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ANNUAL REPORT

VOCATIONAL AGRICULTURE FARM ANALYSIS

EAST SOUTH CENTRAL MINNESOTA

AUSTIN AREA VOCATIONAL SCHOOL
Austin, Minnesota

in cooperation with

VOCATIONAL DIVISION, MINNESOTA DEPARTMENT OF EDUCATION AND
AGRICULTURAL EDUCATION DEPARTMENT
UNIVERSITY OF MINNESOTA

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1956 REPORT OF THE VOCATIONAL AGRICULTURE
FARM ANALYSIS SERVICE IN EAST SOUTH CENTRAL MINNESOTA

Charles M. Painter

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INTRODUCTION

This is the second year that an analysis has been made by the Austin Area Vocational School. The 1955 analysis was for southeast Minnesota. Account books from vocational agriculture departments in the extreme southeastern part of Minnesota are being analyzed by the Winona Area Vocational School this year.

This type of analysis follows the same pattern as that used by the Farm Management Division of the University of Minnesota. These techniques have been developed through studies made with farm management association members since 1928.

We are indebted to Truman Nodland and his associates in the Farm Management Division for the many years of service rendered to vocational agriculture. The analysis of Veterans' Agriculture farm account books and those of cooperating Vocational Agriculture adult farmers has been the principle, but by no means, the only contribution to Vocational Agriculture by the Farm Management Division.

The main purposes of the farm analysis service in this area are: (1) to give assistance to instructors in the mechanics of farm record supervision, (2) to assist instructors and cooperating farmers in farm accounting techniques, (3) to aid the farmer in the study of his farm business through analysis reports and, (4) to provide case study material that can be used by farmers and farm groups to study management problem. The analysis is not set up for research purposes, but we hope that the data included here can be used for comparative studies.

This report and the analysis of records included in the report were done under the direction of Charles M. Painter, Vocational Agriculture Instructor of the Austin Area Vocational School. Clerical assistants were: Madge (Mrs. Merle) Anderson and Adelaide (Mrs. James) Dice. Marion Knutson, vocational office secretary, prepared the report.

Directing in a supervisory capacity for this and the other cooperating projects were: G. R. Cochran, State Supervisor of Agricultural Education and S. K. Wick, Assistant Director of Vocational Education in charge of Area Vocational schools and Morton Carney, Acting Director of the Austin Area Vocational School. Promotion and technical assistance were provided by Milo Peterson Professor of Agriculture Education and Lauren Granger, Farm Management Coordinator.

The professional assistance of G. A. Pond, University Division of Agricultural Economics, E. H. Hartmans and Harlan Routhe, Agriculture Extension Service have done much to bring farm management study up to date. Lauren Granger's services are the result of a grant from the Hill Family Foundation.

Farmers pay a fee to cover the actual analysis costs. This fee covers the clerical costs of the analysis and cost of paper and stencils.

Six schools submitted 1956 farm records for analysis:

Austin (with Hayfield cooperating)	29
Byron	1
Kenyon	1
Spring Valley	1
Zumbrota	7

Total	39
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Table 1 Summary of Farm Inventories 1956*

Items	Your farm		Average of 39 farms	
	Jan.1	Dec.31	Jan.1	Dec.31
Size of farm (acres)			219	
Size of business (work units)**			436	
Dairy and dual purpose cows			\$ 2823	\$ 3026
Other dairy & dual purpose cattle			1435	1693
Beef cattle (incl. feeders)			1594	1607
Hogs			1506	1962
Sheep (including feeders)			55	47
Poultry (including turkeys)			395	425
Productive livestock (total)			7808	8760
Horses			25	22
Crop, seed and feed			5359	7239
Power mach. (farm share)			2930	2959
Crop and general machinery			3462	3530
Livestock equipment			1057	1336
Machinery & equipment (total)			7449	7825
Miscellaneous			--	--
Land			12599	12599
Buildings, fences, etc.			10843	10970
Total farm capital			44083	47415
Items	13 most profitable farms		13 least profitable farms	
	Jan.1	Dec.31	Jan.1	Dec.31
Size of farm (acres)	273		194	
Size of business (work units)**	567		378	
Dairy and dual purpose cows	\$ 3121	\$ 3447	\$ 3324	\$ 3564
Other dairy & dual purpose cattle	2058	2452	1447	1785
Beef cattle (incl. feeders)	478	1033	553	602
Hogs	1847	2397	1100	1588
Sheep (including feeders)	64	69	53	64
Poultry (including turkeys)	923	1006	177	187
Productive livestock (total)	8491	10404	6654	7790
Horses	27	26	43	34
Crop, seed and feed	7848	11062	3386	4380
Power Mach. (farm share)	3861	4207	1715	1561
Crop & general machinery	4366	4710	3042	2847
Livestock equipment	1122	1402	1117	1304
Machinery & equipment (total)	9349	10319	5874	5712
Miscellaneous	--	--	--	--
Land	14136	14136	11139	11139
Buildings, fences, etc.	14546	15005	9411	9568
Total farm capital	54398	60952	36507	38623

* For the purpose of comparison, all the data shown in this report with the exception of household expenses are presented on a full-owner basis. The assets, expenses and receipts of the landlord were included in the records from rented farms.

** See explanation of work unit on page 9.

Table 2 Summary of Farm Earnings (Cash Statement) 1956

Items	Your farm	Average of 39 farms	13 most profitable farms	13 least profitable farms
<u>FARM RECEIPTS</u>				
Dairy and dual-purpose cattle		\$ 1319	\$ 2041	\$ 1177
Dairy products		4578	5045	5326
Beef cattle (including feeders)		2654	745	300
Hogs		4468	5501	2986
Sheep and wool (including feeders)		73	102	51
Horses		8	4	21
Poultry		1588	4604	114
Eggs		1011	1835	865
Corn		1729	2404	736
Small grain		173	245	51
Other crops		1072	2192	133
Mach. & equip. sold & gas tax refund		110	110	129
Misc. farm income		321	451	241
Income from work off the farm		223	340	39
(1) Total farm sales		19327	25619	12169
(2) Increase in farm capital		3331	6555	2115
(3) Family living from the farm		226	275	207
(4) Total farm receipts (1)+(2)+(3)		22884	32449	14491
<u>FARM EXPENSES</u>				
Dairy and dual-purpose cattle bought		\$ 401	\$ 290	\$ 795
Beef cattle bought (incl. feeders)		1771	819	58
Hogs bought		210	228	162
Sheep bought (incl. feeders)		1	--	4
Horses bought		2	6	--
Poultry bought		452	1199	114
Misc. livestock expense		475	796	303
Feed bought		3479	5215	2434
Fertilizers		652	948	437
Other crop expenses		512	626	428
Custom work hired		591	695	554
Gas, oil & grease bought (farm share)		788	1045	592
Rep. of Mechanical power (farm share)		353	426	329
Repair and upkeep of real estate		222	283	200
Rep. & upkeep of crop & gen. mach.		228	322	166
Rep. & upkeep of livestock equip.		114	145	113
Wages of hired labor		607	941	346
Electricity expense (farm share)		203	284	181
Real estate & pers. prop. taxes		655	793	530
Cash rent		--	--	--
General farm expense		230	299	185
(5) Total cash operating expense		11946	15360	7931
(6) Cap. purchases-mech.pow.(f.share)		536	967	237
(7) " " -crop & gen. mach.		750	1337	324
(8) " " -livestock equip.		434	474	341
(9) " " -bldgs. & fencing		735	1351	682
(10) Total farm purchases (5) to (9)		14401	19489	9515
(11) Decrease in farm capital		--	--	--
(12) Interest on farm capital		2257	2791	1878
(13) Unpaid family labor		364	553	358
(14) Board furnished hired labor		71	114	27
(15) Total farm expenses (10) to (14)		17093	22947	11778
(16) Labor earnings (4) - (15)		5791	9502	2713

Table 3 Summary of Farm Earnings (Enterprise Statement) 1956*

ITEMS	Your farm	Average of 39 farms	13 most profitable farms	13 least profitable farms
RETURNS AND NET INCREASES				
1. Dairy and dual-purpose cows		\$ 4926	\$ 6040	\$ 5243
2. Other dairy & dual-pur. cattle		1197	1536	1239
3. Beef breeding herd		207	73	243
4. Feeder cattle		801	651	92
5. Hogs		4744	5864	3329
6. Sheep-farm flock		64	107	59
7. Sheep-feeders		3	--	8
8. Turkeys		1149	3447	--
9. Chickens		1085	1971	926
10. All productive livestock		14176	19689	11139
11. Value of feed fed to livestock		8526	11963	6095
12. Return over feed from livestock		5650	7726	5044
13. Crops, seed, and feed		8598	13066	4609
14. Income from labor off the farm		72	47	--
15. Agricultural conservation payments		169	235	141
16. Miscellaneous		141	184	101
17. Total returns & net increases		14630	21258	9895
EXPENSES AND NET DECREASES				
18. Horses		\$ 1	\$ 3	\$ -4
19. Truck		252	375	165
20. Auto (farm share)		354	438	313
21. Tractor		923	1132	766
22. Elec. & gas engine exp. (f.share)		196	284	165
23. Hired power		427	468	426
24. Total power		2153	2700	1831
25. Crop and general machinery		941	1279	749
26. Livestock equipment		263	341	247
27. Buildings, fencing, and tiling		819	1144	725
28. Misc. productive livestock exp.		475	796	303
29. Labor		1045	1612	732
30. Real estate taxes		526	642	427
31. Personal property tax		129	151	103
32. Insurance		104	135	86
33. General farm		127	164	100
34. Interest on farm capital		2257	2791	1878
35. Total expenses & net decreases		8839	11756	7182
36. Labor earnings		5791	9502	2713

* 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.

Table 4 Household and Personal Expenses for
Those Farms Which Kept Complete Accounts of These Expenses, 1956

Items	Your farm	Average of 15 farms
Number of persons - family	_____	4.7
Number of adult equiv. - family	_____	3.5
other*	_____	.1
Food and meals bought	_____	\$ 812
Operating and supplies	_____	295
Furnishings and equipment	_____	239
Clothing and clothing materials	_____	296
Personal care, personal spending	_____	62
Education, recreation and development	_____	155
Gifts and special events	_____	80
Medical care and health insurance	_____	283
Church, welfare	_____	80
Personal share of auto expense and telephone	_____	146
Operator's share of upkeep on dwelling	_____	13
Household share of electric expense	_____	119
Total cash living expense	_____	2580
H.H. & pers. share of new auto	_____	11
New dwelling	_____	--
Taxes and other deductions	_____	120
Life insurance	_____	193
Other savings and investments	_____	167
Total household and personal cash expense	_____	3071
Income:		
Operators labor earnings	_____	\$4138
Return to capital and labor	_____	6072

* Hired help or others boarded.

Table 5 Net Worth Statement for Those Farmers Who Kept a Complete
Record of All Assets and Liabilities, 1956 (Operator's Share)

Items	Your farm		31 owners	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total farm capital			\$32692	\$35435
Auto (Personal Share)	_____	_____	582	531
Dwelling	_____	_____	1884	2159
Other personal assets	_____	_____	3030	3308
TOTAL ASSETS	_____	_____	38188	41433
Real estate indebtedness	_____	_____	7329	7075
Other indebtedness	_____	_____	5129	5122
TOTAL LIABILITIES	_____	_____	12458	12197
Farmer's net worth	_____	_____	25730	29236
Gain in net worth	_____	_____		3505

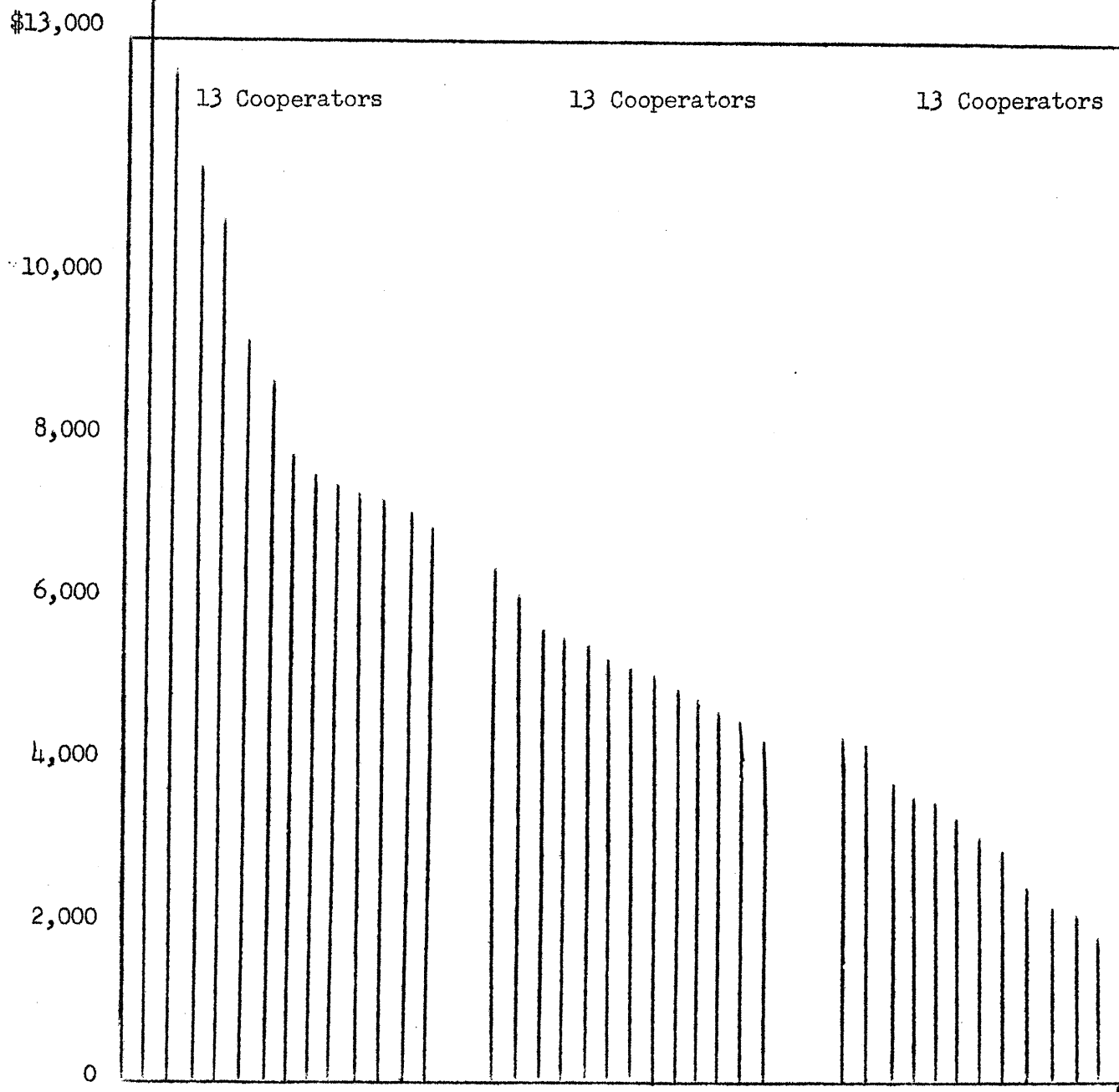
Table 6 Summary of Farm Earnings by Tenure 1956 (Operator's Share)

Items	Your farm	28 owners	2 part owners	9 renters
FARM RECEIPTS				
Dairy and dual-purpose cattle		\$ 1454	\$ 471	\$ 445
Dairy products		3858	8976	2784
Beef cattle (including feeders)		694	--	8916
Hogs		4955	1163	3063
Sheep and wool (including feeders)		63	--	109
Horses		2	138	--
Poultry (including turkeys)		2144	74	150
Eggs		739	407	1741
Corn		1759	--	946
Small grain		189	195	19
Other crops		1024	418	1176
Machinery and equipment sold		91	392	96
Income from work off the farm		157	158	441
Miscellaneous		327	274	249
(1) Total farm sales		17456	12666	20135
(2) Increase in farm capital		3681	3099	2518
(3) Family living from the farm		203	287	285
(4) Total farm receipts (1)+(2)+(3)		21340	16052	22938
FARM EXPENSES				
Dairy and dual-purpose cattle bought		\$ 430	\$ 750	\$ 234
Beef cattle bought (incl. feeders)		469	--	6203
Hogs bought		177	85	328
Sheep bought (including feeders)		2	--	--
Horses bought		3	--	--
Poultry (including turkeys)		561	68	169
Misc. livestock expense		426	416	485
Feed		3647	2452	2566
Fertilizers		659	325	505
Other crop expense		520	280	361
Custom work hired		535	415	535
Gas, oil and grease		818	776	644
Rep. tractor, truck & auto (farm share)		361	415	292
Rep. and upkeep of real estate		228	83	86
Rep. & upkeep of crop & gen. mach.		217	333	231
Rep. & upkeep of livestock equip.		99	207	111
Wages of hired labor		565	806	695
Electricity expense (farm share)		203	165	192
Real est. and pers. prop. taxes		594	226	119
Cash rent		--	570	417
Gen. farm and insurance		241	179	151
Interest paid		--	--	--
Total cash operating exp.		10755	8551	11324
Mech. power bought (farm share)		540	--	644
Crop & gen. mach. bought		740	603	796
Livestock equip. bought		254	1588	739
New real est. improvements		717	144	373
(5) Total farm purchases		13006	10886	16878
(6) Decrease in farm capital		90	--	118
(7) Interest on farm capital		2142	1705	1098
(8) Unpaid family labor		343	566	336
(9) Board furnished hired labor		78	--	70
(10) Total farm expenses (5)+(6)+(7)+(8)+(9)		15659	13157	18500
(11) Labor earnings (4) - (10)		5681	2895	4438
(12) Ret. to cap. & fam. lab. (7)+(8)+(11)		8165	5166	5871

RANGE IN EARNINGS

The range in earnings is not as great as that of 1955. There would appear to be less variation than usually found in farm management studies. Exceptional crop yields were favorable for all cooperators. Factors that we feel contributed the most to differences in labor earnings this particular year were in order of our appraisal;

1. Size of business
2. Return per \$100 feed to productive livestock
3. Work units per worker
4. Crop yields



"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. The number of work units for each class of livestock and each acre of crop are presented in Table 7.

Table 7 Number of Work Units for Each Class of Livestock and Each Acre of Crop

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

* Animal unit represents one dairy cow or bull, two other dairy cattle, $1\frac{1}{4}$ beef cows or bull, 1 feeder steer or heifer, $3\frac{1}{3}$ other beef cattle, 7 sheep, $1\frac{1}{4}$ lambs, $2\frac{1}{2}$ hogs, 5 pigs, 50 hens or 1,100 pounds of turkeys produced.

Table 8 Measures of Farm Organization and Management Efficiency 1956

Measures used in chart on page 11	Your farm	Average of 39 farms	13 most profitable farms	13 least profitable farms
Labor earnings	\$ _____	\$5791	\$9502	\$2713
(1) Crop yields*	_____	100	111	90
(2) Per cent tillable land in high ret.crops	_____	63.3	65.0	66.6
(3) Ret. for \$100 feed to prod. livestock*	_____	100	106	99
(4) Prod. Livestock units per 100 acres**	_____	33.7	32.8	36.1
(5) Size of business - work units	_____	436	567	378
(6) Work units per worker	_____	272	307	261
(7) Pow., mach., equip., & bldg. exp. per work unit	\$ _____	\$10.02	\$9.71	\$10.12

Items related to some of the above measures:

(3) Index of return for \$100 feed from:				
Dairy cattle (see pages 15 & 16)	_____	100	116	97
Beef cattle-breeding herd (see p.17)	_____	100	101	125
Beef cattle-feeders (see page 17)	_____	100	91	104
Hogs (see page 13 & 14)	_____	100	102	100
Sheep - farm flock (see page 18)	_____	100	121	76
Chickens (see page 19)	_____	100	103	94
Turkeys (see page 20)***	_____	100	104	--
(4) Number of animal units	_____	64.3	81.6	54.6
(5) Work units on crops	_____	98.9	131	69
Work units on productive livestock	_____	333	438	296

* Given as a percentage of the average.

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

*** Six cooperators from southern Minnesota.

Using your figures from page 10, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the 39 farms included in this summary are located between the dotted lines across the center of this page.

THERMOMETER CHART

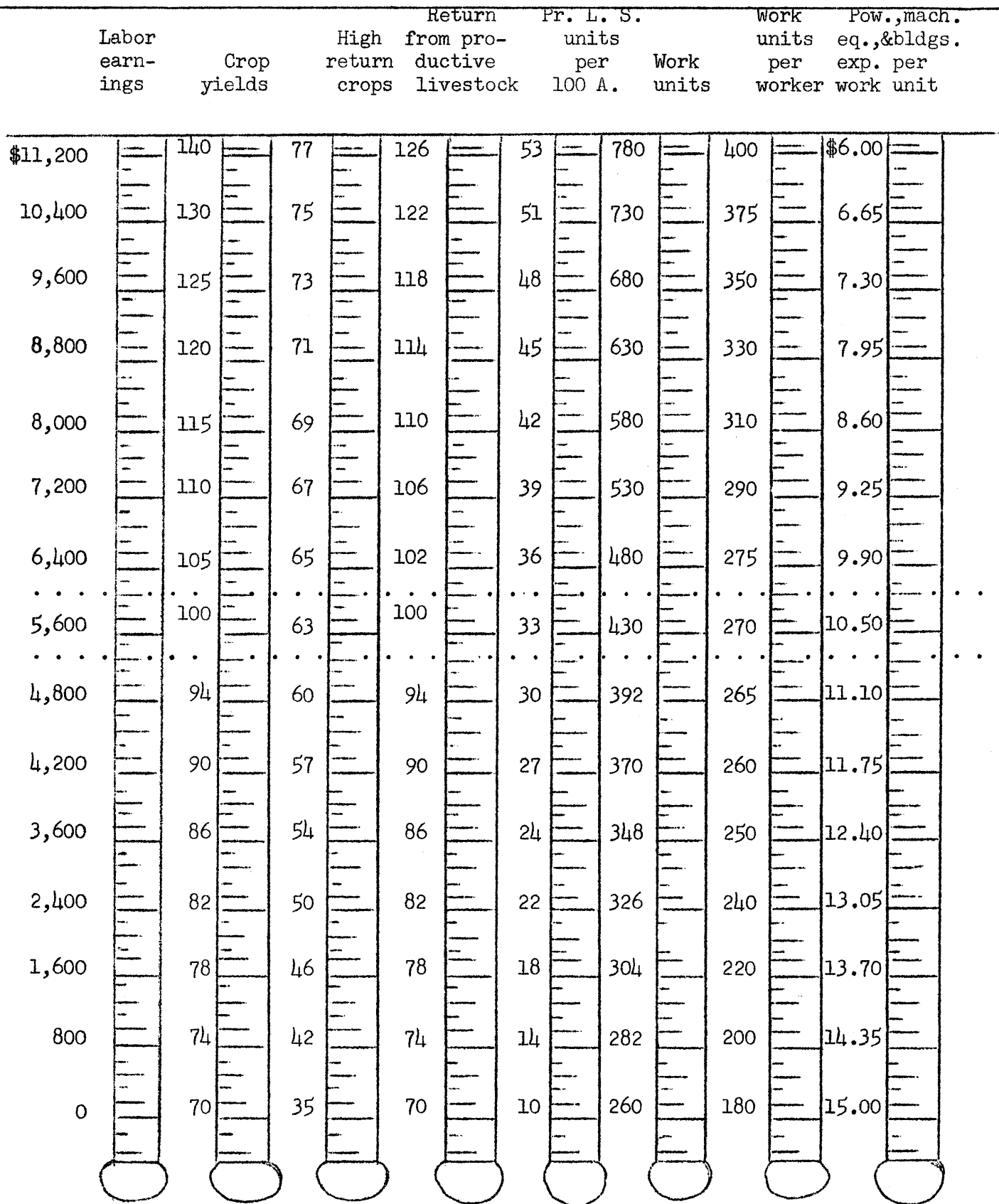


Table 9 Distribution of Acres and Yield 1956

Crop	Crop rating	Number growing	Acres your farm	Average acres of 39 farms	Your yield	Average yield 39 farms
Oats (and mixtures)	D	38	_____	35.9	_____	55.3
Oats silage	D	8	_____	3.3	_____	7.8
*Total small grain & peas			_____	40.7	_____	
Canning corn	B	2	_____	1.1	_____	5.5T
Corn grain	A	39	_____	61.6	_____	77.3
Soybeans (grain)	C	19	_____	16.	_____	25.4
Corn silage	B	26	_____	5.4	_____	12.4T
*Total cultivated crops			_____	84.1		
Alfalfa hay	A	36	_____	25.4	_____	2.7T
Red Clover hay	B	9	_____	4.5	_____	1.4T
**Misc. hay and seed	D		_____	2.0	_____	
Total tillable land in hay			_____	31.9		
Alfalfa pasture	A	31	_____	16.4		
Other legume pasture	C (or B)	7	_____	3.6		
Other tillable pasture	D	14	_____	4.2		
Total tillable land in pasture			_____	24.2		
***Soil Bank and tillable land not cropped	A & D		_____	3.		
Total tillable land			_____	185.		
Non-tillable pasture			_____	12.7		
Timber			_____	3.3		
Roads and waste			_____	9.1		
Farmstead			_____	9.		
Total acres in farm			_____	218.7		
Per cent land tillable			_____	84.5		
Per cent in high return crops			_____	63.		

*Breakdowns are not included for crops averaging less than one acre or grown by only one operator.

**Some crops were grouped because acreages for each were less than one acre. Included are legumes for seed and timothy for seed and emergency hay crops.

***Soil Bank was given the rating of the crop taken out of production.

TOTAL FEED COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES

The total "return over feed costs" for each class of livestock is shown in Table 10. This differs from the "return over feed" shown in the enterprise statement in that it is the total for each class of livestock instead of a return "per head" "per unit" or "per 100 pounds". These data indicate the relative importance of different classes of livestock as a source of income and as a market for feed. The value of milk consumed by calves is included in the total returns from dairy or dual purpose cows and in the total feed cost for other dairy or other dual purpose cattle. The value of milk consumed by calves is not included in either the total returns or the feed cost of "all dairy" or "all dual purpose" cattle. The return over feed is not a net return, but rather the amount available from the gross income, after paying the feed bill, to cover the outlay for hired labor, power, equipment, taxes, insurance, interest and veterinary bills and to provide a return for the use of family labor and capital.

Table 10 Total Feed Costs and Returns From Your Livestock Enterprises, 1956

	Dairy or dual purpose cattle			Beef breeding herd
	Cows	Other	All	
Total returns	_____	_____	_____	_____
Total feed cost	_____	_____	_____	_____
Total return over feed	_____	_____	_____	_____
	Feeder cattle	Hogs	Farm flock of sheep	Chickens
Total returns	_____	_____	_____	_____
Total feed cost	_____	_____	_____	_____
Total return over feed	_____	_____	_____	_____

Feed is the largest single item of cost for all classes of livestock. The proportion of the total cost represented by feed varies between classes of livestock. Feed makes up approximately 45 per cent of the total costs of maintaining dairy cattle and poultry, 50 per cent in the case of a farm flock of sheep, and 75 to 90 per cent for hogs, feeder cattle and feeder lambs. It is necessary to secure a relatively higher return over feed from dairy cattle and poultry than from the other livestock enterprises to cover costs other than feed.

HOGS

Hogs and dairy were the major livestock enterprises in the area. Only those farmers producing 2000# of pork or more were included in the analysis. The spread between the high 1/3 and the low 1/3 is much narrower than that found in similar studies.

One factor stood out as to its influence on hog profits - feed consumed to produce 100# of pork.

Producers receiving the greatest return over feed cost .8 pigs more per litter than those who got the lowest return over feed costs. The high group actually received \$.52 per hundred less for hogs sold than the low return group.

Table 11 Feed Costs and Returns from Hogs 1956

Items	Your farm	* Average of 26 farms	9 farms highest in returns above feed	9 farms lowest in returns above feed
Feed per cwt. hogs produced, lbs.:				
Corn	_____	305	271	329
Small grain	_____	95	92	99
Commercial feeds	_____	47	45	44
Total concentrates	_____	447	408	473
Skim milk and buttermilk	_____	13	-	35
Feed cost per cwt. hogs produced:				
Concentrates	\$ _____	\$11.37	\$10.21	\$12.19
Skim milk and buttermilk	_____	.09	-	.17
Pasture	_____	.15	.12	.18
TOTAL FEED COSTS	\$ _____	11.61	10.33	12.54
Net increase in val. per cwt. hogs prod.	\$ _____	\$16.29	\$16.66	\$15.23
RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED	\$ _____	\$ 4.68	\$ 6.33	2.69
RETURNS FOR \$100 OF FEED	\$ _____	\$143	\$163	\$122
Price received per cwt. hogs sold	\$ _____	\$14.56	\$14.24	\$14.78
No. of spring litters raised	_____	12.3	8.4	12.4
No. of fall litters raised	_____	8.7	8.3	10.0
Total no. of litters raised	_____	21.0	16.7	22.4
No. of pigs born per litter	_____	7.8	8.4	8.2
No. of pigs weaned per litter	_____	6.3	7.1	6.3
Pounds of hogs produced	_____	39069	34563	38837
* Thirty-two cooperators qualified as hog producers - 6 records showed slight inconsistency and were omitted from the averages.				

DAIRY AND DUAL PURPOSE CATTLE

Only producers who averaged two or more cows per year were included in this summary. One operator bred to a beef bull so all young cattle were classed as beef. No herds were classed as dual purpose.

Production was generally high. The spread between the top one-third and the bottom one-third was quite narrow. It will be noted that the high production group fed much more grain and commercial feed than the low group. This tended to offset part of the advantage gained from the extra production.

Table 12 Factors of Cost and Returns from Dairy Cows, 1956

Items	Your farm	Average of 29 farms	10 farms highest in butterfat per cow	10 farms lowest in butterfat per cow
Pounds of Butterfat per cow	_____	323	373	263
Price rec. per lb. B.F. sold (cents)	_____	87	86	83
Feeds per cow, lbs:				
Corn	_____	1486	1601	982
Small grain	_____	814	1069	600
Commercial feeds	_____	419	550	247
Legume hay	_____	4111	4133	4236
Other hay	_____	34	98	--
Fodder and stover	_____	--	-	--
Total concentrates	_____	2703	3190	1810
Total dry roughage	_____	4148	4231	4245
Silage	_____	8187	7196	8348
Feed cost per cow:				
Concentrates	_____	\$ 69.33	\$ 82.42	\$ 45.55
Roughages	_____	59.91	57.76	60.82
Pasture	_____	11.09	11.04	11.21
TOTAL FEED COSTS	_____	140.33	151.22	117.58
Value of produce per cow:				
B.F. sales	_____	271.63	309.48	206.69
Dairy produce used in home	_____	5.45	5.48	5.40
Milk to livestock	_____	11.17	11.87	14.95
Net increases in value of cows	_____	-10.14	-11.72	-10.72
TOTAL VALUE PRODUCED	_____	278.11	315.11	216.32
RETURNS ABOVE FEED COST PER COW	_____	137.73	163.89	98.74
RETURNS FOR \$100 OF FEED	_____	\$198.00	213.00	185.00
Feed cost per lb. B.F. (cents)	_____	44.0	41.4	45.6
Number of cows*	_____	21.5	24.5	16.9

* 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. Herds averaging two cows or less were omitted from this study.

Table 13 Feed Costs and Returns from Other Dairy and Dual Purpose Cattle, 1956

Items	Your farm	Average of 29 farms	10 farms highest in butterfat per cow	10 farms lowest in butterfat per cow
Feeds per head, lbs.:				
Concentrates	_____	802	768	634
Hay and fodder	_____	1964	2061	1817
Silage	_____	1739	2612	288
Skim milk	_____	76	58	163
Whole milk	_____	305	389	314
Feed cost per head:				
Concentrates	\$ _____	\$21.41	\$21.29	\$17.41
Roughages	_____	23.13	26.07	21.69
Milk	_____	10.77	12.12	13.40
Pasture	_____	3.98	4.24	4.15
TOTAL FEED COSTS PER HEAD	_____	59.29	63.72	56.65
Net inc. in value of other cattle	_____	78.27	83.71	74.87
RETURNS ABOVE FEED COST PER HEAD	_____	18.98	19.99	18.22
RETURNS FOR \$100 OF FEED	\$ _____	\$136	\$131	\$136
Number of head of other cattle	_____	19.9	23.2	15.1

Table 14 Feed Costs and Returns from All Dairy and Dual Purpose Cattle, 1956

Items	Your farm	Average of 29 farms	10 farms highest in butterfat per cow	10 farms lowest in butterfat per cow
Feed per animal unit, lbs.:				
Concentrates	_____	2345	2633	1581
Hay and fodder	_____	4211	4266	4349
Silage	_____	7233	6899	7047
TOTAL FEED COSTS PER ANIMAL UNIT		\$126.53	\$134.40	\$105.79
Value of produce per animal unit:				
Dairy products		\$189.07	\$215.33	\$139.03
Net increase in val. of dairy cattle		40.40	43.27	40.53
TOTAL VALUE PRODUCED		229.47	258.60	179.56
RETURNS ABOVE FEED PER ANIMAL UNIT		\$102.94	\$124.20	\$ 73.78
RETURNS PER \$100 OF FEED		\$183	\$196	\$170
Animal units of cattle		31.5	36.1	25.9

Table 15 Feed Cost and Returns from Beef Cattle, 1956

Items	Your farm	Average of all farms
Beef breeding herd: No. of farms:		6*
Feeds per animal unit, lbs.:		
Concentrates	_____	842
Legume	_____	4294
Other hay	_____	--
Silage	_____	2240
Feed cost per animal unit:		
Concentrates	\$ _____	\$21.89
Roughages	_____	41.36
Pasture	_____	15.82
TOTAL FEED COSTS		<u>79.07</u>
Value of produce per animal unit:		
Dairy products	\$ _____	\$ -
Net increase in value of animals	_____	<u>70.41</u>
TOTAL VALUE PRODUCED		<u>70.41</u>
RETURNS ABOVE FEED COST PER ANIMAL UNITS	\$ _____	-8.65
RETURNS FOR \$100 OF FEED	\$ _____	\$89
Number of cows and herd bulls	_____	26.2
Number of animal units in the herd	_____	34.0
Lbs. beef produced	_____	17182**
Feeding Cattle: No. of farms		6
Feeds per cwt. beef produced, lbs.:		
Corn	_____	448
Small grain	_____	63
Commercial feeds	_____	52
Legume hay	_____	315
Other hay and fodder	_____	--
Total concentrates	_____	214
Total hay and fodder	_____	125
Silage	_____	989
Feed cost per cwt. beef produced:		
Concentrates	\$ _____	\$13.50
Roughages	_____	5.77
Pasture	_____	.79
TOTAL FEED COSTS		<u>20.06</u>
Net increase in value of feeders	_____	21.60
RETURNS ABOVE FEED COST PER CWT. BEEF PROD.	_____	1.54
RETURNS FOR \$100 OF FEED	\$ _____	\$114
Price paid per cwt. beef bought	\$ _____	\$16.69
Price rec'd. for feeder cattle sold	_____	23.46
Number of animal units	_____	40.2
Pounds of beef produced	_____	21151

* 3 farms Austin Area - 3 farms Winona Area

** 3 farms Austin Area

SHEEP

Farm flocks in this area are small and the feed consumption is high because of feed availability. Efforts were made to have cooperators charge the flock for all feed consumed.

Table 16 Feed Costs and Returns from a Farm Flock of Sheep 1956

Items	Your farm	Average of 4 farms
Feeds per head,* lbs.		
Concentrates	_____	163
Legume hay	_____	357
Other hay	_____	-
Silage	_____	91
Feed cost per head:		
Concentrates	\$ _____	\$ 3.87
Roughages	_____	3.33
Pasture	_____	.46
TOTAL FEED COSTS	\$ _____	7.66
Value of produce per head:		
Wool	\$ _____	\$ 3.75
Net increase in value of sheep	_____	10.70
TOTAL VALUE PRODUCED	\$ _____	14.44
RETURNS ABOVE FEED COST PER HEAD	\$ _____	\$ 6.78
RETURNS FOR \$100 OF FEED	\$ _____	\$196
Price per cwt. of lambs sold	\$ _____	\$15.40
Price per lb. wool sold (cts.)	_____	47.28
Pounds of wool per sheep sheared	_____	9.2
Number of ewes kept for lambing	_____	26
Per cent lamb crop**	_____	138
Per cent death loss**	_____	5.2
Pounds of sheep produced	_____	2836
No. of head of sheep*	_____	39.1

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

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

CHICKENS

Flocks from 15 farms are included in this report. Only those flocks averaging 100 or more hens, and having a full years production are included in the averages. Sixteen farms did not have laying flocks at any time of the year. Seven were without a laying flock for a part of the year.

Table 17 Feed Costs and Returns from Chickens, 1956*

Items	Your farm	5 farms		5 farms	
		Average of 15 farms	highest in return above feed	lowest in return above feed	
Feed per hen, lbs.:					
Grain	_____	86	70		91
Commercial feeds	_____	52	45		55
Total concentrates	_____	138	115		146
Skim milk and butter milk	_____	-	-		-
TOTAL FEED COST PER HEN	\$ _____	\$4.27	\$ 3.34		\$4.88
Value of produce per hen:					
Eggs sold and used in house	\$ _____	\$5.04	\$ 5.22		\$4.60
Net increase in value of chickens	_____	.14	.18		--
TOTAL VALUE PRODUCED	\$ _____	\$5.18	\$ 5.40		\$4.60
RETURNS ABOVE FEED COST PER HEN	\$ _____	.91	\$ 2.06		-.28
RETURNS FOR \$100 OF FEED	\$ _____	\$126	\$161		\$94
Price rec'd. per doz. eggs sold (cts.)	_____	31.6	32.8		30.9
Eggs laid per hen	_____	193	192		182
Ave. no. hens on farm during year	_____	393	633		281
Per cent death loss of hens	_____	10.0	7.0		13.0

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

TURKEYS

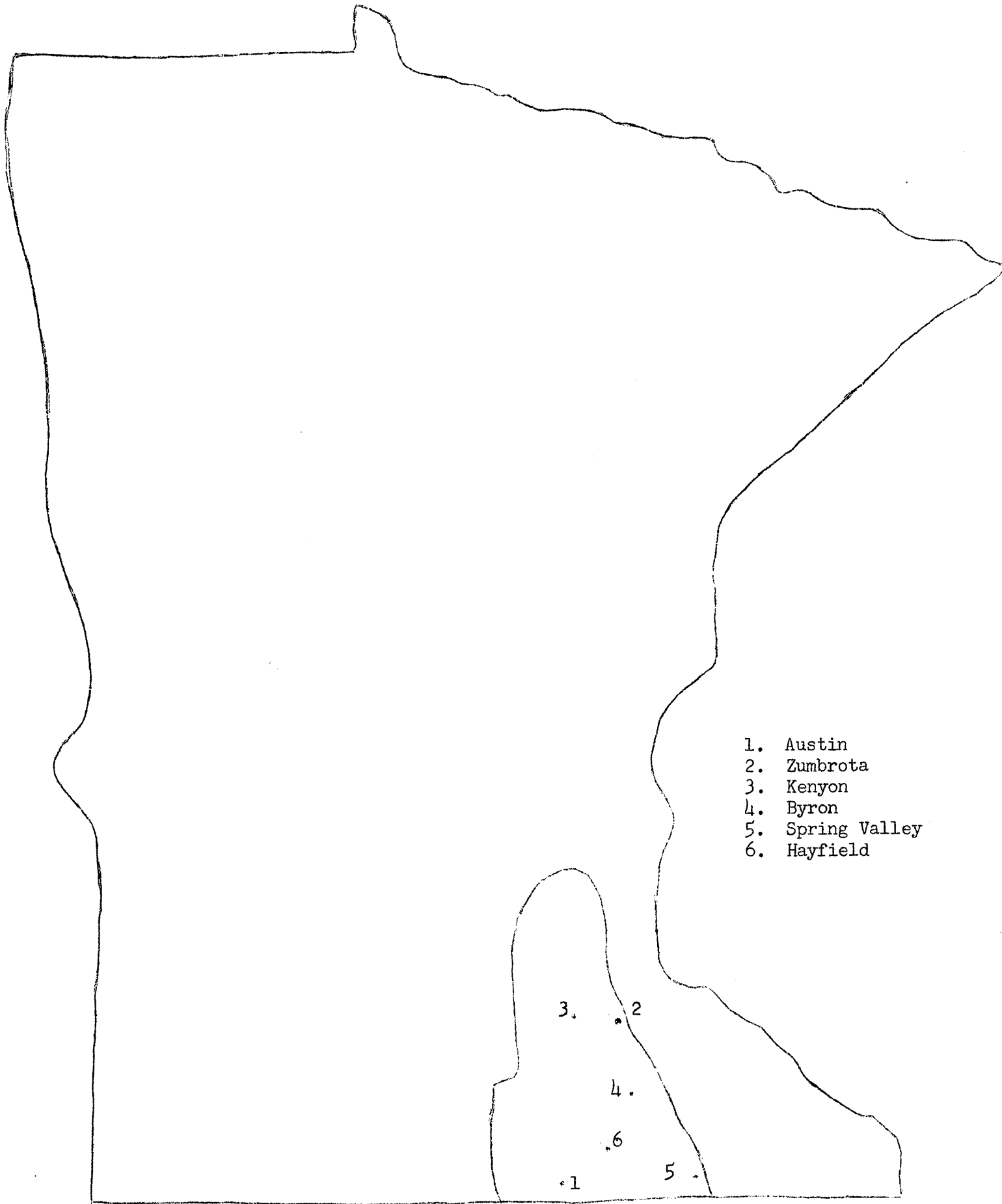
While turkeys were produced on only two farms they represented an important source of income. Feed records were given special attention to insure the greatest degree of accuracy possible.

An average of the two growers in this area, and four from the Mankato area was made for this report.

Table 18 Feed Costs and Returns for Turkeys 1956
(6 Farms in Southern Minnesota)

Items	Your farm	Average of 6* farms
Feed per cwt. turkeys produced, lbs.:		
Grain	_____	230
Commercial feeds	_____	181
Total concentrates	_____	<u>411</u>
Feed cost per cwt. turkeys produced	\$ _____	\$15.12
Net increase in value per cwt. turkeys produced	\$ _____	\$23.26
RETURNS ABOVE FEED COST PER CWT. TURKEYS PRODUCED	\$ _____	\$ 8.13
RETURNS FOR \$100 OF FEED	\$ _____	\$150
No. of poults put on feed	_____	6582
Price paid per poult purchased (cts.)	_____	71.5
Per cent death loss	_____	11.5
Price received per lb. turkeys sold (cts.)	_____	29.9
Weight per bird sold (lbs.)	_____	12.8
Pounds of turkey produced	_____	71648

* Only two growers were from this area.



1. Austin
2. Zumbrota
3. Kenyon
4. Byron
5. Spring Valley
6. Hayfield

3. 2

4.

6

1

5