

Annual Report

VOCATIONAL AGRICULTURE FARM ANALYSIS

EAST SOUTH CENTRAL MINNESOTA

1965

Austin Area Vocational School

AUSTIN, MINNESOTA

IN COOPERATION WITH

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

April 1966

1965 VOCATIONAL AGRICULTURE FARM ANALYSIS REPORT
FOR EAST SOUTH CENTRAL MINNESOTA

Charles M. Painter

INDEX

Introduction	1
Schools Included in the Analysis	2
Farm Inventories	3
Farm Earnings (Cash Statement)	4
Farm Earnings (Enterprise Statement)	5
Household-Personal Expenses and Receipts	6
Net Worth	6
Earnings by Tenure	7
Range in Earnings	8
Explanation of "Work Units"	9
Measures of Farm Organization and Management Efficiency	10
Thermometer Chart	11
Distribution of Acres and Crop Yields	12
Total Feed Costs and Returns from Livestock Enterprises	13
Hogs	13
Hogs	14
Dairy Cattle	15
Dairy Cattle	16
Dairy Cattle	17
Beef Cattle	18
Sheep.	19
Chickens	20
Feeder Pigs - Price of Feeds	21
Other Information	22
Farm Earnings Summaries	23

INTRODUCTION

This is the eleventh year that an analysis has been made by the Austin Area Vocational-Technical 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 veteran's 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 to express our appreciation to Harlan Koch, Graphic Arts Instructor of the Austin Public Schools, and his class, for preparing our cover and assembling the report. Mr. Koch replaces Jack Kentta who retired last summer.

Some main purposes of the farm analysis services in this area are (1) to assist instructors and cooperating farmers in farm accounting techniques (2) to aid the farmer in the study of his farm business through analysis reports and (3) to provide case study material that can be used by farmers and farm groups to study management problems. The analysis also has some research value.

This report and the analysis of records included in the report were done under the direction of Charles M. Painter, Vocational Agriculture Coordinator, Austin Area Vocational-Technical School. Analysis assistants were Madge Anderson, Dexter; Elaine Harber and Eileen Heimsness, Austin; Audrey Anhorn and Donna Qualey of Faribault. Helen Bergh and Lynda Planz, school secretaries, did the typing and duplicating. Without the excellent work and team effort of these people this report would not have been possible.

Directing in a supervisory capacity for this and the other cooperating projects were G. R. Cochran, State Supervisor of Agricultural Education; S. K. Wick, Director of Vocational Education; Morton A. Carney, Director of the Austin Area Vocational-Technical School and Irwin T. Mickelson, Austin Superintendent of Schools. William Knaak, former Assistant Director of Vocational Education, assisted in the early development of the program. Technical assistance was provided by the University of Agricultural Education Department under the direction of Dr. Milo Peterson. The professional assistance of the University Division of Agricultural Economics and the Agricultural Extension Service has done much to bring farm management study up to date. Financial assistance from the Hill Family Foundation helped to initiate the program from 1954 through 1957.

Farmers pay a fee to cover clerical costs, data processing, paper and stencils.

After a somewhat shakey start with data processing last year we gave it a second trial. The service this year was encouraging except for the delay in averaging. Agricultural Records Cooperative of Madison, Wisconsin did an excellent reprogramming job for the individual farm analysis. As of March 10 reports designated for averages had been processed. The delay in averaging was a disappointment.

The following schools submitted 1965 farm records for analysis:

<u>School</u>	<u>No. of Books</u>	<u>Instructors</u>
Adams	20	Dwain Vangsness* LeRoy Swanson
Alden	1	John Nelson*
Austin	20	Leland Arneson* Donald Ritland
Blooming Prairie	41	Gene Francis* Truman Tilleraas
Dodge Center	2	Herbert Hanson*
Faribault	57	Ralph Palan* Paul Day
Farmington	3	Lyle Phelps*
Hayfield	15	Bruce Oxton* Bert Fuller Frank Moon
Kenyon	16	Dennis Kluver* John Shelstad
LeRoy	4	Donald Haugland*
Lyle	8	Pete Godfredson* Ross Peterson
New Richland	20	Russell Schmeising* Gary Leske
Owatonna	2	John Zwiebel* Glenn Edin
Spring Valley	5	Ed Morine* Dale Peters
Stewartville	4	Frank Quam*
Wanamingo	2	Brian Ingvalson*
West Concord	3	Hilbert Hoof*
Zumbrota	2	Gerald Halvorson*
	<u>223</u> Books	

* Instructor responsible for the adult agriculture program.

TABLE 1 SUMMARY OF FARM INVENTORIES 1965

Items	Average of 181 Farms*	
	Adjustments	Jan. 1 Dec. 31
Size of farm (acres)		279
Size of business (work units)		510
Dairy & dual purpose cows	\$ 3671	\$ 3692
Other dairy & dual purpose cattle	1940	2027
Beef cattle (including feeders)	3001	3177
Hogs	2930	4834
Sheep (including feeders)	53	60
Poultry (including turkeys)	131	112
Productive Livestock (total)	\$11726	\$13902
Crop, Seed and Feed	\$ 7376	\$ 9307
Power machinery (farm share)	3892	4636
Crop and general machinery	4614	5397
Livestock equipment	1512	1701
Machinery & Equipment (total)	\$10018	\$11734
Miscellaneous	-----	-----
Land	\$33122	\$33678
Buildings, fences, etc.	16620	17411
Total Farm Capital	\$78862	\$86032

Items	36 Most Profit. Farms		36 Least Profit. Farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)	354		230	
Size of business (work units)**	644		485	
Dairy & dual purpose cows	\$ 2422	\$ 2415	\$ 4997	\$ 4876
Other dairy & dual purpose cows	1576	1489	2460	2509
Beef cattle (including feeders)	7061	6594	997	1209
Hogs	7510	12367	1128	1605
Sheep (including feeders)	81	116	86	101
Poultry	101	72	120	124
Productive Livestock (total)	\$18751	\$23053	\$ 9788	\$10424
Crop, seed and feed	\$11184	\$15845	\$ 5356	\$ 5343
Power machinery (farm share)	5350	6322	3605	4161
Crop & general machinery	5837	7574	4670	5181
Livestock equipment	2232	2397	1484	1598
Machinery & equipment (total)	\$13419	\$16293	\$ 9759	\$10940
Land	\$42298	\$43270	\$24787	\$25072
Buildings, fences, etc.	22520	23723	15317	15611
Total Farm Capital	\$108172	\$122184	\$ 65007	\$ 67390

* Some books arrived too late to be included in the averages. Others were omitted for various reasons (see page 2). 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.

NOTE: See cooperator number correction on page 22.

TABLE 2 SUMMARY OF FARM EARNINGS (CASH STATEMENT) 1965

Items	Adjust- ments	Average of 181 Farms	36 most profitable Farms	36 least profitable Farms
<u>FARM RECEIPTS</u>				
Dairy & dual purpose cattle		\$ 1722	\$ 1676	\$ 2243
Dairy products		6154	4257	7945
Beef cattle (including feeders)		4781	12249	1391
Hogs		10413	27247	3735
Sheep & wool (including feeders)		76	173	87
Poultry		53	17	32
Eggs		452	276	477
Corn		1981	1860	788
Small grain		235	215	281
Diverted acre income		1552	1722	864
Other crops		2775	3563	1240
Mach. & equip. sold, gas tax refund		343	474	369
Income from work off the farm		395	331	454
Misc. farm income		440	619	304
(1) Total farm sales		<u>\$31372</u>	<u>\$54679</u>	<u>\$20210</u>
(2) Increase in farm capital		7170	14012	2383
(3) Family living from the farm		363	368	358
(4) Total farm receipts (1+2+3)		<u>\$38905</u>	<u>\$69059</u>	<u>\$22951</u>
<u>FARM EXPENSES</u>				
Dairy & dual purpose cattle bought		\$ 482	\$ 493	\$ 713
Beef cattle bought (inc. feeders)		2402	6236	504
Hogs bought		928	2073	338
Sheep bought (inc. feeders)		2	-	7
Poultry bought		88	26	119
Misc. livestock expense		629	889	684
Feed bought		5246	11165	3183
Fertilizers		1612	2729	1080
Other crop expenses		1325	1648	1035
Custom work hired		831	858	870
Gas, oil, grease bought (f.share)		1088	1392	886
Rep. mech. power (f.share)		664	807	674
Rep. & upkeep of real estate		386	638	302
Rep. & upkeep of crop & gen. mach.		518	744	376
Rep. & upkeep of livestock equip.		167	248	145
Wages of hired labor		531	906	232
Electricity expense (f.share)		320	413	307
Real estate & pers. prop. tax		1382	1749	1259
General farm expense		387	470	328
(5) Total cash operating expense		<u>\$18988</u>	<u>\$33484</u>	<u>\$13042</u>
(6) Cap. purc. mech. pow. (f.share)		1596	2217	1318
(7) Cap. purc. crop & gen. mach.		1827	3150	1410
(8) Cap. purc. livestock equip.		498	710	391
(9) Cap. purc. land, bldgs, fences		2383	3570	1499
(10) Total farm purchases (5-9)		<u>\$25292</u>	<u>\$43131</u>	<u>\$17660</u>
(11) Decrease in farm capital		----	----	----
(12) Interest on farm capital		4122	5759	3310
(13) Unpaid family labor		633	919	731
(14) Board furnished hired labor		82	143	53
(15) Total farm expenses (10-14)		<u>\$30129</u>	<u>\$49952</u>	<u>\$21754</u>
(16) Labor earnings (4 minus 15)		\$ 8776	\$19107	\$ 1197

See footnote on page 5

TABLE 3 SUMMARY OF FARM EARNINGS (ENTERPRISE STATEMENT) 1965

Items	Adjust- ments	Average of 181 Farms	36 most profitable Farms	36 least profitable Farms
<u>RETURNS & NET INCREASES</u>				
Dairy & dual purpose cows		\$ 6075	\$ 4204	\$ 7760
Other dairy & dual purpose cattle		1859	1450	2135
Beef breeding herd		184	126	32
Feeder cattle		2319	5440	1002
Hogs		11448	30123	3908
Sheep (farm flock)		82	210	96
Sheep (feeders)		--	---	--
Turkeys		--	---	--
Chickens		416	252	411
All Productive Livestock		\$22383	\$41805	\$15344
Value of feed fed to livestock		-12228	-21362	-9720
Return over feed from livestock		\$10155	\$20443	\$ 5624
Crops, seed & feed		12430	17776	7461
Income from labor off farm		186	165	224
Agriculture conservation payments		113	38	24
Miscellaneous		327	581	280
(1) Total Returns & Net Increases		\$23211	\$39003	\$13613
<u>EXPENSES & NET DECREASES</u>				
Truck		\$ 365	\$ 541	\$ 365
Auto (farm share)		507	608	398
Tractor		1342	1785	1159
Elec. & gas engine exp.(f.share)		322	413	307
Hired power		423	417	453
Total Power		\$ 2959	\$ 3764	\$ 2682
Crop & general machinery		\$ 1585	\$ 2219	\$ 1336
Livestock equipment		472	766	420
Buildings, fences & tiling		1383	2037	1124
Bare land (minus)		-5	-3	-35
Misc. prod. livestock expense		629	889	684
Labor		1521	2246	1308
Real estate taxes		1182	1527	1050
Personal property taxes		200	222	209
Insurance		192	224	167
General farm expense		195	246	161
Interest on farm capital		4122	5759	3310
(2) Total Expenses & Net Decreases		\$14435	\$19896	\$12416
(3) Labor Earnings (1) Minus (2)		\$ 8776	\$19107	\$ 1197

* 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; total expenses and net decreases.

TABLE 4 CASH HOUSEHOLD AND PERSONAL EXPENSES FOR
THOSE FARMS WHICH KEPT COMPLETE ACCOUNTS OF THESE EXPENSES 1965

Items	Average of 96 Farms
Number of persons - family	5.3
Number of adult equivalent - family	3.7
Food and meals bought	\$1202
Operating and supplies	384
Furnishings and equipment	315
Clothing and clothing materials	450
Personal care - personal spending	163
Education - recreation - development	278
Gifts and special events	185
Medical care and health insurance	489
Church and welfare	240
Personal share truck and auto expense	216
Operator's share of upkeep on dwelling	84
Personal share telephone & electric expense	126
Total cash living expense	\$4132
Personal share new auto and truck	266
New dwelling bought	339
Taxes and other deductions	328
Life insurance	361
Other savings and investments	260
Total household & personal cash expense	\$5686
Total family living from the farm	357
Total cash expense and perquisites	\$6043
Income: Operator's labor earnings	\$8236
Return to capital and labor	\$9867
Total non-farm income	\$ 693

TABLE 5 NET WORTH STATEMENT FOR THOSE FARMERS WHO KEPT
A COMPLETE RECORD OF ALL ASSETS AND LIABILITIES 1965 (OPERATOR'S SHARE)

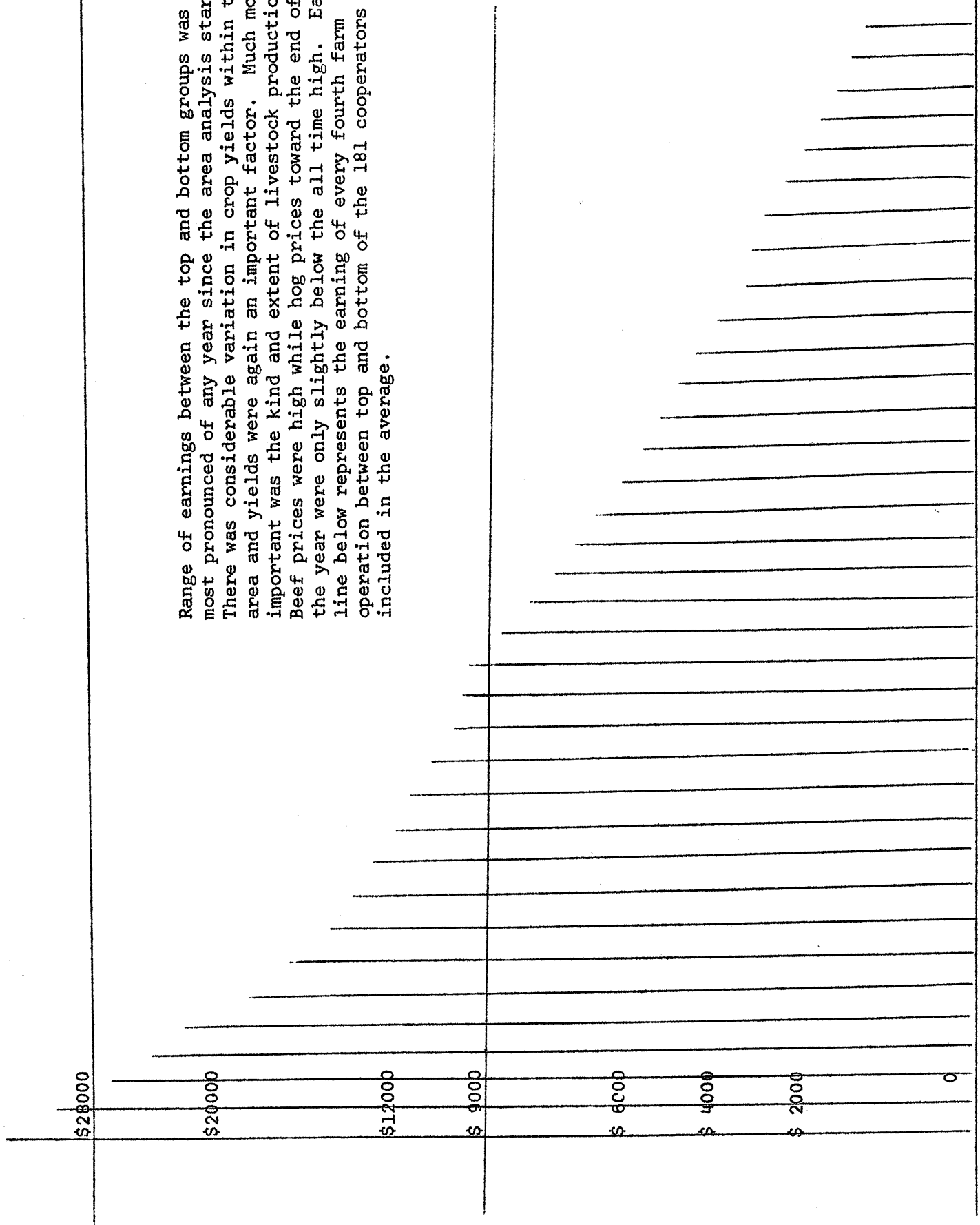
	Owners 102 Farms		Renters 35 Farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total farm capital	\$63181	\$69904	\$22835	\$27926
Auto (personal share)	572	585	290	413
Dwelling	3908	4277	---	113
Other personal assets	7558	7916	5320	5826
Total assets	\$75219	\$82682	\$28445	\$34278
Real estate mortgages	\$21053	\$20913	\$ 177	\$ 164
Chattel mortgages	5741	6574	5802	5625
Notes	1778	2472	3232	3463
Accounts payable	1087	1353	1679	2237
Total liabilities	\$29659	\$31312	\$10890	\$11489
Farmer's net worth	\$45560	\$51370	\$17555	\$22789
Gain in net worth		\$ 5810		\$ 5234

TABLE 6 SUMMARY OF FARM EARNINGS BY TENURE 1965 (OPERATOR'S SHARE)

Items	Adjust- ments	138 Owners & Part Owners	43 Renters
<u>FARM RECEIPTS</u>			
Dairy & dual purpose cattle		\$ 1467	\$ 1516
Dairy products		5457	5408
Beef cattle (including feeders)		4321	4058
Hogs		10536	6697
Sheep and wool (including feeders)		77	38
Poultry (including turkeys)		65	6
Eggs		546	72
Corn		1720	622
Small grain		194	53
Diverted acre income		1443	818
Other crops		2686	1093
Machinery and equipment sold		353	259
Income from work off farm		389	380
Miscellaneous		494	209
(1) Total farm sales		\$29748	\$21229
(2) Increase in farm capital		7538	5917
(3) Family living from farm		360	294
(4) Total farm receipts (1) + (2) + (3)		\$37646	\$27440
<u>FARM EXPENSES</u>			
Dairy and dual purpose cattle bought		\$ 395	\$ 587
Beef cattle bought (including feeders)		2317	1924
Hogs bought		1033	342
Sheep bought (including feeders)		--	5
Poultry		115	2
Miscellaneous livestock expense		561	575
Feed		4918	4498
Fertilizers		1614	826
Other crop expense		1314	743
Custom work hired		780	659
Gas, oil and grease		1085	836
Repair tractor, truck & auto (farm share)		645	616
Repair & upkeep of real estate		366	54
Repair & upkeep of crop & general machinery		532	407
Repair & upkeep of livestock equipment		166	131
Wages of hired labor		560	302
Electricity expense (farm share)		316	246
R.E. & personal property taxes		1047	163
Cash rent		480	1636
General farm expenses		403	236
Interest paid		1622	468
Total cash operating expenses		\$20269	\$15256
Mechanical power bought (farm share)		1646	1114
Crop & general machinery bought		1830	1682
Livestock & equipment bought		500	428
New real estate improvements		2640	1076
(5) Total farm purchases		\$26885	\$19556
(6) Decrease in farm capital		-----	-----
(7) Interest on farm capital		1826	765
(8) Unpaid family labor		631	637
(9) Board furnished hired labor		89	59
(10) Total farm expenses (5) + (6) + (7) + (8) + (9)		\$29431	\$21017
(11) Labor earnings (4) minus (10)		8215	6423
(12) Ret. to Cap. & Family Labor (7) + (8) + (11)		\$10672	\$ 7825

RANGE IN EARNINGS

Range of earnings between the top and bottom groups was the most pronounced of any year since the area analysis started. There was considerable variation in crop yields within the area and yields were again an important factor. Much more important was the kind and extent of livestock production. Beef prices were high while hog prices toward the end of the year were only slightly below the all time high. Each line below represents the earning of every fourth farm operation between top and bottom of the 181 cooperators included in the average.



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 per farm or per worker may be interpreted differently for different farm situations. They may measure the degree of efficiency of labor due to mechanization or careful planning. They may also measure quality or quantity of work. Occasionally, high work units per worker indicate an excessive work load. 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 & dual purpose cows	10.0 per cow	Small grain	.5 per acre
Other dairy & dual pur cattle	3.5 per an.unit*	Sugar beets	3.0 per acre
Beef breeding herd	3.5 per an.unit*	Sweet corn	.7 per acre
Feeder cattle	.25 per 100#	Corn, husked	.7 per acre
Sheep - farm flock	1.5 per an.unit*	Corn, hogged	.4 per acre
Sheep - feeders	.3 per 100#	Corn, shredded	1.5 per acre
Hogs	.2 per 100#	Corn, silage	1.0 per acre
Turkeys	.2 per 100#	Corn, fodder	1.0 per acre
Hens	20.0 per 100 hens	Alfalfa hay	.6 per acre
Canning peas	.5 per acre	Soybean hay	.5 per acre
Soybeans for grain	.5 per acre	Other hay crops	.4 per acre
Turkey hens	40.0 per 100 hens		

* Animal unit represents one dairy cow or bull, two other dairy cattle, one and one-fourth beef cows or bulls, one feeder steer or heifer, three and one-third other beef cattle, seven sheep, fourteen lambs, two and one-half hogs, five pigs, fifty laying hens, twenty-five turkey hens, eleven hundred pounds of turkey produced.

TABLE 8 MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY 1965

Measures used in Chart on Page 11	Average of 181 farms	36 most profitable farms	36 least profitable farms
Labor earnings	\$8776.00	\$19107.00	\$1197.00
(1) Crop yields *	100	106	84
(2) Per cent tillable land in high return crops	67.1	72.4	61.1
Gross return per acre	\$ 67.09	\$ 72.37	\$ 55.13
(3) Return for \$100 feed to produce livestock *	100	103	91
(4) Productive livestock units per 100 acres **	29.8	39	29
(5) Size of business - work units	510	644	485
(6) Work units per worker	335	360	329
(7) Power, machinery, equipment & building expense per work unit	\$ 12.55	\$ 13.65	\$ 11.47

Items Related to Some of the Above Measures

(3) Index of return for \$100 feed from:			
Dairy cattle (see pp. 15 & 16)	100	106	89
Beef cattle - breeding herd (see p. 17)	100	81	--
Beef cattle - feeders (see p. 17)	100	96	86
Hogs (see pp. 13 & 14)	100	101	89
Sheep - farm flock (see p. 18)	100	111	96
Chickens (see p. 19)	100	98	103
(4) Number of animal units	76.9	130.1	60.5
(5) Work units on crop	138	184	105
Work units on productive livestock	359	448	365
(7) Power expense per work unit	\$5.80	\$5.85	\$5.53
Crop machinery expense per work unit	\$3.11	\$3.45	\$2.75
Livestock equipment exp. per work unit	\$.93	\$1.19	\$.87
Building & fence exp. per work unit	\$2.71	\$3.16	\$2.32

* Given as a percentage of the average.

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

NOTE: Agricultural Records Cooperative has a classification of "Other Productive Work Units" which accounts for the slight discrepancy in total work units.

THERMOMETER CHART

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

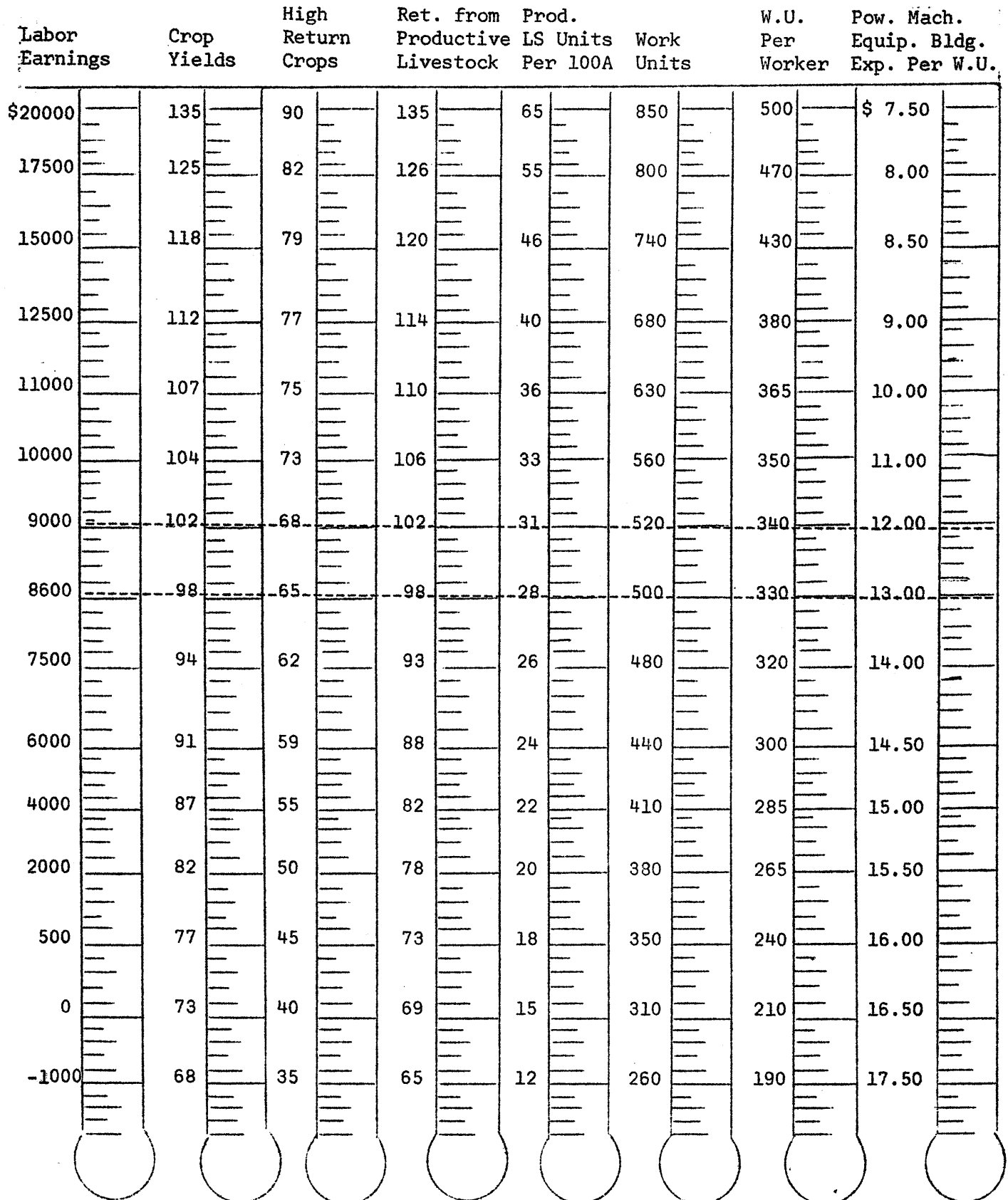


TABLE 9 DISTRIBUTION OF ACRES AND YIELD 1965

Crop	Crop rating	Number growing	Average acres of 181 Farms	Adjust-ments	Aver-age yield
Canning peas	B	11	1.4		\$66.34
Wheat	C	12	.8		18.5 bu.
Barley	D	2	.3		65.2 bu.
Oat silage	C	28	1.7		6.5 ton
Oats for grain	D	157	22.8		71.5 bu.
			<u>27.0</u>		
Sugar beets	A	2	1.3		13.9
Corn grain	A	181	86.7		73.2 bu.
Canning corn	B	16	3.3		\$51.62
Soybeans	B	152	49.2		22.1 bu.
Corn silage	B	132	12.0		12.6 ton
Other crops		1	.1		
Total cultivated crops			<u>152.6</u>		
Alfalfa	B	146	22.5		2.7 ton
Other legume & legume mixture	C	22	2.7		2.5
Miscellaneous hay & seed *	D	38	2.3		2.5
Total tillable land in hay			<u>27.5</u>		
Alfalfa pasture	B	78	7.1		
Other legume pasture	C or B	14	.9		
Other tillable pasture	D	43	2.4		
			<u>10.4</u>		
Government program	A	120	25.5		\$60.76
Tillable land not cropped (including plowdown & waterways)	D	11	.5		
Total tillable land			243.5		
Wild hay		11	.3		
Non-tillable pasture		108	14.0		
Timber		28	2.2		
Roads and waste			10.5		
Farmstead			8.7		
Total acres in farm			279.2		
Per cent land tillable			87.2		
Per cent in high return crops			67.1		

* Some crops were grouped because acreages for each were less than one acre.

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 1965

	Dairy or Dual Purpose Cattle			Beef
	Cows	Other	All	Breeding
				Herd
Total returns				
Total feed cost				
Total return over feed				
	Feeder		Farm Flock	
	Cattle	Hogs	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 65 to 75 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.

TABLE 11 FEED COSTS AND RETURNS FROM HOGS 1965

Items	Adjust- ments	Average of 103 Farms	30 Farms high in return a- bove feed	20 Farms low in return a- bove feed
Feed per cwt. hogs produced (lbs.):				
Corn		300	278	293
Small grain		40	40	47
Commercial feeds		68	62	72
Total Concentrates		408	380	412
Forage and miscellaneous		5	7	6
Feed cost per cwt. hogs produced:				
Concentrates (plus forage & misc.)		\$11.38	\$10.34	\$13.68
Pasture		.01	.02	.02
Total feed costs		\$11.39	\$10.36	\$13.70
Net increase in value per cwt. of hogs produced		\$24.19	\$25.29	\$23.09
Return above feed cost per cwt. of hogs produced		\$12.80	\$14.93	\$ 9.39
Return for \$100 feed		\$212.00	\$244.00	\$169.00
Price received per cwt. hogs sold		\$20.91	\$21.78	\$20.15
Number of litters farrowed		43	47	28
Number of pigs born per litter		9.4	9.7	8.8
Number of pigs weaned per litter		7.5	7.8	6.7
Lbs. of hogs produced		70,750	69,793	45,928

Operators producing less than 10,000 pounds of pork are omitted from hog averages. Questionable records were omitted, including those who produced hogs for only a portion of the year. Feeder pig operations are shown in Table 18. We are not able to explain why A.R.C. used different numbers of cases for high return and low return operations.

DAIRY AND DUAL PURPOSE CATTLE

No herds were classed as dual purpose. Farms raising only dairy heifers were omitted as were herds with averages of less than five cows. Also omitted were those who had herds for only a portion of the year.

TABLE 12A FACTORS OF COST AND RETURNS FROM DAIRY COWS 1965

Items	Adjust- ments	Average of 117 Farms	29 Farms highest ret. over feed cost	29 Farms lowest ret. over feed cost
Pounds of butterfat per cow		384	462	294
Pounds of milk per cow		10693	12757	8176
Per cent of butterfat in milk		3.6	3.6	3.6
Price rec'd. per lb. BF sold (¢)		95.1	95.5	94.3
Price rec'd. per cwt. milk sold		\$3.42	\$3.44	\$3.39
Feed per cow (lbs.):				
Corn		2958	3418	2415
Small grain		745	738	878
Commercial feeds		553	710	360
Legume hay		4649	5025	4215
Other hay		233	54	259
Total Concentrates		4256	4866	3653
Total Dry Roughage		4882	5079	4474
Silage		9450	8963	9251
Feed cost per cow:				
Concentrates		\$102.78	\$118.35	\$ 85.38
Roughages		80.86	83.11	75.74
Pasture		9.23	10.82	9.50
Total Feed Costs		\$192.87	\$212.28	\$170.62
Value of produce per cow:				
Butterfat sales		\$354.34	\$430.88	\$264.66
Dairy products used in home		4.25	4.54	4.88
Milk to livestock		6.13	5.87	6.52
Net increases in value of cows		-15.33	-12.86	-15.01
Total value produced		\$349.39	\$428.43	\$261.05
Return above feed per cow		\$156.52	\$216.15	\$ 90.43
Return for \$100 of feed		\$181.00	\$202.00	\$153.00
Feed cost per lb. BF (¢)		50.3	45.9	58.1
Number of cows		26.8	29.3	24.8

NOTE: No breakdown was made on the basis of high and low butterfat herds - thus, we are unable to provide a Table 12 or a page 15.

TABLE 13 FEED COSTS AND RETURNS FROM OTHER DAIRY & DUAL PURPOSE CATTLE 1965

Items	Adjust- ments	Average of 118 Farms	29 Farms highest ret. over feed cost	29 Farms lowest ret. over feed cost
Feeds per head (lbs.):				
Concentrates		848	1014	822
Hay and fodder		1496	1543	1392
Silage		3250	3563	2925
Whole milk		148	150	170
Feed cost per head:				
Concentrates		\$22.26	\$27.73	\$21.07
Roughages		26.77	28.61	23.22
Milk		4.95	4.98	5.65
Pasture		3.96	4.27	3.58
Total feed costs per head		\$57.94	\$65.59	\$53.52
Net increase in value of other cattle		\$86.19	\$101.89	\$73.39
Return above feed cost per head		\$28.25	\$36.30	\$19.87
Returns for \$100 feed		\$149.00	\$155.00	\$137.00
No. of head of other cattle		32.6	34.6	28.5

TABLE 14 FEED COSTS & RETURNS FROM ALL DAIRY & DUAL PURPOSE CATTLE 1965

Items	Adjust- ments	Average of 117 Farms	29 Farms highest ret. over feed cost	29 Farms lowest ret. over feed cost
Feed per animal unit (lbs.):				
Concentrates		5297	6063	4596
Hay and fodder		6718	6899	6070
Silage		12799	13165	12605
Total feed costs per animal unit		\$264.02	\$289.64	\$231.99
Value of produce per animal unit:				
Dairy products		\$364.72	\$441.28	\$276.06
Net increase in value of dairy cattle		90.51	107.31	69.13
Total value produced		\$455.23	\$548.59	\$345.19
Returns above feed per cow		\$191.21	\$258.95	\$113.20
Returns per \$100 feed		\$172.00	\$189.00	\$149.00
Animal units of cattle		42.4	46.6	38.8

TABLE 15 FEED COST AND RETURNS FROM BEEF CATTLE 1965

Items	Adjustments	Average of 11 Farms
<u>Beef Breeding Herd</u>		
Feeds per animal unit (lbs.):		
Concentrates		291
Legume hay		1444
Silage		8677
Other hay		1552
Feed cost per animal unit:		
Concentrates		\$ 9.19
Roughages		50.47
Pasture		12.45
Total feed costs		\$72.11
Total value produced		\$95.16
Returns above feed cost per animal unit		\$23.05
Returns for \$100 feed		\$132.00
Number of cows and herd bulls		28.9
Number of animal units in the herd		27.3
Lbs. of beef produced		11278
<u>Feeding Cattle - 46 Farms</u>		
Feeds per cwt. beef produced (lbs.):		
Corn		522
Small grain		19
Commercial feeds		49
Legume hay		202
Other hay and fodder		42
Total concentrates		590
Total hay and fodder		244
Silage		868
Feed cost per cwt. beef produced:		
Concentrates		\$13.33
Roughages		5.48
Pasture		.18
Total feed costs		\$18.99
Net increase in value of feeders		\$28.26
Return above feed cost per cwt. beef produced		\$ 9.27
Return for \$100 feed		\$149.00
Price received for feeder cattle sold		\$19.35
Number of animal units		55.6
Lbs. of beef produced		31165

Several cooperators had beef breeding animals and also feeders, but sometimes failed to make a distinction. These were not included in the averages. In some cases club calves and project animals represented the only beef produced.

SHEEP

Farm flocks in this area are small and the feed consumption is often impossible to determine. Flocks were carefully screened for reliability. Only three of the twenty reporting sheep were used. Costs and returns are determined on a per ewe basis.

TABLE 16 FEED COSTS AND RETURNS FROM A FARM FLOCK OF SHEEP 1965

Items	Adjustments	Average of 9 Farms
Feeds per ewe (lbs.):		
Concentrates		312
Legume hay		573
Other hay		---
Silage		243
Feed cost per ewe:		
Concentrates		\$ 8.00
Roughages		6.45
Pasture		3.11
Total feed costs		\$17.56
Value of produce per head:		
Wool *		\$ 5.79
Net increase in value of sheep		24.40
Total value produced		\$30.19
Returns above feed cost per head		\$12.63
Returns for \$100 feed		\$172.00
Price per cwt. of lambs sold		\$21.14
Price per lb. wool sold (¢)		.61
Lbs. of wool per sheep sheared (awaiting correction)		-----
Number of ewes kept for lambing		44.1
Per cent lamb crop		140.0
Per cent death loss		26.8
Average number of ewes		47.0

* Wool return including incentive payment.

CHICKENS

Flocks from 24 farms are included in this report. Only those flocks averaging 200 or more hens and having a full year's production are included in the averages.

TABLE 17 FEED COSTS AND RETURNS FROM CHICKENS 1965

Items	Adjust- ments	Average of 24 Farms	12 Farms highest in return above feed	12 Farms lowest in return above feed
Feed per hen (lbs.):				
Grain		77	70	88
Commercial feeds		38	41	34
Total concentrates		115	111	122
Total feed cost per hen		\$3.35	\$3.09	\$3.75
Value of produce per hen:				
Eggs sold and used in the home		\$4.28	\$4.27	\$4.30
Net increase in value of chickens		-.50	-.28	-.85
Total value produced		\$3.78	\$3.99	\$3.45
Returns above feed cost per hen		\$.43	\$.90	\$-.30
Returns for \$100 feed		\$113.00	\$129.00	\$92.00
Price rec'd. per doz. eggs sold (¢)		24.6	24.2	25.2
Eggs laid per hen		209	212	205
Average number hens on farm during year		725	890	559
Per cent death loss of hens **		12.6	12.5	12.8

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

** Basis used by Agricultural Records Cooperative gives a considerably higher percentage of death loss than would be true if previous basis was used.

TABLE 18 FEED COSTS AND RETURNS FROM FEEDER PIGS 1965

	Your Farm	Average of 17 Farms
Concentrates per cwt. hogs produced		404#
Miscellaneous forage		3#
Total feed cost		\$10.50
Net increase in value per cwt. produced		\$19.64
Return over feed cost per cwt. produced		\$ 9.14
Return per \$100 feed		\$183.00
Average price received		\$ 20.81
Pounds pork produced		84319#
Average reported weight of pigs bought		39.8#
Average price paid per pig		\$14.62
Average weight of hogs sold		225#
Per cent of death loss		3.7

TABLE 19 AVERAGE PRICES USED FOR FEED 1965

		(Pasture per head per month)
Ear corn	\$ 1.10	Dairy & beef cows-bulls \$3.00
Oats per bushel	.65	Young cattle 1.50
Alfalfa hay per ton	22.00	Hogs .16
Red or Alsike clover hay per ton	18.00	Pigs .08
Non-legume per ton	14.00	Ewes .40
Corn silage per ton	\$6.00 - \$7.00	Lambs .20

TABLE 20 TRACTOR & CROP MACHINERY EXPENSE PER CROP ACRE 1965 (See Table 8 also)

	Your Farm	181 Farms	High 36	Low 36
Acres per farm in crops and government program		234	311	176
Tractor expense per acre of crop		\$7.98	\$7.72	\$9.02
Crop machinery expense per acre of crop		\$7.66	\$7.83	\$8.30

For additional information divide items "Expenses and Net Decreases" (Table 3) by crop acres.

LABOR EARNINGS CORRELATED WITH EXCELLED FACTORS

Studies of earnings of farmers in this report were measured by eight management factors causing variations in earnings among farmers within a given year. These eight factors are crop yields; choice of crops; gross returns per acre; returns from livestock; amount of livestock; size of business; accomplishments per worker and control over expenses. The combined or cumulative influence of these eight management factors on earnings is shown in Table 21. Comparisons of how individuals were related to income levels is shown in Table 8.

TABLE 21 - 181 FARMS

Number of factors in which Farmers excelled	Number of Farms	Average Labor Earnings		
		\$4000	\$8000	\$12000
0 or 1	24	XX		\$ 5006
2 or 3	61	XXXX		6068
4 or 5	64	XXXXXXXXXXXXXXXXXXXXXXX		11006
6	19	XXXXXXXXXXXXXXXXXXXXXXX		11344
7 or 8	13	XXXXXXXXXXXXXXXXXXXXXXX		13719

EARNINGS OF 40 OPERATORS NOT INCLUDED IN THE AVERAGES

These farms were omitted mainly because of three factors (1) twenty-one books were submitted too late (2) nine records were not considered to be sufficiently reliable and (3) ten were not typical farming operations - one business was incorporated, some were part-time operations, while others had unusual situations or combinations.

Labor earnings from all farms averaged \$9525. The top ten farms had labor earnings averaging \$24333. The ten lowest income farms averaged \$1341 labor earnings. Work units on these farms ranged from a low of 41 to a high of 2697.

CORRECTIONS

Due to the bad storm on March 23, two Austin cooperators were unable to complete their records. With no electricity for three days some farmers fell far behind with their work. We had only 221 books instead of 223.

As soon as time will permit, a check will be made on weight of wool produced per sheep and yields of hay.

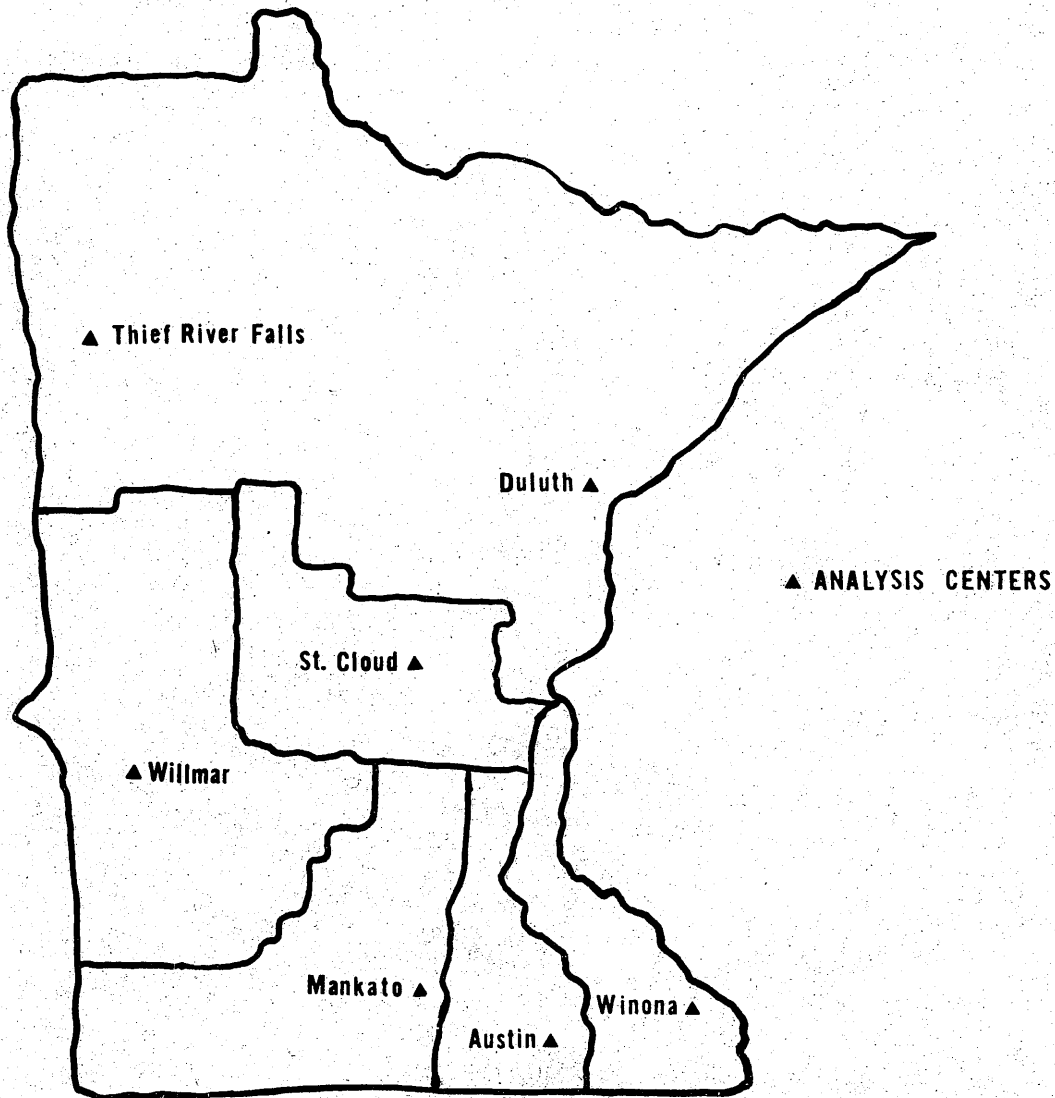
SUMMARY OF FARM EARNINGS BY YEARS

Items	1960	1961	1962	1963	1964	1965
FARM RECEIPTS						
Dairy cattle	\$ 1160	\$ 1602	\$ 1402	\$ 1348	\$ 1570	\$ 1722
Dairy products	4726	4776	5050	5073	6237	6154
Beef cattle (inc. feeders)	6958	5585	4645	3813	3781	4781
Hogs	6426	8751	8346	7860	8196	10413
Sheep and wool	181	147	155	234	82	76
Diverted acre income (shown separately 1965)						1552
Poultry	2280	78	49	25	37	53
Eggs	1628	989	676	546	712	452
Corn	1468	883	1601	2137	2220	1981
Small grain	401	505	507	726	431	235
Other crops	961	1179	1491	2472	2894	2775
Mach. equip. sold & gas tax ref.	172	208	266	281	302	343
Income from work off farm	406	174	228	327	299	395
Miscellaneous *	239	875	983	1478	1530	440
(1) Total farm sales	\$27006	\$25752	\$25399	\$26320	\$28291	\$31372
(2) Increase in farm capital	1795	3180	669	2554	-	7170
(3) Family living from the farm	326	341	368	330	317	363
(4) Total farm receipts (1+2+3)	\$29127	\$29273	\$26436	\$29204	\$28608	\$38905
FARM EXPENSE						
Dairy cattle bought	\$ 373	\$ 333	\$ 250	\$ 221	\$ 273	\$ 482
Beef cattle bought (inc. feeders)	3493	3949	2386	2829	1635	2402
Hogs bought	530	537	669	590	724	928
Sheep bought (inc. feeders)	43	17	5	36	6	2
Poultry bought	720	117	92	57	138	88
Miscellaneous livestock	777	568	570	582	601	629
Feed bought	5546	4604	4238	4341	4611	5246
Fertilizers	1085	1000	1065	1327	1522	1612
Other crop expenses	695	699	716	973	1153	1325
Custom work hired	607	592	629	722	840	831
Gas-oil-grease bought (f.share)	991	951	1010	1083	1028	1088
Repair of mech. power (f.share)	533	522	534	595	580	664
Repair & upkeep of real estate	324	332	375	336	323	386
Repair & upkeep of crop & gen. mach.	397	347	357	440	410	518
Repair & upkeep of livestock equip.	139	168	158	172	193	167
Wages of hired labor	570	459	348	538	470	531
Electricity expense (f.share)	309	292	300	299	319	320
Real estate & personal property tax	906	934	1066	1206	1277	1382
General farm expense	330	293	310	333	389	387
(5) Total cash operating expense	\$18368	\$16714	\$15078	\$16680	\$16492	\$18988
(6) Cap. purch. mech. power bought	697	560	992	696	1126	1596
(7) Crop & general machinery bought	1174	995	1090	923	1037	1827
(8) Livestock equipment bought	628	216	320	423	380	498
(9) New R.E. improvements&land(1965)	1360	1010	1036	1095	1072	2383
(10) Total farm purchases (5)-(9)	\$22227	\$19495	\$18516	\$19814	\$20107	\$25292
(11) Decrease in farm capital					143	
(12) Interest on farm capital	3106	3077	3138	3528	3764	4122
(13) Unpaid family labor	529	550	638	634	658	633
(14) Board furnished hired labor	51	68	67	66	78	82
(15) Total farm expense (10)-(14)	\$25913	\$23190	\$22359	\$24042	\$24750	\$30129
(16) Labor earnings (4) minus (15)	\$ 3214	\$ 6083	\$ 4077	\$ 5162	\$ 3858	\$ 8776

* Government program payments included prior to 1965.

Area Coordinators

Thief River Falls	-	Peter Probasco
Duluth	-	Robert Anderson
St. Cloud	-	Ed O'Connell
Mankato	-	Del Hodgkins
Austin	-	Charles Painter
Winona	-	Gordon Ferguson
Staples	-	William Guelker
Willmar	-	Ed Hartog



COOPERATING VOC. AG. DEPARTMENTS in Austin Area

Faribault
 Wanamingo
 Zumbrota
 Kenyon
 Blooming Prairie
 Austin
 Hayfield
 Spring Valley
 Adams

Lyle
 Owatonna
 LeRoy
 West Concord
 New Richland
 Alden
 Stewartville
 Dodge Center
 Farmington