

1958 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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1958 REPORT OF THE VOCATIONAL AGRICULTURE
FARM ANALYSIS SERVICE IN EAST SOUTH CENTRAL MINNESOTA

Charles M. Painter

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INTRODUCTION

This is the fourth year that an analysis has been made by the Austin Area Vocational School. 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.

We would like also to express our appreciation to J. A. Kentta, Printing Instructor of the Austin Area Vocational School, and his class for preparing our cover page, and assembling the report.

The main purpose 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 problems. 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 Elaine (Mrs. Leonard) Harber. Audrey (Mrs Harold) Wussow and Carol Greenlee, vocational office secretaries prepared the report. Without the conscientious efforts of these people this report would not have been possible. Mrs. Anderson has assisted with the report for three seasons. Her skill and experience contributed to making the job much simpler than in years past.

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, who was Farm Management Coordinator prior to leaving the state in July.

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 were 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.

The following schools submitted 1958 farm records for analysis:

<u>Name of School</u>	<u>No. of Books</u>	<u>Instructors</u>
Adams	1	Arvid Anderson
Austin	22	Charles Painter
Hayfield and Austin	2	Bert Fuller and Marvin Thomsen
Blooming Prairie	7	Truman Tilleraas
Byron	1	Joe Trammel
Cannon Falls	2	James Erredge
Kasson-Mantorville	1	Ernest Knutson
Dodge Center	1	Herbert Hanson
Wanamingo	4	Glen Montzka
Zumbrota	5	Gerald Halvorson
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Table 1 Summary of Farm Inventories 1958*

Items	Your Farm		Average of 46 farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)			231	
Size of business (work units)**			466	
Dairy and dual purpose cows			\$ 2934	\$ 3028
Other dairy & dual purpose cattle			1392	1783
Beef cattle (including feeders)			2304	3579
Hogs			2321	2879
Sheep (including feeders)			97	129
Poultry (including turkeys)			288	349
Productive livestock (total)			9336	11747
Horses			3	--
Crop, seed, and feed			6187	6027
Power machinery (farm share)			3173	3539
Crop and general machinery			3809	3984
Livestock equipment			1155	1317
Machinery & equipment (total)			8137	8840
Miscellaneous			--	--
Land			13506	13506
Buildings, fences, etc.			12198	13138
Total farm capital			49367	53258

Items	15 most profitable farms		15 least profitable farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)	270		214	
Size of business (work units)**	600		353	
Dairy and dual purpose cows	\$ 2223	\$ 2360	\$ 3158	\$ 3030
Other dairy & dual purpose cattle	748	953	1474	2232
Beef cattle (including feeders)	6002	10254	411	497
Hogs	3489	4956	1415	1432
Sheep (including feeders)	180	255	83	67
Poultry (including turkeys)	320	467	130	145
Productive livestock (total)	12962	19245	6671	7403
Horses	12	--	--	--
Crop, seed, and feed	7631	7239	4664	3863
Power machinery (farm share)	4196	4843	2691	2988
Crop & general machinery	4274	4563	3671	3570
Livestock equipment	1238	1645	852	962
Machinery & equipment (total)	9708	11051	7214	7520
Miscellaneous	--	--	--	--
Land	13038	13038	14830	14830
Buildings, fences, etc.	15139	17719	9360	9360
Total farm capital	58490	68292	42739	42976

* 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) 1958

Items	Your farm	Average of 46* farms	15 most profitable farms	15 least profitable farms
FARM RECEIPTS				
Dairy and dual -purpose cattle	_____	\$ 1481	\$ 888	\$ 1889
Dairy products	_____	4517	3869	4255
Beef cattle (including feeders)	_____	3630	9736	312
Hogs	_____	7083	11046	3801
Sheep and wool (including feeders)	_____	121	295	54
Horses	_____	5	17	—
Poultry	_____	1573	4321	101
Eggs	_____	1095	1147	493
Corn	_____	1862	2789	1701
Small grain	_____	372	616	306
Other crops	_____	1118	1541	823
Mach. & equip. sold & gas tax ref.	_____	173	274	124
Misc. farm income	_____	143	169	82
Income from work off the farm	_____	349	665	98
(1) Total farm sales	_____	23522	37373	14039
(2) Increase in farm capital	_____	3891	9802	237
(3) Family living from the farm	_____	269	258	212
(4) Total farm receipts (1)+(2)+(3)	_____	27682	47433	14488
FARM EXPENSES				
Dairy and dual -pur. cattle bought	_____	\$ 313	\$ 44	\$ 598
Beef cattle bought (incl. feeders)	_____	2618	7722	99
Hogs bought	_____	633	1448	125
Sheep bought (incl. feeders)	_____	43	120	11
Horses bought	_____	—	—	—
Poultry bought	_____	501	1251	100
Misc. livestock expense	_____	624	1068	300
Feed bought	_____	4377	7965	1953
Fertilizers	_____	955	1524	549
Other crop expenses	_____	645	835	536
Custom work hired	_____	672	940	554
Gas, oil & grease bought (f. share)	_____	931	1113	764
Rep. of mechanical power (f. share)	_____	419	506	289
Repair and upkeep of real estate	_____	468	702	295
Rep. & upkeep of crop & gen. mach.	_____	326	404	241
Rep. & upkeep of livestock equip.	_____	127	164	108
Wages of hired labor	_____	503	862	237
Electricity expense (f. share)	_____	235	240	187
Real estate & pers. prop. taxes	_____	704	724	667
Cash rent	_____	—	—	—
General farm expense	_____	290	348	202
(5) Total cash operating expense	_____	15384	27980	7815
(6) Cap. purc.-mech. pow. (f. share)	_____	914	1210	861
(7) Cap. purc.-crop & gen. mach.	_____	990	1329	630
(8) Cap. purc.-livestock equip.	_____	385	749	259
(9) Cap. purc.-bldgs. & fencing	_____	1652	3589	554
(10) Total farm purchases (5) to (9)	_____	19325	34857	10119
(11) Decrease in farm capital	_____	—	—	—
(12) Interest on farm capital	_____	2535	3075	2144
(13) Unpaid family labor	_____	348	277	284
(14) Board furnished hired labor	_____	41	55	23
(15) Total farm expenses (10) to (14)	_____	22249	38264	12570
(16) Labor earnings (4) - (15)	_____	5433	9169	1918

* See the Footnote** on page 5

Table 3 Summary of Farm Earnings (Enterprise Statement) 1958*

Items	Your farm	Average of 45 farms	15 most profitable farms	15 least profitable farms
RETURNS AND NET INCREASES				
1. Dairy and dual-purpose cows		\$ 4815	\$ 4209	\$ 4491
2. Other dairy & dual-pur. cattle		1607	1008	1909
3. Beef breeding herd		277	710	140
4. Feeder cattle		2043	5623	171
5. Hogs		7053	11118	3733
6. Sheep - farm flock		111	249	29
7. Sheep - feeders		--	--	--
8. Turkeys		1084	3246	--
9. Chickens		1184	1157	546
10. All productive livestock		18174	27320	11019
11. Value of feed fed to livestock		9548	14823	5944
12. Return over feed from livestock		8626	12497	5075
13. Crops, seed, and feed		6664	8996	4832
14. Income from labor off the farm		39	56	21
15. Agricultural conservation payments		209	512	54
16. Miscellaneous		139	154	43
17. Total returns and net increases		15677	22215	10025
EXPENSES AND NET DECREASES				
18. Horses		\$ --	\$ --	\$ --
19. Truck		311	413	199
20. Auto (farm share)		370	477	325
21. Tractor		984	1013	956
22. Elec. & gas engine exp. (f. share)		236	246	178
23. Hired power		536	714	471
24. Total power		2437	2863	2129
25. Crop and general machinery		1238	1570	1020
26. Livestock equipment		344	494	253
27. Buildings, fencing, and tiling		1180	1709	849
28. Misc. productive livestock exp.		624	1069	300
29. Labor		892	1194	545
30. Real estate taxes		558	542	537
31. Personal property tax		146	182	130
32. Insurance		146	182	86
33. General farm		144	166	115
34. Interest on farm capital		2535	3075	2143
35. Total expenses & net decreases		10244	13046	8107
36. Labor earnings		5433	9169	1918

* 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 1958

Items	Your farm	Average of 13 farms
Number of persons - family	_____	3.8
Number of adult equiv. - family	_____	2.8
other*	_____	.3
Food and meals bought	_____	\$1044
Operating and supplies	_____	302
Furnishings and equipment	_____	285
Clothing and clothing materials	_____	325
Personal care, personal spending	_____	379
Education, recreation, and development	_____	202
Gifts and special events	_____	134
Medical care and health insurance	_____	488
Church, welfare	_____	207
Personal share of auto expense	_____	265
Operator's share of upkeep on dwelling	_____	12
Household share of electric and telephone expense	_____	127
Total cash living expense	_____	\$3770
H.H. & pers. share of new auto	_____	234
New dwelling	_____	—
Taxes and other deductions	_____	43
Life insurance	_____	274
Other savings & investments	_____	64
Total household and personald cash exp.	_____	\$4385
Income:		
Operators labor earnings	_____	\$4430
Return to capital and labor	_____	\$4658

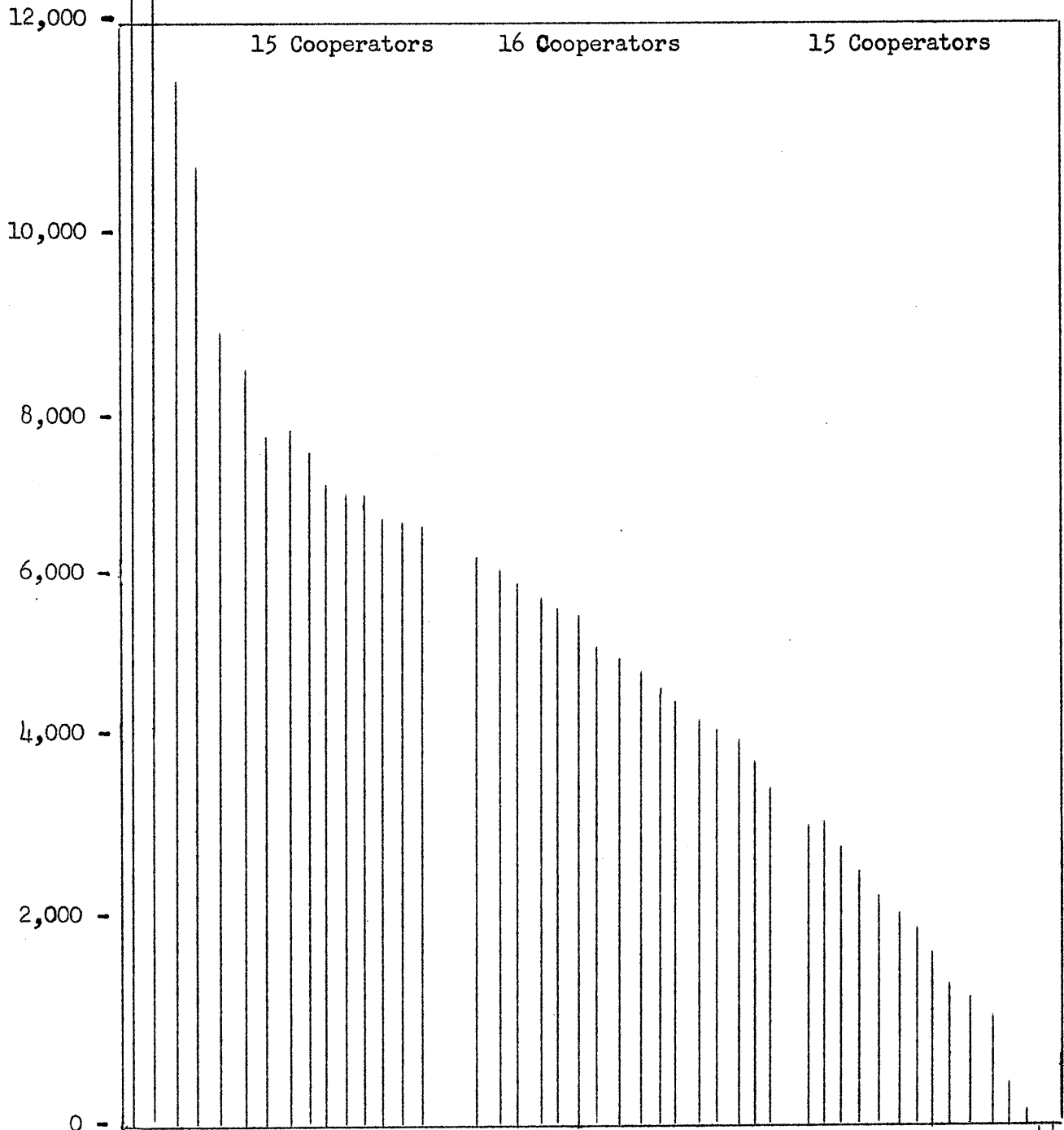
*Hired help or others boarded

Table 5 Net worth Statement for Those Farmers Who Kept A
Complete Record of All Assets and Liabilities 1958 (Operator's Share)

Items	Your farm		17 farms	
	Jan. 1	Dec. 31	Jan 1	Dec. 31
Total farm capital	_____	_____	\$31010	\$31160
Auto (personal share)	_____	_____	676	634
Dwelling	_____	_____	1558	2070
Other personal assets	_____	_____	5764	5557
TOTAL ASSETS	_____	_____	\$39008	\$39421
Real estate indebtedness	_____	_____	\$ 5138	\$ 5018
Other indebtedness	_____	_____	4992	3898
TOTAL LIABILITIES	_____	_____	\$10130	\$ 8916
Farmer's Net Worth	_____	_____	\$28878	\$30505
Gain in Net Worth	_____	_____		\$ 1628

RANGE IN EARNINGS

There was a narrower range of earnings in 1958 than 1957. The range in crop yields was unusually great with corn yields ranging from between 20 and 30 bushels at one extreme and between 90 and 100 bushels at the other extreme. Grain prices were slightly lower. Feeding operations were again profitable in 1958. 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. Work units per worker; 3. Productive livestock per 100 acres; 4. Livestock feeding efficiency.



"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 1/4 beef cows or bull; 1 feeder steer or heifer; 3 1/3 other beef cattle; 7 sheep; 14 lambs; 2 1/2 hogs; 5 pigs; 50 hens or 1,100 pounds of turkeys produced.

Table 8 Measures of Farm Organization and Management Efficiency 1958

Measures used in chart on page 11	Your farm	Average of 46 farms	15 most profitable farms	15 least profitable farms
Labor earnings	\$ _____	\$5433	\$9169	\$1918
(1) Crop yields*	_____	100	105	84
(2) Per cent tillable land in high return crops	_____	57.9	61.2	54.5
(3) Return for \$100 feed to produce livestock*	_____	100	108	98
(4) Prod. livestock units per 100 A.**	_____	36.9	50.7	26.7
(5) Size of business - work units	_____	466	600	353
(6) Work units per worker	_____	317	366	276
(7) Pow.; mach.; equip.; & bldg.exp. per work unit	\$ _____	\$ 11.80	\$ 12.50	\$ 12.48
Items related to some of the above measures;***				
(3) Index of return for \$100 feed from:				
Dairy cattle (see pages 15 & 16)	_____	100	114	103
Beef cattle-breeding herd (see page 17)	_____	100	137	100
Beef cattle-feeders (see pg 17)	_____	100	100	146
Hogs (see pages 13 & 14)	_____	100	99	101
Sheep - farm flock (see pg 18)	_____	100	—	37
Chickens (see page 19)	_____	100	98	108
Turkeys (see page 20)	_____	100	138	—
(4) Number of animal units	_____	70	113	47
(5) Work units on crop	_____	108	133	91
Work units on prod. livestock	_____	358	467	261
(7) Power exp. per work unit	\$ _____	\$ 5.60	\$ 5.50	\$6.10
Crop Mach. exp. per work unit	\$ _____	\$ 2.91	\$ 3.17	\$3.12
Livestock equip. exp. per w.u.	\$ _____	\$.69	.71	.72
Bldg. & Fence exp. per w.u.	\$ _____	\$ 2.60	\$ 3.12	\$2.54

* Given as a percentage of the average.

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

*** Cooperators from Austin and Mankato were combined on beef breeding herds, beef feeder cattle, sheep, and turkeys.

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 46 farms included in this summary are located between the dotted lines across the center of this page.

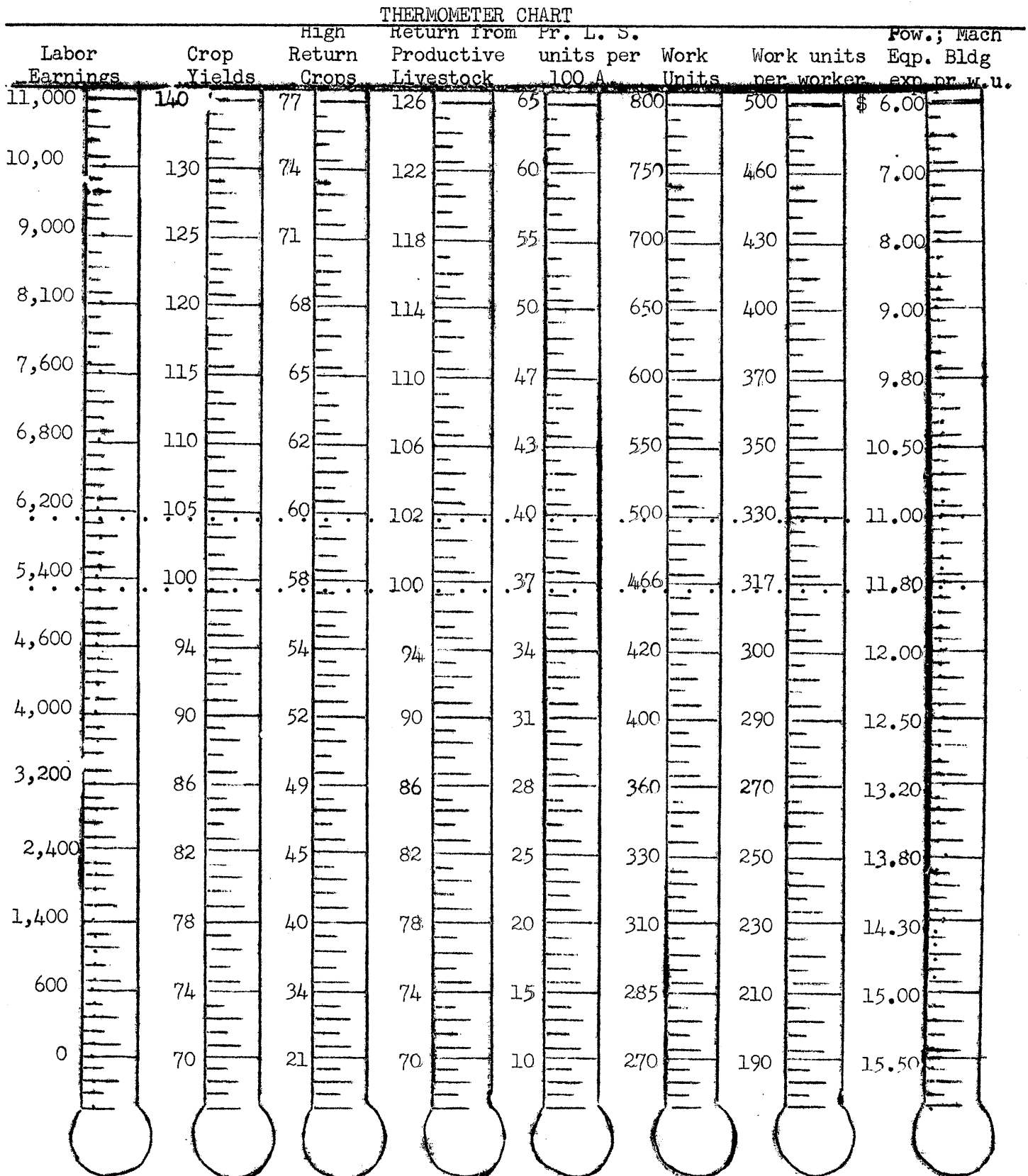


Table 9 Distribution of Acres and Yield 1958

Crop	Crop rating	Number growing	Acres your farm	Average acres of 46 farms	Your yields	Average yield
Oats (and mixtures)	D	41	_____	32.5	_____	65.7
Oats silage	C	7	_____	1.9	_____	7.9T
Canning Peas	B	2	_____	.7	_____	\$37.50
Wheat	C	5	_____	1.5	_____	34.3
Barley and Rye	D	0	_____	0	_____	--
Total small grain & peas			_____	36.6		
Canning corn	B	4	_____	1.2	_____	4.0T
Corn grain	A	45	_____	68.3	_____	58.7
Soybeans (grain)	B	25	_____	28.3	_____	20.0
Corn silage	B	30	_____	9.8	_____	10.8T
Total cultivated crops			_____	107.6		
Alfalfa hay	B	38	_____	24.2	_____	2.8T
Red Clover hay	C	6	_____	2.9	_____	2.1T
Other Legumes & Legume mixtures	C	4	_____	1.9	_____	2.2T
*Misc. Hay and seed	D	0	_____	0	_____	
Total tillable land in hay			_____	29.0		
Alfalfa pasture	B	32	_____	16.5		
Other legume pasture (C or B)		13	_____	3.9		
Other tillable pasture	D	8	_____	1.1		
Total tillable land in pasture			_____	21.5		
Soil Bank	A		_____	3.8		
Tillable land not cropped (incl. plowdown & waterways)			_____	1.0		
Total tillable land			_____	200		
Wild hay			_____	.1		
Non-tillable pasture			_____	9.5		
Timber			_____	3.4		
Roads and waste			_____	9.1		
Farmstead			_____	8.8		
Total acres in farm			_____	231		
Per cent land tillable			_____	84		
Per cent in high return crops			_____	58		

* 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.

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 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 1958

	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 4000 pounds of pork or more were included in the analysis. 1958 was another ideal year to feed hogs. Feed prices were low as compared to pork prices. Much of the year the corn-hog ratio was as wide as 1:20 or more.

Table 11 Feed Costs and Returns from Hogs 1958

Items	Your farm	Average of 33 farms	11 farms highest in returns above feed	11 farms lowest in returns above feed
Feed per cwt. hogs produced, lbs:				
Corn	_____	303	279	332
Small Grain	_____	70	60	86
Commerical Feeds	_____	<u>64</u>	<u>65</u>	<u>68</u>
Total Concentrates	_____	437	404	486
Feed cost per cwt. hog produced:				
Concentrates (incl. alf.)	_____	\$10.52	\$ 9.84	\$11.59
Milk	_____	--	--	--
Pasture	_____	<u>.10</u>	<u>.09</u>	<u>.11</u>
TOTAL FEED COSTS	_____	\$10.62	\$ 9.93	\$11.70
Net increase in val. per cwt. hogs prod.	_____	\$18.78	\$19.98	\$17.92
RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED	_____	\$ 8.16	\$10.05	\$6.22
RETURNS FOR \$100 OF FEED	_____	\$177	\$201	\$153
Price received per cwt. hogs sold	_____	\$19.94	\$20.10	\$19.61
No. of spring litters raised	_____	14	18	12
No. of fall litters raised	_____	<u>13</u>	<u>16</u>	<u>8</u>
Total no. of litters raised	_____	27	34	20
No. of pigs born per litter	_____	8.4	9.1	7.8
No. of pigs weaned per litter	_____	6.7	7.0	6.1
Pounds of hogs produced	_____	49834	53223	40457

*Thirty eight cooperators raised hogs = Three records showed less than 4000# pork. Two others showed slight inconsistencies and were also omitted from the averages.

DAIRY AND DUAL PURPOSE CATTLE

No herds were classed as dual purpose. Production was generally high. It will be noted that the high producing herds gave a higher return per hundred dollars worth of feed than the average, but this difference was not nearly as significant as the return over feed cost per cow.

Table 12 Factors of Cost and Returns from Dairy Cows 1958

Items	Your farm	Average of 30 farms	10 Farms Highest in butterfat per cow	10 farms lowest in butterfat per cow
Pounds of Butterfat per cow	_____	327	388	258
Price rec. per lb. B. F. Sold (cents)	_____	89.5	93.1	86.9
Feeds per cow, lbs:				
Corn	_____	1840	2360	1523
Small grain	_____	977	1346	877
Commerical feeds	_____	413	624	219
Legume Hay	_____	4739	4723	4631
Total concentrates	_____	3230	4330	2619
Total dry roughage	_____	4739	4723	4631
Silage	_____	8619	9054	8410
Feed cost per cow:				
Concentrates	_____	\$71.57	\$95.45	\$57.53
Roughages	_____	64.71	65.39	62.86
Pasture	_____	11.36	10.40	12.28
TOTAL FEED COSTS	_____	\$147.64	\$171.24	\$132.67
Value of produce per cow:				
B. F. sales	_____	\$283.24	\$356.64	\$212.47
Dairy products used in home	_____	5.20	3.80	4.27
Milk to livestock	_____	6.80	4.19	7.78
Net increases in value of cows	_____	7.14	6.47	13.53
TOTAL VALUE PRODUCED	_____	\$302.38	\$371.10	\$238.05
RETURNS ABOVE FEED COST PER COW	_____	\$154.74	\$199.86	\$105.38
RETURNS FOR \$100 OF FEED	_____	\$205.00	\$217.00	\$179.00
Feed cost per lb. B. F. (cents)	_____	45.7	44.2	51.5
Number of cows*	_____	22.9	29.8	18.

* 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 of less than five cows were omitted from this study.

Table 13 Feed Costs and Returns from Other Dairy and Dual Purpose Cattle 1958

Items	Your farm	Average of 30 farms	10 farms highest in butterfat per cow	10 farms lowest in butterfat per cow
Feeds per head, lbs.:				
Concentrates	_____	656	777	648
Hay and fodder	_____	2051	2162	1953
Silage	_____	2679	2399	2181
Skim Milk	_____	_____	_____	_____
Whole Milk	_____	216	114	283
Feed cost per head:				
Concentrates	_____	\$16.05	\$17.64	\$16.63
Roughages	_____	24.91	25.03	23.00
Milk	_____	6.93	4.00	8.59
Pasture	_____	4.78	4.82	4.30
TOTAL FEED COSTS PER HEAD	_____	\$52.67	\$51.49	\$52.52
Net inc. in value of other cattle	_____	\$98.40	\$97.13	\$104.49
RETURNS ABOVE FEED COST PER HEAD	_____	\$45.73	\$45.64	\$51.97
RETURNS FOR \$100 OF FEED	_____	\$187.00	\$189.00	\$199.00
Number of head of other cattle	_____	24.5	33.5	19.5

Table 14 Feed Costs and Returns from All Dairy and Dual Purpose Cattle 1958

Items	Your farm	Average of 30 farm	10 farms highest in butterfat per cow	10 farms lowest in butterfat per cow
Feed per animal unit, lbs.:				
Concentrates	_____	2509	3255	2098
Hay and fodder	_____	4471	5480	4239
Silage	_____	7469	7448	7146
TOTAL FEED COSTS PER ANIMAL UNIT	_____	\$126.29	\$141.93	\$114.53
Value of produce per animal unit:				
Dairy products	_____	\$188.66	\$230.64	\$142.82
Net increase in value of dairy cattle	_____	69.32	72.23	74.49
TOTAL VALUE PRODUCED	_____	\$257.98	\$302.87	\$217.31
RETURNS ABOVE FEED PER ANIMAL UNIT	_____	\$131.69	\$160.94	\$102.78
RETURNS PER \$100 OF FEED	_____	\$204.00	\$213.00	\$190.00
Animal units of cattle	_____	35.4	46.8	27.9

Table 15 Feed Cost and Returns from Beef Cattle 1958

Items	Your farm	Average of all farms
Beef breeding herd: No. of farms: 6 Austin Area Winona Area		
Feeds per animal unit, lbs.:		
Concentrates	_____	441
Legume	_____	5886
Other hay	_____	—
Silage	_____	2297
Feed cost per animal units:		
Concentrates	\$ _____	\$ 8.80
Roughages	\$ _____	45.78
Pasture	\$ _____	20.72
TOTAL FEED COSTS	_____	\$ 75.30
Value of produce per animal unit:		
Dairy Products	_____	\$ —
Net increase in value of animals	_____	126.11
TOTAL VALUE PRODUCED	_____	\$126.11
RETURNS ABOVE FEED COST PER ANIMAL UNITS	_____	\$ 50.81
RETURNS FOR \$100 OF FEED	_____	\$167.00
Number of cows and herd bulls	_____	26.5
Number of animal units in the herd	_____	27.8
Pounds of beef produced (ave. 3 herds Austin Area)	_____	14587
Feeding Cattle: No. of farms: 26 Austin, Mankato, and Winona Areas		
Feeds per cwt. beef produced, lbs.:		
Corn	_____	489
Small grain	_____	29
Commercial feeds	_____	65
Legume hay	_____	212
Other hay and fodder	_____	8
Total concentrates	_____	583
Total hay and fodder	_____	220
Silage	_____	317
Feed cost per cwt. beef produced:		
Concentrates	\$ _____	\$ 12.20
Roughages	_____	2.80
Pasture	_____	.18
TOTAL FEED COSTS	_____	\$ 15.18
Net increase in value of feeders	_____	26.14
RETURNS ABOVE FEED COST PER CWT. BEEF PRODUCED	_____	10.96
RETURNS FOR \$100 OF FEED	\$ _____	\$172.00
Price paid per cwt beef bought	\$ _____	\$ 25.03
Price received for feeder cattle sold	_____	24.24
Number of animal units	_____	66.5
Pounds of beef produced	_____	48550

SHEEP

Farm flocks in this area are small and the feed consumption is often higher than necessary because the feed is available. Efforts were made to have cooperators charge the flock for all feed consumed. The table below includes 9 farms from the Austin, Winona, and Mankato areas.

Table 16 Feed Costs and Returns from a Farm Flock of Sheep 1958

Items	Your Farm	Average of 9 farms in southern Minnesota
Feeds per head,* lbs.:		
Concentrates	_____	215
Legume hay	_____	499
Other hay	_____	253
Silage	_____	131
Feed cost per head:		
Concentrates	\$ _____	\$ 3.95
Roughages	_____	4.89
Pasture	_____	1.81
TOTAL FEED COSTS	\$ _____	\$ 10.66
Value of produce per head:		
Wool	_____	\$ 2.53
Net increase in value of sheep	_____	15.09
TOTAL VALUE PRODUCED	\$ _____	\$ 17.62
RETURNS ABOVE FEED COST PER HEAD	\$ _____	\$ 6.96
RETURNS FOR \$100 OR FEED	\$ _____	\$165.00
Price per cwt. of lambs sold	\$ _____	\$ 19.14
Price per lb. wool sold (cents)	_____	.38
Pounds of wool per sheep sheared	_____	9.3
Number of ewes kept for lambing	_____	63.
Per cent lamb crop**	_____	110
Per cent death loss**	_____	5.3
Pounds of sheep produced	_____	6183
Number of head of sheep*	_____	89

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

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

CHICKENS

Flocks from 16 farms are included in this report. Only those flocks averaging 125 or more hens, and having a full year's production are included in the averages. Twenty-two did not have laying hens at any time of the year. Four were without a laying flock for a part of the year. Others kept a few hens to provide eggs for the family.

Table 17 Feed Costs and Returns from Chickens 1958*

Items	Your farm	Average of 16 farms	5 farms highest in return above feed	5 farms lowest in return above feed
Feed Per hen, lbs.:				
Grain	<u> </u>	90	85	100
Commercial feeds	<u> </u>	43	44	40
Total concentrates	<u> </u>	133	129	140
 TOTAL FEED COST PER HEN	<u> </u>	\$ 3.80	\$ 3.78	\$ 4.06
Value of produce per hen:				
• Eggs sold and used in house	<u> </u>	\$ 5.49	\$ 6.70	\$ 4.36
Net increase in value of chickens	<u> </u>	.23	.77	.09
 TOTAL VALUE PRODUCED	<u> </u>	\$ 5.72	\$ 7.47	\$ 4.45
 RETURNS ABOVE FEED COST PER HEN	<u> </u>	\$ 1.92	\$ 3.69	\$.39
 RETURNS FOR \$100 OF FEED	<u> </u>	\$151.00	\$198.00	\$110.00
 Price rec'd. per doz. eggs sold (cents)	<u> </u>	31.2	31.1	31.1
Eggs laid per hen	<u> </u>	212	258	170
 Ave. No. hens on farm during year	<u> </u>	537	591	256
Per cent death loss of hens	<u> </u>	10.	6.0	20.7

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

TURKEYS

Turkeys were produced on only two farms included in the Austin Area. These were averaged with one cooperator from the Winona Area. One cooperator had an abnormal death loss. The other two growers had feed conversions of 338# and 371# total per 100# of turkey produced. Their feed costs were \$14.04 and \$12.85 per hundred pounds turkeys produced. Returns per \$100 feed were \$129 and \$153.

Table 18 Feed Costs and Returns for Turkeys, 1958
(3 Farms in Southern Minnesota)

Items	Your farm	Average of 3 farms
Feed per cwt. turkeys produced, lbs.:		
Grain	_____	328
Commercial feeds	_____	276
Total concentrates	_____	604
Feed cost per cwt. turkeys produced	_____	\$18.22
Net increase in value per cwt. turkeys produced	_____	\$16.96
RETURNS ABOVE FEED COST PER CWT. TURKEYS PRODUCED	_____	\$-1.26
RETURNS FOR \$100 OF FEED	_____	\$93.00
No. of poults put on feed	_____	144,992
Price paid per poult purchased (cents)	_____	58.0
* Per cent death loss	_____	27.0
Price received per lb. turkeys sold (cents)	_____	24.5
Weight per bird sold (lbs.)	_____	12.6
Pounds of turkey produced	_____	128,562

One cooperator lost a large number of poults from drowning. The information on the turkey enterprise is given for those who may be interested. Three cases do not provide sufficient information from which to draw conclusions.

LOCATION OF COOPERATING EAST SOUTH CENTRAL SCHOOLS

1. Cannon Falls
2. Wanamingo
3. Zumbrota
4. Byron
5. Kasson-Mantorville
6. Dodge Center
7. Hayfield
8. Blooming Prairie
9. Austin
10. Adams

