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

1962 REPORT OF THE VOCATIONAL AGRICULTURE FARM ANALYSIS SERVICE IN EAST SOUTH CENTRAL MINNESOTA

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INTRODUCTION

This is the eighth 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 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 to express our appreciation to J. A. Kentta, Printing Instructor of the Austin Area Vocational-Technical School, and his class for preparing our cover page and assembling the report. The special design on the cover page is characteristic of Jack's creativeness.

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 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-Technical School. Analysis assistants were:
Madge Anderson, Dexter; Elaine Harber and Eileen Heimsness, both of Austin;
Audrey Anhorn of Faribault and Patricia Francis of Blooming Prairie. Helen
Bergh and Darlene Corson, school secretaries, deserve the credit for the neat
and accurate jobs of 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 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 have 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 the actual analysis costs. This fee covers the clerical costs of the analysis and cost of paper and stencils.

The following schools submitted 1962 farm records for analysis:

Name of School	No. of Books	Instructors
Adams	5	Dwain Vangsness*
Austin	12	Leland Arneson* Charles Painter
Hayfield	9	Bruce Oxton* Bert Fuller Frank Moon
Dodge Center	1	Herbert Hanson*
Blooming Prairie	28	Eugene Francis* Truman Tilleraas
Faribault	39	Ralph Palan* Paul Day
Spring Valley	3	Ed Morine* Rollis Larson
Wanamingo	2	Robert Johnson*
Zumbrota	3	Gerald Halvorson*
TOTAL	102	

^{*} Instructor responsible for the Adult Agriculture program.

Table 1 Summary of Farm Inventories 1962*

Items	Your farm Jan. 1 - Dec. 31	Average of 90 farms Jan. 1 - Dec. 31		
Size of farm (acres) Size of business (work units)**		240 458		
Dairy and dual purpose cows Other dairy and dual purpose cattle Beef cattle (including feeders) Hogs Sheep (including feeders) Poultry (including turkeys) Productive livestock (total) Crop, seed and feed Power machinery (farm share) Crop and general machinery Livestock equipment Machinery & equipment (total) Miscellaneous Land		\$ 3312 1863 3285 3011 116 169 11756 7514 3248 4460 1162 8870	\$ 3387 1799 3064 3423 117 189 11979 7157 3526 4667 1243 9436	
Buildings, fences, etc. Total farm capital		13386 61699	13624 62369	

Items 22 most		farms 22 Dec. 31	least profital	ole <u>farms</u> Dec. 31
Size of farm (acres) Size of business (work units)**	246 540		279 416	
Dairy and dual purpose cows Other dairy & dual purpose cows Beef cattle (including feeders) Hogs Sheep (including feeders) Poultry (including turkeys) Productive livestock (total) Crop, seed, feed Power machinery (farm share) Crop & general machinery Livestock equipment Machinery & equipment (total) Miscellaneous	\$ 3919 2304 1326 4505 161 140 12355 9875 3905 5517 1477 10899	\$ 4112 2370 1540 5282 166 141 13611 10061 4075 5443 1669 11187	\$ 2564 1351 4523 2754 148 217 11557 7526 3487 5096 849 9432	\$ 2680 1199 4883 3045 168 246 12221 6077 3991 5238 815 10044
Land Buildings, fences, etc.	14651	15139	13178	13088
Total farm capital	71508	73726	62734	62471

^{*} 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 E	arnings	(Cash Stat		
		Average	22 most	22 least
Items	Your	of 90	profitable	profitable
	farm	farms	farms	farms
FARM RECEIPTS				A
Dairy and dual purpose cattle		\$ 1402	\$ 1515	\$ 1016
Dairy products		5050	6238	3819
Beef cattle (including feeders)		4645	1847	4425
Hogs		8346	13160	7572
Sheep & wool (including feeders)	-	155	361	95
Horses			***	
Poultry		49	53	60
Eggs		676	644	747
Corn		1601	2065	1147
Small grain		507	626	382
Other crops		1491	1943	1507
Mach & equip sold & gas tax ref.		266	262	240
Income from work off the farm		228	214	276
Misc. farm income		983	1240	971
(1) Total farm sales		25399	30168	22257
(2) Increase in farm capital		669	2218	
(3) Family living from the farm	-	368	440	346
(4) Total farm receipts (1+2+3)		26436	32826	22603
(4) 10 002 2011 20002500 (1.5.5)		20430	,	
FARM EXPENSES				
Dairy & dual pur. cattle bought		250	181	238
Beef cattle bought (inc. f's)		2386	1189	2690
Hogs bought		669	951	1038
Sheep bought (inc. feeders)		ź	8	2
Horses bought			444 544 554	· · · · · · · · · · · · · · · · · · ·
Poultry bought		92	64	134
Misc. livestock expense		570	686	460
Feed bought		4238	4780	3846
Fertilizers	***************************************	1065	1474	920
Other crop expenses		716	929	573
Custom work hired		629	781	502
Gas, oil & grease bought (F.share)	***************************************	1010	1119	1017
Rep. mechanical power (F. share)		534	582	578
Rep. & upkeep of real estate		375	430	412
Rep. & upkeep of crop & gen. mach.		357	405	388
Rep. & upkeep of livestock equip.		158	208	183
Wages of hired labor		348	377	263
Electricity expense (farm share)	*********	300	386	252
Real estate & pers. prop. taxes		1066	1235	1120
Cash rent				
General farm expenses		310	342	319
(5) Total cash operating expense		15078	16127	14935
(6) Cap. purc-mech. pow (F.share)		992	907	1399
(7) Cap. purc-crop & gen. mach.	***************************************	1090	1060	993
(8) Cap. pure livestock equip.		320	472	145
(9) Cap. pur. bldgs. & fencing		1036	1316	778
(10) Total farm purchases (5-9)		18516	19882	18250
(11) Decrease in farm capital				264
(12) Interest on farm capital		3138	3688	3182
(13) Unpaid family labor		638	849	601
(14) Board furnished hired labor		67	72	20
(15) Total farm expenses (10-14)		22359	24491	22317
(16) Labor earnings (4) - 15		4077	8335	286
		4011		
See Footnote* on page 5				

Table 3 Summary of Farm Earnings (Enterprise Statement) 1962*							
		Average	22 most	22 least			
Items	Your	of 90	profitable	profitable			
	farm	farms	farms	farms			
RETURNS AND NET INCREASES		ж					
1. Dairy and dual-purpose cows		\$ 5079	\$ 6312	\$ 3748			
2. Other dairy & dual-pur. cattle	***************************************	1557	5057	1105			
3. Beef breeding herd	************	267	1	407			
4. Feeder cattle		1716	793	1702			
5. Hogs	***********	8148	13071	6882			
6. Sheep - farm flock	*	152	357	113			
7. Sheep - feeders	P-04	are are are	100 dem	ong pitts Ado			
8. Turkeys				au an en			
9. Chickens		688	667	758			
10. All productive livestock		17607	23225	14715			
ll. Value of feed fed to livestock	****	11054	13308	10533			
12. Return over feed from livestock		6553	9917	4182			
13. Crops, seed, and feed		8181	10841	6708			
14. Income from labor off the farm		132	118	170			
15. Agricultural conservation payments	-	772	800	887			
16. Miscellaneous	****	209	441	<u>83</u>			
17. Total returns and net increases		15847	22117	12030			
TYPENCES AND NEW DECDEAGES							
EXPENSES AND NET DECREASES 18. Horses		\$	\$	\$			
19. Truck	-	307	363	₩ <u>2</u>			
20. Auto (farm share)		424	478	494			
21. Tractor		1276	1361	1392			
22. Elec. & gas engine exp. (F share)	-	286	350	253			
23. Hired power	-	306	393	260			
24. Total power	***************************************	2599	2945	2743			
25. Crop & general machinery		1305	1612	1295			
26. Livestock equipment		391	474	360			
27. Buildings, fencing & tiling		1137	1255	1218			
28. Misc. prod. livestock expense		570	686	460			
29. Labor	****	1256	1545	1047			
30. Real estate taxes		872	1012	924			
31. Personal property tax		193	223	196			
32. Insurance		160	201	164			
33. General farm		149	141	155			
34. Interest on farm capital	***************************************	3138	3688	3182			
J4. Interest on raim caproar				<u> </u>			
35. Total expenses & net decrease		11770	13782	11744			
36. Labor earnings		4077	8335	286			
2-1		7011		230			

^{*} 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 Cash Household and Personal Expenses for Those Farms which kept complete accounts of these expenses 1962

Items	Your farm	Average of 26 farms
Number of persons - family Number of adult equivalent - family		5•4 3•8
Food and meals bought Operating and supplies Furnishings and equipment Clothing and clothing materials Personal care, personal spending Education, recreation and development Gifts and special events Medical care and health insurance Church, welfare Pers. share truck & auto exp. Oper. share upkeep on dwelling Pers. share tel. & elect. expense Total cash living expenses Pers. share new auto & truck Taxes and other deductions Life insurance Other savings and investments Total household & personal cash exp. Total family living from the farm Total cash exp. and perquisites Income: Operators labor earnings Return to capital & labor		\$1096 282 307 416 120 261 164 446 273 186 112 123 \$3786 160 28 194 77 \$4245 468 \$4713

Table 5 Net Worth Statement for those Farmers who kept a complete record of all Assets and Liabilities 1962 (Operator's share) Your farm 54 farms Items Jan. 1 Dec. 31 Jan. 1 Dec. 31 \$45018 \$46053 Total farm capital Auto (Personal share) 492 550 Dwelling 2364 2299 Other personal assets 4919 TOTAL ASSETS \$52793 Real estate mortgages \$11746 \$12082 Chattel mortgages 4007 3846 1574 Notes 1569 637 Accounts payable 705 TOTAL LIABILITIES \$18027 \$18139 Farmer's Net Worth \$34766 \$35918 Gain in Net Worth \$+1152

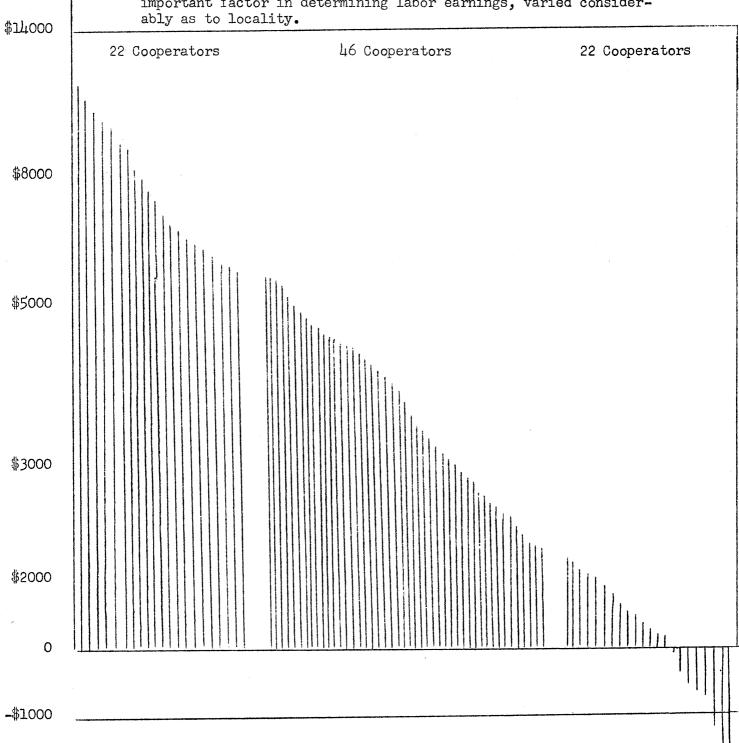
Table 6 Summary of Farm Earnings by Tenure 1962 (operator's share)

Items	Your	48*	20 Part	22
FARM RECEIPTS	farm	Owners	Owners	Renters
Dairy and dual purpose cattle		# alol	# 21.00	
Dairy products		\$ 1404	\$ 1422	\$ 667
Beef cattle (including feeders)		4427	5173	3048
Hogs	-	3127	11168	1553
Sheep and wool (including feeders)		10714	4713	3510
Poultry (including turkeys)		213	29	55
Eggs		60	59 18 0	4
Corn		828	670	71
Small grain	*	1527	1587	895
Other crops		301	913	316
Machinery and equipment sold		1074	1686	1186
Income from work off the farm	•	292	263	169
Miscellaneous		183 1021	273	252
(1) Total farm sales		25171	1136	<u>570</u>
(2) Increase in farm capital			29092	12296
(3) Family living from the farm		649	96	1897
(4) Total farm receipts (1)+(2)+(3)		354	421	236
FARM EXPENSES		26174	29609	14429
Dairy and dual purpose cattle bought		\$ 259	45 7.00	
Beef cattle bought (including feeders)			\$ 192	\$ 465
Hogs bought		1456	6687	381
Sheep bought (including feeders)		1036	139	208
Poultry		8	1	1
Misc. livestock expense		118	104	100 to 100
Feed	***************************************	629	495	256
Fertilizers		4751	3510	2183
Other crop expense		994	1209	550
Custom work hired		711	773	354
Gas - oil - grease		582	688	420
Rep. Tractor, Truck, Auto (farm share)		1001	1033	691
Rep. and upkeep of real estate		566 1, 20	489	413
Rep. and upkeep of crop & gen. mach.	***********	435	251	22
Rep. and upkeep of livestock equip.		387 186	330	254
Wages of hired labor			167	75
Electricity expense (farm share)		458	153	255
Real estate & pers. property taxes		307	323	200
Cash rent		1014	751	97
Gen. farm and insurance	***************************************	92*	1185	640
Interest paid		322 3068	293	154
Total cash operating expenses		1068	1148	342
Mec. power bought (farm share)		16380	19921	7961
Crop and gen. mach. bought		874	950 3.667	1264
Livestock equip, bought		1003 347	1267	1078
New real estate improvements		1256	328 805	5/1/1
(5) Total farm purchases		19860	89 <u>5</u>	234
(6) Decrease in farm capital	•	19000	23361	10781
(7) Interest on farm capital	***************************************	1973	1542	۳۵٥
(8) Unpaid family labor	-			528
(9) Board furnished hired labor		666	776 70	370
(10) Total farm expenses (5+6+7+8+9)		73	70 2021-0	47
(11) Labor earnings (4) - (10)	Name	22572 3603	25749 3860	11726
(12) Ret. to cap. & fam. lab. (7+8+11)		3602	3860 6178	2703
Manage and a sum of the contract of the contra		6241	6178	3601

^{*} There were some small acreages for additional hay or special crops rented on a few of these farms.

RANGE IN EARNINGS

Range in earnings was wider than for 1961. The difference between the top one fourth and bottom one fourth was very significant. Prices were slightly lower than for 1961 and crop yields averaged far below those of 1961. Yields which were again a very important factor in determining labor earnings, varied considerably as to locality.



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 and dual-purpose cows Other dairy & du. pur. cattle Beef breeding herd Feeder cattle Sheep - farm flock Sheep - feeders Hogs Turkeys Hens Canning peas Soybeans for grain	10.0 per cow 3.5 per an. unit* 3.5 per an. unit* .25 per 100 lbs. 1.5 per an. unit* .3 per 100 lbs2 per 100 lbs5 per 100 lbs. 20.0 per 100 hens .5 per acre .5 per acre	Small grain Sugar beets Sweet corn Corn husked Corn, hogged Corn, Shredded Corn, silage Corn, fodder Alfalfa hay Soybean hay Other hay crops	.5 per acre 1.5 per acre .7 per acre .7 per acre .4 per acre 1.5 per acre 1.0 per acre 1.0 per acre .6 per acre .8 per acre .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 turkey produced.

Table 8 Measures of Farm Organization and Management Efficiency 1962 22 most 22 least Average of 90 profitable profitable Your Measures used in chart on page 11 farm farms farms farms \$4077 \$8335 \$ 286 Labor earnings 88 (1) Crop yields* 100 111 (2) Per cent tillable land in 61.8 64.7 67.4 high return crops (3) Return for \$100 feed to produce livestock* 100 110 88 (4) Prod. livestock units per 36.0 100 acres** 36.7 38.3 416 458 540 (5) Size of business-work units (6) Work units per worker 327 359 307 (7) Power; machinery; equipment; \$12.24 \$14.34 \$11.67 building expense per work unit Items related to some of the above measures*** (3) Index of return for \$100 feed from: 86 Dairy cattle (see pgs 15 & 16) 100 103 Beef cattle-breeding herd 105 90 (see page 17) 100 133 77 Beef cattle-feeders (see pg 17) 100 Hogs (see pages 13 & 14) 100 109 87 88 Sheep-farm flock (see pg 18) 100 117 100 Turkeys (see page 20) Chickens (see page 19) 109 89 100 76.4 .89.5 74.8 (4) Number of animal units 125 103 107 (5) Work units on crop 415 Work units on prod. livestock 351 313 \$5.96 \$7.05 (7) Power expense per work unit \$5.56 Crop Machinery expense per \$2.93 \$2.93 \$3.29 work units Livestock equip expense per \$.85 \$.90 \$.92 work unit Building & fence expense per \$2.50 \$2.28 \$3.08 work unit

^{*} Given as a percentage of the average.

^{**} Acres in timber not pastured, roads, waste & farmstead were not included.

Cooperators from Austin, Mankato, and Winona 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 90 farms included in this summary are located between the dotted lines across the center of this page.

THERMOMETER CHART

Labor Earnings	Crop Yields	High Return Crops	Return from Productive Livestock	Pr. L. S units per 100 A.		Work units per worker	Pow.; Mach. Eqp. Bldg. exp.pr.w.u.
10,000	140	90	135	70	800	500	6.00
8,000	130	82	126	60	750	460	8.00
7,000	125	78	120	55	700	430	9,00
6,000	118	74 =	114 =	50	650 =	400	10.00-
5,500	112 =	72	110	46	600 =	360	11.00_
5,000	108	69	106	42	550	345	11.25
4,300	109	66	102	38	470	335	11.7
3,900	97	63	98' =	35	440	320	12.77
3,300	94	60	93 =	31	420	305	13.25
2,500	90 =	57	1 88	29	400	295	14.00
1,500	86 =	50	82	27	370	280	14.50
500	82	45	78 =	25	340	260	15.00
0	78	40	73 =	20	310	240	15.50
-800	74 =	35	69 =	15	280 =	210	16.00
-1,500	70	30	65	10	250	190	17.00
				$) \bigcirc$	$) \subset$		

Table 9 Distribution of Acres and Yield 1962

Table	9 Distr	ibution of		Yield 1962		
Chan	Cmon	Number	Acres	Average	Vouv	A *** ** ** ** ** ** ** ** ** ** ** ** *
Crop	Crop rating	growing	your far m	acres of 99 farms	Your yields	Average yield
Oats (and mixtures)	D	87		24.3	<i>y</i> = = = = =	51.9
Oats silage	C	3		•4		6.6 T
Canning peas	В	2		•3		\$58.69
Wheat	C	37		5.4		28.8
Barley	D	1		•2	**********	27.0
Flax	С	2		<u>.2</u>		12.0
Total small grain & pea	as			30.8		
Canning corn	B	5		•7		4.9 T
Corn grain	Α	9 9	*****	73.9		68.5
Soybeans (grain)	В	72		29.1		20.2
Corn silage	В	66		7.4		12.6 T
Corn or cane fodder	D	0				0
Total cultivated crops				111.1		
Alfalfa hay	В	88		25.5		3.1
Red clover hay	C	12		1.6		2.9
Other Leg. & Leg. mixture		2		•2		3.0
*Misc. hay and seed	D	5	*****************	•6		2.0
Total tillable land in	pasture		age of county of contracts and a	27.9		
Alfalfa pasture	В	50		9•2		
	C or B)	9	manifestation in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the second section is the second section in the second section in the section is the second section in the section is the second section in the section is the section in the section in the section is the section	1.4		
Other tillable pasture	D	7	***************************************	•5		
Total tillable land in	pasture			11.1		
Government program		61		22.8		
Tillable land not cropped		17		1.3		
(inc. plowdown & waterway		t		4		
	,					
Total tillable land				205.0		
Wild hay				•7		
Non-tillable pasture		٠	Para	15.1		
Timber				2.4		
Roads and waste			_	9.3		
Farmstead			-	9•3	•	
Total acres in farm			**************************************	241.8		
Per cent land tillable				84.9		
Per cent in high return of	rops			65.2		
Č			***************************************			

^{*} 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 1962

	Dairy or	Dual Purpose	Cattle	Beef Breeding
	Cows	Other	All	Herd
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 8,000 pounds of pork or more were included in the analysis. Those who did not have hogs both at the beginning and end of the year were omitted from the averages.

Table II Feed Costs and Returns from Hogs 1962

Items	Your farm	Average of 59 farms	returns	in lowest
Feed per cwt. hogs produced, lbs: Corn Small grain Commercial feeds Total concentrates Forage		334 51 67 452 6	317 38 65 420 5	
Feed cost per cwt. hogs produced: Concentrates (plus forage) Pasture		\$10.94 .02	\$10.17 .02	\$12.07 .02
TOTAL FEED COSTS	####www.com	\$10.96	\$10.19	\$12.09
Net increase in val per cwt. hogs pr	٥	\$16.20	\$17.32	\$15.42
RETURNS ABOVE FEED COST PER CWT. HOGS PRODUCED		\$ 5.24	\$ 7.13	\$ 3.33
RETURN FOR \$100 OF FEED		\$148.00	\$170.00	\$128.00
Price received per cwt. hogs sold	-	\$16.63	\$16 . 99	\$16.20
No. of spring litters raised No. of fall litters raised Total no. of litters raised		21 20 41	21 22 43	17 <u>14</u> 31
No. of pigs born per litter No. of pigs weaned per litter		9•5 7•5	9.8 7.8	9•3 7•3
Pounds of hogs produced		68196	71388	52624

Operators producing less than 8000 pounds of pork are omitted from hog averages. Of the 90 cooperators, 77 produced pork. Seven feeder pig operations were omitted and will be included in a later report. Four other records were questionable and seven showed a production of less than 8000 pounds of pork.

DAIRY AND DUAL PURPOSE CATTLE

No herds were classed as dual purpose. Several farms raising only dairy heifers were omitted as were herds with averages of less than five cows. Seven other operators had some dairy animals consisting of either young dairy stock only, or fewer than five cows.

Table 12 Factors of Cost and Returns from Dairy Cows 1962

Items	Your farm	Average of 57 farms	18 farms highest in butterfat per cow	18 farms: lowest in butterfat per cow
Pounds of butterfat per cow Pounds of milk per cow % of butterfat in milk		353 9393 3•7	421 10916 3.8	282 7717 3•6
Price rec. per lb. of B.F. sold ¢ Price rec. per cwt. milk sold		92.0 3.42	93 . 9 3 . 43	90.0 3.34
Feed per cow, lbs.: Corn Small grain Commercial feeds		2803 584 501	3226 754 616	2267 564 370
Legume hay Other hay		5170 188	5899 123	4839 417
Total concentrates Total dry roughage Silage		3888 5358 6442	4596 6022 7372	3201 5256 5913
Feed cost per cow: Concentrates Roughages Pasture TOTAL FEED COSTS		\$83.52 67.63 8.51 \$159.66	\$98.99 75.41 8.34 \$182.74	\$68.05 63.45 9.25 \$140.75
Value of produce per cow: B.F. sales Dairy products used in home Milk to livestock Net increases in value of cows TOTAL VALUE PRODUCED		\$313.85 5.10 6.82 -10.91 \$314.86	\$383.01 5.51 7.51 -7.84 \$388.19	\$243.06 4.63 7.84 -8.71 \$246.82
RETURNS ABOVE FEED COST PER COW		\$155 . 20	\$205.45	\$106.07
RETURNS FOR \$100 OF FEED	**************************************	\$197.00	\$212.00	\$175.00
Feed cost per 1b. B.F. (cents)	Marriago alginos direitos godinas	45.2	43.2	49.9
Number of cows*		24.8	28.8	23•5

^{*} 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 1962

Items .	Your farm	Average of 57 farms	18 farms highest in butterfat per cow	18 farms lowest in butterfat per cow
Feeds per head, lbs.: Concentrates Hay and fodder Silage Skim milk Whole milk		945 1949 2025 201	1049 1723 2160 	911 1994 2349 233
Feed cost per head: Concentrates Roughages Milk Pasture		\$23.00 23.25 6.50 3.63	\$27.19 22.11 7.07 4.41	\$20.34 24.07 7.80 3.69
TOTAL FEED COSTS PER HEAD		\$56.38	\$60.78	\$55.90
Net inc. in value of other cattle		\$87.27	\$93.65	\$79.06
RETURNS ABOVE FEED COST PER HEAD	,	\$30.89	\$32.87	\$23.16
RETURNS FOR \$100 OF FEED		\$155.00	\$154.00	\$141.00
Number of head of other cattle	North Control of the	28.3	33•3	26.5
Table 14 Feed Costs and Returns from	ı All Da	airy and D	ual Purpose C	attle 1962
Items	Your farm	Average of 57 farms	18 farms highest in butterfat per cow	18 farms lowest in butterfat per cow
Feed per animal unit, lbs. Concentrates Hay and fodder Silage		3176 4806 5600	3719 5013 6237	2705 4838 5 51 0
TOTAL FEED COSTS PER ANIMAL UNITS		\$137.68	\$154.42	\$125.20
Value of produce per animal unit: Dairy products Net increase in val of dairy catt	•	\$206.54 52.73	\$246.55 60.58	\$163.40 47.31
TOTAL VALUE PRODUCED		\$259.27	\$307.13	\$210.71
RETURNS ABOVE FEED PER ANIMAL UNIT		\$121.59	\$152.71	\$ 85.51
RETURNS PER \$100 OF FEED	engy()mmh-in-ini(enilemne	\$188.00	\$199.00	\$168.00
Animal units of cattle	•	39.2	45.9	36.8

Table 15 Feed Cost and Returns from Beef Cattle 1962

Items	Your farm	Average of 4 farms
Beef breeding herd: 4 farms		
Feeds per animal unit - lbs.: Concentrates Legume Silage Other hay		519 3578 4708
Feed cost per animal unit: Concentrates Roughages Pasture TOTAL FEED COSTS	## ## ## ## ## ## ## ## ## ## ## ## ##	\$ 9.95 46.32 5.50 \$61.77
Value of produce per animal unit: Dairy products Net increase in value of animals TOTAL VALUE PRODUCED		\$ 1.47 \$107.31 \$108.78
RETURNS ABOVE FEED COST PER ANIMAL UNIT	***************************************	\$47.Ol
RETURNS FOR \$100 OF FEED		\$176.00
Number of cows and herd bulls Number of animal units in the herd Pounds of beef produced		36.3 38.3 15656
Feeding cattle: 20 farms		
Feeds per cwt. beef produced - lbs.: Corn Small grain Commercial feeds		664 11 54
Legume hay Other hay and fodder		296 5
Total concentrates Total hay and fodder Silage Feed cost per cwt. beef produced:		729 301 487
Concentrates Roughages Pasture TOTAL FEED COSTS	\$	\$14.66 4.05 .08 \$18.79
Net increase in value of feeders RETURNS ABOVE FEED COST PER CWT. BEEF PROPRETURNS FOR \$100 OF FEED	\$	\$24.99 \$ 6.20 \$133.00
Price paid per cwt. beef bought Price received for feeder cattle sold Number of animal units Pounds of beef produced	\$	\$ 23.82 22.33 50.7 27809

BEEF CATTLE (Continued):

Nine cooperators had beef breeding animals and twenty-eight fed some beef. In some cases club calves and project animals represented the only beef produced. Only those producing 5000 pounds or more of beef were included.

SHEEP

Farm flocks in this area are small and the feed consumption is often impossible to determine. Flocks consisting of fewer than 50 ewes are not included in the report. Only four of the eleven reporting sheep had that number. Costs and returns are determined on a per ewe basis.

* * * *

Table 16 Feed Costs and Returns from a farm flock of Sheep 1962 Your Average of Items farm 4 farms Feeds per ewe - lbs.: Concentrates 417 Legume hay 660 Other hay 15 Silage 126 Feed cost per ewe: Concentrates \$ 9.29 6.44 Roughages Pasture 3.23 TOTAL FEED COSTS \$18.96 Value of produce per head: \$ 6.95** Wool Net increase in value of sheep \$19.88 TOTAL VALUE PRODUCED \$26.83 RETURNS ABOVE FEED COST PER HEAD \$ 7.87 RETURNS FOR \$100 OF FEED \$142.00 Price per cwt. of lambs sold \$19.52 Price per lb. wool sold (cents) •49*** Pounds of wool per sheep sheared 8.9 Number of ewes kept for lambing 96.8 Per cent lamb crop* 119 Per cent death loss* 9 Average number of ewes 95.6

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

^{**} Wool return including incentive payment.

^{***} Price per pound excludes incentive payment.

CHICKENS

Flocks from 23 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. Sixteen other farms kept some laying hens.

Table 17 Feed costs and Returns from Chickens 1962*

Items	Your farm	Average of 23 farms		return
Feed per hen - lbs.: Grain Commercial feeds Total concentrates		85 42 127	89 43 132	96 36 132
TOTAL FEED COST PER HEN		\$3.65	\$3.65	\$3.83
Value of produce per hen: Eggs sold & used in the home Net increase in value of chickens		\$5.12 16	\$5.92 11	\$4.51 33
TOTAL VALUE PRODUCED	***************************************	\$4.96	\$5.81	\$4.18
RETURNS ABOVE FEED COST PER HEN		\$1.31	\$2.16	\$ •35
RETURNS FOR \$100 OF FEED		\$136.00 \$	159.00	\$109.00
Price rec'd per doz eggs sold (cents) Eggs laid per hen		27.5 224	27•7 253	27 . 4 198
Av. no. hens on farm during year Per cent death loss of hens		503 7•0%	543 5.0%	621 10.0%

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

Table 18 Feed Costs and Returns from Feeder Pigs 1962

Item	Your farm		Average of 6 farms
Feed per cwt. hogs produced, lbs.:	4		
Corn			338
Small grain			53
Commercial feeds			42
Total concentrates			433
Buttermilk, hay & potatoes			24
Feed cost per cwt. hog produced:			\$ 9.72
Concentrates (inc. alf.) Milk			₩ 9•12 •02
Pasture	***************************************		•02

TOTAL FEED COSTS	***************************************		\$ 9.74
Net increase in val. per cwt. hogs prod.	****		\$12.85
RETURNS ABOVE FEED COST PER CWT. HOGS PROD.	***************************************		\$ 3.11
RETURNS FOR \$100 OF FEED			\$ 132
Price received per cwt. hogs sold	***************************************		\$16.88
Table 19 Average prices us			Pasture (per head per month)
Ear corn (including shelled & ground) \$ 1.		bulls	\$2.50
, A	-	cattle	1.25
Alfalfa hay, per ton 18.	. •	•	.16
Red or Alsike clover hay, 1 ton 15.			•08
Non-legume, per ton 10. Corn silage, per ton 6.	00 Ewes 00 Lambs		•40
corn strage, per con	OO Lamos		•20
Table 20 Power and Crop Machinery	Exp. per c	rop acre 19	62
Your farm	90 farms	High 22	Low 22
Crop acres per farm	170	200	168
Power exp. per crop acre	\$7.49	\$6 . 79	\$8.28
Crop exp. per crop acre	\$7.66	\$8.04	\$7.70

SUMMARY OF FARM EARNINGS BY YEARS

Items	195 7	1958	1959	1960	1961	1962
FARM RECEIPTS Dairy cattle Dairy products Beef cattle (including feeders)	\$ 1220 4406 2960	\$ 1481 4517 3630	\$ 1828 4492 5130	\$ 1160 4726 6958	\$ 1602 4776 5585	5050
Hogs Sheep and wool Horses	6814 137 2	7083 121 5	5895 221 3	6426 181	8751 147	8346 155
Poultry (including turkeys) Eggs Corn Small grain	1609 1334 1683 332	1573 1095 1862 372	1879 917 1473 495	2280 1628 1468 401	78 989 883 505	49 676 1601 507
Other crops Machine equipment sold & gas tax refund Income from work off the farm Miscellaneous	896 134 152 232	1118 173 349 143	975 194 357 237 24096	961 172 406 239	1179 208 174 875	1491 266 228 983 25399
(1) Total farm sales(2) Increase in farm capital(3) Family living from the farm(4) Total farm receipts (1)+(2)+(3)	21911 1993 260 24164	23522 3891 269 27682	2754 271 27121	27006 1795 326 29127	25752 3180 341 29273	669 368 26436
FARM EXPENSE Dairy cattle bought Beef cattle bought (including feeders) Hogs bought Sheep bought (including feeders)	\$ 301 2038 489 10	\$ 313 2618 633 43	\$ 539 3290 387 287	\$ 373 3493 530 43	\$ 333 3949 537 17	\$ 250 2386 669 5
Horses bought Poultry bought Misc. livestock Feed bought Fertilizers	465 539 3946 892	501 624 4377 955	475 546 4585 1112	720 777 5546 1085	117 568 4604 1000	92 570 4238 1065
Other crop expenses Custom work hired Gas, oil & grease bought (farm share) Repair of mechanical power (farm share) Repair & upkeep of real estate	678 565 817 375 345	645 672 931 419 468	894 593 949 487 377	695 607 991 533 324	699 592 951 522 332	716 629 1010 534 375
Repair & upkeep of crop & gen. machinery Repair & upkeep of livestock equipment Wages of hired labor Electricity expense (farm share) Real estate & personal property taxes	289 177 570 221 657	326 127 503 235 704	257 838	397 139 570 309 906	934	
Cash rent General farm expense (5) Total cash operating expense (6) Cap. purchases, mech. power bought (7) Crop & gen. machinery bought (8) Livestock equipment bought (9) New real estate improvements (10) Total farm purchases (5) to (9)	235 13609 680 912 316 848 16365	914 990 385 1652 19325	20879	22227	560 995 216 1010 19495	18516
(11) Decrease in farm capital (12) Interest on farm capital (13) Unpaid family labor (14) Board furnished hired labor (15) Total farm expense (10) to (14) (16) Labor earnings (4) (15)	2328 345 20 19058 5106	2535 348 41 22249 5433	2839 380 41 24139 2982	3106 529 51 25913 3214	3077 550 68 23190 6083	638 67