items by Years

Miscellaneous items:	1935	1936	1937	1938	1939
Acres in farm	193.9	189.9	203.7	202.3	216.6
Crop acres in farm	106.2	100.7	108.7	110.9	107.6
% of tillable land in high return crops	*	36.7	41.7	40.3	35.6
Yield per acre, corn (bu.)	39.1	30.1	34.8	49.5	57.7
Yield per acre, barley (bu.)	20.8	18.1	23.9	26.6	22.8
Yield per acre, oats (bu.)	33.2	20.8	37.0	31.6	32.2
Yield per acre, alfalfa (tons)	3.2	1.8	2.0	2.4	1.5
Productive livestock units per 100 A.	14.9	17.6	17.9	20.1	20.0
No. of days of productive work	506	550	597	628	646
No. of days of productive work per worker	288	301	314	340	321
Power & equipment exp. per day of prod. work	$.76	$1.13	$1.10	$1.06	$1.09
No. of work horses	4.4	4.2	4.3	4.0	3.8
No. of colts	.6	.9	.8	1.0	1.0
No. of cows	12.7	13.9	13.7	14.2	14.4
No. of head of other cattle	13.8	17.2	21.2	19.9	21.1
No. of litters of pigs	3.7	7.6	6.8	8.7	11.8
Pounds of hogs produced	*	8404	9950	12808	16534
No. of head of sheep	26.0	23.7	30.9	30.2	22.4
No. of hens	103	79	93	100	101
Pounds of butterfat per cow	190	178	192	200	189
No. of pigs per litter	6.3	5.6	6.8	6.7	6.1
No. of eggs laid per hen	95	102	114	118	115
Price received per lb. of butterfat sold	$.30	$.31	$.37	$.30	$.27
Price received per cwt. hogs sold	*	9.22	9.01	7.55	6.15
Price received per dozen eggs sold	.21	.18	.18	.18	.15

*Information not available.

Footnote for page 23:

The financial statements differ in that the unpaid family labor rate was $40 per month for 1935, $43 in 1936, and $45 in 1937 to 1939; and the board for hired labor was figured at $15 per month in 1935, and $18 per month in 1936 to 1939. These adjustments to meet changes in the price level should be considered in comparing 1939 results with previous years.

The data for each of the first three years were for the 12 months' period beginning March first of the years indicated and ending February twenty-eighth of the following year. The data for 1938 and 1939 were for the period January first to December thirty-first.

Suggestions for Improvements