

1955 ANNUAL REPORT

V O C A T I O N A L A G R I C U L T U R E

F A R M M A N A G E M E N T P R O G R A M

M A N K A T O A R E A O F S O U T H E R N M I N N E S O T A

UNIVERSITY OF MINNESOTA

Institute of Agriculture

and

MINNESOTA DEPARTMENT OF EDUCATION

Vocational Division

and

AREA VOCATIONAL TECHNICAL SCHOOL

Mankato, Minnesota

Cooperating

April 1956

1955 Report of the Vocational Agriculture Farm Management
Program in the Mankato Area of Southern Minnesota

Del Hodgkins

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INTRODUCTION

The University of Minnesota, the Mankato Area Vocational-Technical School in cooperation with the Vocational Division, Minnesota Department of Education and with assistance from the Department of Agriculture Economics and the Agriculture Extension Division of the University, operate and maintain the Vocational Agriculture Farm Management Program in the Mankato Area of Southern Minnesota. The program was initiated in 1955 and is available to farmers who are enrolled in Vocational Agriculture Adult, Young Farmers or Veterans classes in the public schools.

The purpose of the Program as far as the area school is concerned is (1) to give assistance to the instructors in the mechanics of keeping farm records (2) to aid in the analysis of the farm business through the use of records as a basis for vocational guidance. The enrollment is on a voluntary basis insofar as the number of schools participating and the number of farmers enrolled in the program.

The analysis of the records and preparation of the reports for the Mankato area are handled by Del. Hodgkins of the Vocational Agriculture Department, under the general supervision of F. G. Kalin, Director of Vocational and Adult Education and Superintendent Erling O. Johnson. The program is under the general direction of Milo Peterson and Lauren Granger of the University of Minnesota, Department of Agriculture Education. The State Department of Education is represented by S. K. Wick, Assistant Director of Vocational Education in charge of Area Vocational-Technical Schools and G. R. Cochran, State Supervisor of Agriculture Education. T. R. Nodland gave assistance and advice in setting up and operation of the Analysis center. Ralph Smith of the Morris Station was also called upon for advice in setting up the Analysis Center. H. Routhe and E. Hartmans represented the Agriculture Extension Service.

Each farmer pays an annual fee which covers a portion of the cost of the record analysis. Through a grant of funds from the Hill Family Foundation, Lauren Granger was employed by the Department of Agricultural Education as a co-ordinator for the program in the state.

This report deals with farmers enrolled in 11 schools in the Mankato area. The following tabulation shows by schools the number of 1955 records submitted:

2.

Madelia	11	St. Peter	3
Lake Crystal	4	St. Clair	2
New Ulm	23	Sherburn	3
Mankato	6	Lake Wilson	1
Watertown	3	Worthington	<u>1</u>
Waterville	2	Total	59

The records kept included farm inventories, cash receipts and expenses, feed consumed by the various classes of livestock, family living secured from the farm, household and personal expenses and receipts and the operators liabilities and assets other than farm capital.

FARM INVENTORIES

The Capital investment per farm varied from \$22,843 to \$133,552. The average investment for all farms included in this report and for the 19 high and the 19 low in labor earnings is shown in Table 1.

FARM EARNINGS

Labor earnings is a measure of the relative financial success of a farm as compared with other farms and represents the returns above all farm expenses and a charge for the use of farm capital.

There are two methods of computing Labor earnings. Table 2 shows the earnings statement on a cash basis and Table 3 shows the earnings on an enterprise or accrual basis. The principal difference in the two statements is the method of handling the net increase or or decrease in the value of farm capital. In the cash statement the net increase or decrease in farm capital is entered as one item. In the enterprise statement the net change in the inventory has been included in each enterprise in order to compute "total returns and net increases", or "total expenses and net decreases" by enterprises.

RETURNS TO CAPITAL

The return to capital and family labor represents the amount available to the operator for living expenses, payment on indebtedness and savings. These figures are found on Table 5.

Table 1. Summary of Farm Inventories, 1955

Items	Your farm		Ave. of 59 Farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)			211	
Size of business (work units)*			329.6	
Dairy and dual purpose cows			1520	1643
Other dairy & dual purpose cattle			717	696
Beef cattle (include feeders)			2044	2119
Hogs			1788	1294
Sheep (including feeders)			297	334
Poultry (including turkeys)			211	231
Productive livestock (total)			6577	6318
Horses			7	6
Crop, seed and feed			6084	5772
Auto & truck (farm share)			1266	1413
Tractors & motors			1908	1806
Crop and general machinery			3386	3513
Livestock equipment			584	638
Machinery & equipment (total)			7144	7370
Miscellaneous			--	--
Land			22496	22496
Buildings, fences, etc.			8077	7882
Total farm capital			50385	49844

Items	19 most profitable farms		19 least profitable	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Size of farm (acres)	212		317	
Size of business (work units)*	356		243	
Dairy and dual purpose cows	2176	2299	1078	1250
Other dairy & dual purpose cattle	900	885	639	569
Beef cattle (including feeders)	999	913	3004	3241
Hogs	1783	1535	1866	1138
Sheep (including feeders)	60	142	474	353
Poultry (including turkeys)	125	105	228	251
Productive livestock (total)	6043	5879	7289	6802
Horses	11	7	8	8
Crop, seed, and feed	6914	7451	5686	4696
Auto & truck (farm share)	1369	1403	1234	1652
Tractors & motors	1722	1645	2075	1774
Crop & general machinery	3621	4015	3348	3318
Livestock equipment	556	645	667	772
Machinery & equipment	7268	7708	7324	7516
Miscellaneous	--	--	--	--
Land	22754	22754	27573	27573
Buildings, fences, etc.	6628	6779	10145	9476
Total farm capital	49618	50578	58025	56071

* See page 8 for an explanation of "work units".

Table 2. Summary of Farm Earnings (Cash Statement), 1955

Items	Your Farm	Average of 58 Farms	18 most profitable Farms	19 least profitable Farms
FARM RECEIPTS				
Dairy cattle		\$ 520	\$ 671	\$ 581
Dairy products		2144	3418	1429
Beef cattle (including feeder cattle)		3582	1924	4874
Hogs		4359	4501	4107
Sheep and wool		373	146	554
Poultry (including turkeys)		210	418	108
Eggs		968	787	905
Corn		3198	4318	3310
Small grain		174	353	80
Other crops		1025	1213	652
Machinery & equipment sold		395	261	760
Income from work off the farm		129	146	106
Miscellaneous		120	153	168
1. Total farm sales		17207	18309	17634
2. Increase in farm capital		930	1974	365
3. Family living from the farm		290	354	251
4. Total farm receipts (1), (2), & (3)		18427	20637	18250
FARM EXPENSES				
Dairy cattle bought		126	44	284
Beef cattle bought (including feeders)		1855	1198	2382
Hogs bought		355	147	393
Sheep bought		159	86	203
Poultry bought (including turkeys)		104	103	96
Misc. livestock expenses		328	414	291
Feed bought		2597	2734	2659
Fertilizer		456	502	125
Other crop expense		529	517	564
Custom work hired		585	677	629
Gas, oil, grease bought (farm share)		734	715	770
Repairs for tractors, trucks & autos (farm share)		371	362	418
Repair and upkeep of farm real estate		181	209	138
Repair and upkeep of crop & gen. mach.		250	256	277
Repair and upkeep of livestock equip.		86	80	83
Wages of hired labor		464	626	595
Electricity expense		178	181	193
Pers. prop. & real estate taxes		500	553	565
Telephone and general farm expense		237	189	307
5. Total cash operating expense		10095	9598	11277
6. Mechanical power bought (farm share)		920	709	1291
7. Crop and general machinery bought		706	556	854
8. Livestock equipment bought		147	187	154
9. New real estate improvements		465	609	592
10. Total farm purchases (5) to (9)		12333	11659	14168
11. Decrease in farm capital		1560	1215	2319
12. Interest on farm capital		2514	2531	2852
13. Unpaid family labor		99	10	201
14. Board furnished hired labor		62	68	30
15. Total farm expenses (10) to (14)		16568	15483	19570
16. Labor earnings (4) - (15)		1859	5154	-1320

Table 3. Summary of Farm Earnings (Enterprise Statement) 1955

Items	Your Farm	Average of 59 farms	18 most profitable farms	19 least profitable farms
<u>RETURNS AND NET INCREASES</u>				
Dairy cows	_____	\$ 2457	\$ 3820	\$ 1723
Other dairy cattle	_____	465	721	316
Beef breeding herd	_____	189	3	363
Feeder cattle	_____	1605	744	2255
Hogs	_____	3567	4030	3197
Sheep - farm flock	_____	214	41	226
Sheep - feeders	_____	14	22	---
Turkeys	_____	91	294	---
Chickens	_____	1012	685	999
All productive livestock	_____	9614	10360	9079
Value of feed fed to livestock	_____	7119	7331	7323
Return over feed from livestock	_____	2495	3029	1756
Crop, seed, and feed	_____	7534	9967	6607
Income from labor off the farm	_____	125	146	98
Agricultural conservation payments	_____	24	17	25
Miscellaneous	_____	106	136	145
(1) Total returns & net increases	_____	10284	13295	8631
<u>EXPENSES AND NET DECREASES</u>				
Horses	_____	\$ 3	\$ 8	\$ ---
Truck	_____	173	175	161
Auto (farm share)	_____	489	437	542
Tractor	_____	1077	907	1363
Elec. & gas engine exp. (f. share)	_____	183	184	198
Hired power	_____	375	516	343
Total power	_____	2300	2227	2607
Crop and general machinery	_____	997	693	1364
Livestock equipment	_____	181	190	157
Buildings, fences and tiling	_____	703	604	953
Misc. productive livestock expense	_____	329	414	291
Labor	_____	664	735	855
Real estate taxes	_____	405	453	464
Personal property tax	_____	95	105	101
Insurance	_____	44	30	53
General farm expense	_____	193	159	254
Interest on farm capital	_____	2514	2531	2852
(2) Total expenses & net decreases	_____	8425	8141	9951
(3) Operator's earnings (1) - (2)	_____	1859	5154	-1320

* Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each item of expense in order to show total receipts and net increases, and total expenses and net decreases. The operator's earnings are the same as those on page 4.

FAMILY LIVING FROM THE FARM

The family living from the farm is the estimated value of the farm produce used in the house and shelter furnished the farmer and his family by the farm. It is a part of the income of the farm and a part of the expenses of operating the household even though cash transactions are not involved. The omission of the farm produce used in the home results in an incomplete record of both farm income and personal expense.

The value of the family living as shown in Table 4 amounts to 1.6 per cent of the total farm receipts on these farms. The values assigned are a conservative market price on the farm. If these products had been purchased, the amount paid out would have been considerably higher.

Table 4. Family Living from the Farm, 1955

Items	Your Farm	Average all farms	Your Farm	Average all farms
Adult equivalent - family	_____	3	_____	
Whole milk	_____	674 qts.	_____	\$ 72
Skim milk	_____	40 qts.	_____	5
Cream	_____	14 pts.	_____	10
Beef	_____	409 lbs.	_____	76
Hogs	_____	413 lbs.	_____	49
Lamb and mutton	_____	9 lbs.	_____	2
Poultry	_____	83 lbs.	_____	22
Eggs	_____	96 doz.	_____	31
Potatoes	_____	2 bu.	_____	3
Vegetables & fruit	_____		_____	12
Farm fuel	_____		_____	6
Total			_____	\$290

HOUSEHOLD AND PERSONAL EXPENSES AND RECEIPTS

Household and personal accounts are important if the family is to manage its financial affairs wisely. The household and personal expenses and receipts are presented in Table 5. These farmers spent an average of \$236 per month for family living in addition to the food, fuel and housing furnished by the farm.

Table 5. Household and Personal Expenses for Those Farms Which Kept Complete Accounts of These Expenses. 1955

Items	Your Farm	Average of all farms	Most profitable farms	Least profitable farms
Number of persons - family	_____	4	5	4
Number of adult equiv. - family	_____	3	3	3
Food and meals bought	_____	\$ 729	\$ 788	\$ 660
Operating and supplies	_____	266	340	187
Furnishings and equipment	_____	227	213	243
Clothing and clothing materials	_____	219	230	167
Personal care, personal spending	_____	116	154	71
Education, recreation & development	_____	155	149	158
Gifts and special events	_____	98	108	92
Medical care and health insurance	_____	268	271	315
Church, welfare	_____	121	202	60
Personal share of auto & tr. exp.	_____	110	94	75
Operator's share of upkeep on dwell.	_____	12	8	9
Household share of elec. & tel. exp.	_____	74	80	80
Total cash living expense	_____	2395	2637	2117
H.H. & pers. share of new auto	_____	61	144	6
New dwelling	_____	119	20	344
Taxes and other deductions	_____	88	172	38
Life insurance	_____	161	162	203
Other savings and investments	_____	8	6	4
Total household & pers. cash exp.	_____	2832	3141	2712
Total family living from the farm	_____	290	354	251
Total cash exp. & perquisites	_____	3122	3495	2963
Receipts:				
Return to capital & family labor	_____	3339	4919	2023
Income from investments	_____	34	17	30
Sale of outside investments	_____	---	---	---
Other personal income	_____	278	230	296

NET WORTH

A net worth statement includes a listing of all the assets and liabilities as of a given date. The difference between the farmer's total assets and his liabilities is his net worth. A net worth statement is presented in Table 6. Both the farm and personal assets and liabilities are included.

The difference between the operator's net worth at the beginning and at the end of the year shows the gain in net worth. It represents the financial progress that has been made during the year.

Table 6. Net Worth Statement for Those Farmers Who Kept a Complete Record of All Assets and Liabilities. 1955 (Operator's share)

Items	Your farm		Ave. of 49 farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
Total acres in farm			197	
Total farm capital			33478	34145
Stocks and bonds			352	332
Life insurance			722	800
Notes & accounts receivable			11	55
Shares in mktg. organizations			111	119
Outside real estate			155	250
Cash on hand & in bank			915	1215
Household furnishings & clothing			1585	1637
Pers. share of auto & truck			458	653
Farm dwelling			1784	1918
Total non-farm assets			6093	6979
Total Assets			39571	41124
Federal Land Bank mortgage			517	486
Other mtges. on farm operated			643	1231
Loans on other real estate			2950	3150
P.C.A. loans			112	93
F.E.A. chattel mortgages			288	199
Sealed grain			465	310
Other chattel mortgages			1198	1108
Miscellaneous			--	71
Notes payable			1466	1610
Accounts payable			188	359
Total liabilities			7827	8617
Farmer's Net worth			31744	32507
Change in net worth				763

EXPLANATION OF "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, working on crops and productive livestock at an average efficiency. The number of work units for each class of livestock and each acre of crop are presented in Table 7. Days of work off the farm for pay are not included in this report.

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	.7 per a.
Other dairy & du. pur. cattle	3.5 per an. unit*	Corn husked	1.1 per a.
Beef breeding herd	3.5 per an. unit*	Corn, silage	1.7 per a.
Feeder cattle	.25 per 100 #	Corn, fodder	1.0 per a.
Sheep - farm flock	1.5 per an. unit*	Alfalfa hay	.9 per a.
Sheep - feeders	.3 per 100 #	O. hay crops	.6 per a.
Hogs	.2 per 100 #	Legume seed	1.0 per a.
Hens	20.0 per 100 hens	Grass silage	1.0 per a.
Potatoes	3.8 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 lbs. of turkeys produced.

RANGE IN EARNINGS

Every study of farm earnings shows a wide variation in earnings among farmers in a given year (figure 1). The average labor earnings of those farmers ranking in the upper 30 per cent of the range according to earnings was \$5154 and of those in the lower 30 per cent was \$1320. This is a range of \$6474 between the average earnings of these two groups. Some of the causes for these differences in earnings, such as weather, may be beyond the control of the individual farmer. Other factors are within his control. The more important management factors affecting earnings are as follows: These factors vary from year to year in their relative influence on earnings. 1/

1. Crop Yields
2. Choice of Crops
3. Return from Livestock
4. Amount of Livestock
5. Size of Business
6. Work Units per Worker
7. Control over Expenses

Operator's
Earnings

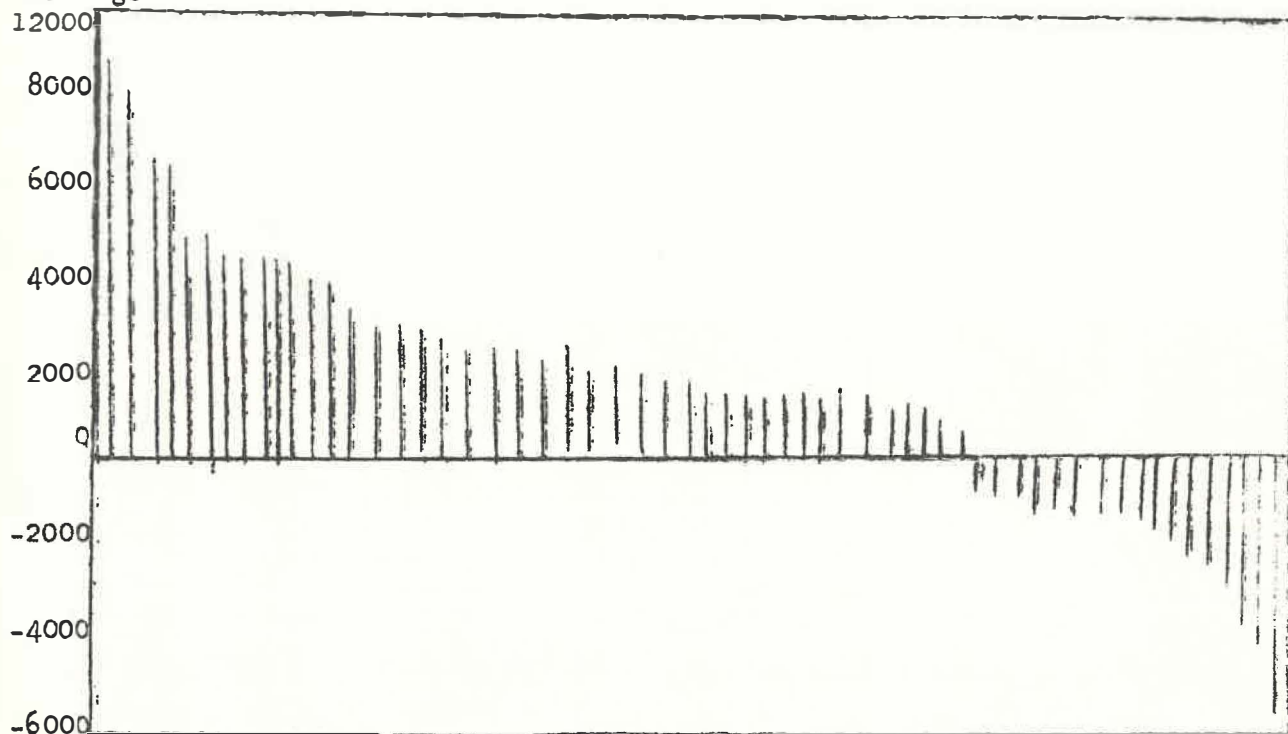


Fig. 1 Range in operator's earnings.
Each line represents the earning of one farmer.

1/ See Pond, G.A. "Why Farm Earnings Vary." Minn. Agri. Expt. Sta. Bul. 386, June, 1945
Nodland, T. R. and Pond, G. A. "Some Factors Affecting the Earnings of Farmers in Southwestern Minnesota." Univ. of Minn., Dept. of Ag. Econ., Report No. 219, November, 1954.

Table 8. Measures of Farm Organization and Management Efficiency, 1955

Measures used in chart on page 11	Your farm	Average of 59 farms	19 most profitable farms	19 least profitable farms
Labor earnings	\$ _____	\$1859	\$5154	\$-1320
(1) Crop yields*	_____	100	107	89
(2) Per cent tillable land in high return crops**	_____	65.7	62.7	67.2
(3) Ret. for \$100 feed to prod. Livestock***	_____	100	112	88
(4) Prod. livestock units per 100A****	_____	32.5	32	27.8
(5) Size of business - work units	_____	335	356	317
(6) Work units per worker	_____	238	261	223
(7) Pow., Mach., equip., & bldg. exp. per work unit	_____	14.24	11.96	18.95

Items related to some of the above measures:

(3) Index of ret. for \$100 feed from:				
Dairy cattle (see pages 15 & 16)	_____	100	106	58
Beef cattle-breeding herd(see p.18)	_____	100	---	84
Hogs (see page 17)	_____	100	103	85
Sheep - farm flock (see p. 20)	_____	100	117	112
Chickens (see page 19)	_____	100	110	92
(4) Number of animal units	_____	54.6	51	59.4
(5) Work units on crops	_____	97	107	105
Work units on productive livestock	_____	231	239	204
Work Units from other productive work	_____	8.8	9.7	8.1
(6) Number of family workers	_____	1.2	1.2	1.2
Number of hired workers	_____	.2	.3	.3
Total number of workers	_____	1.4	1.5	1.4
(7) Power expense per work unit	\$ _____	\$ 7.78	\$6.52	\$10.17
Crop mach. exp. per work unit	_____	3.10	1.73	4.55
Livestock equip. exp. per work unit	_____	.53	.53	.40
Bldgs. & fencing exp. per work unit	_____	2.83	3.13	3.83

* Given as percentage of the average.

** Crops are marked in table 9 as (A), (B), (C), and (D). All of acres in (A) crops, one half of acres in (B) crops, and one fourth of acres in (C) crops are used in calculating per cent of tillable land in high return crops.

*** An index weighted by the animal units of livestock.

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

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 59 farms included in this summary are located between the solid lines across the center of this page.

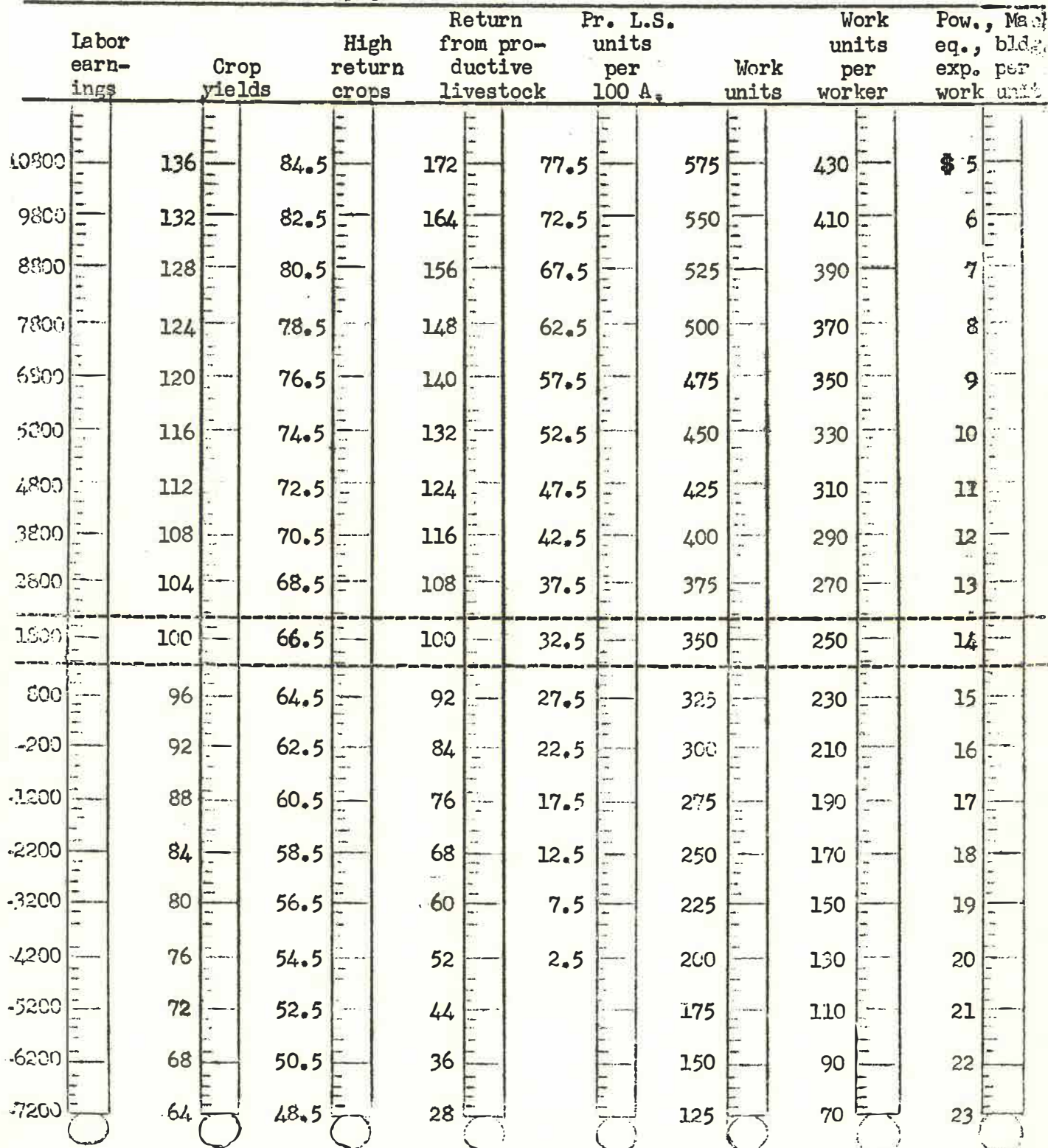


Table 10. Crop Yields Per Acre, 1955

Crop	Your Farm	Average of farms growing each crop
Canning peas, dollars	_____	44.21
Flax, bu.	_____	17.5
Barley, bu.	_____	44.4
Wheat, bu.	_____	31.3
Oats, bu.	_____	51.9
Rye, bu.	_____	24.0
Soybeans, bu.	_____	25.3
Corn grain, bu.	_____	65.8
Sweet corn, tons	_____	2.8
Corn silage, tons	_____	9.9
Alfalfa hay, tons	_____	2.7
Legumes for seed, lbs.	_____	71.1
Red or alsike clover hay, tons	_____	2.8
Red clover silage, tons	_____	4.5
Alfalfa silage, tons	_____	4.7
Oats silage, tons	_____	7.0
Other hay, tons	_____	6.4
Soybean hay, tons	_____	20.0
Brome or timothy hay, tons	_____	1.3

POWER AND MACHINERY EXPENSES

Power and machinery expense per crop acre is an indication of the economy with which capital is invested in these items. The crop acres per farm ranged from 61 to 334 with an average of 164 (Table 11). The expenses are high on the farms with a small acreage. In some cases, low expenses for labor might be offset by high power and equipment costs. The farmer is interested in operating at the lowest cost for power, machinery and labor combined.

Table 11. Power and Machinery Expenses Per Crop Acre, 1955

Items	Your Farm	Average of 58 Farms	19 most profitable farms	19 least profitable farms
Crop acres per farm	_____	164	172	172
Tractor expense per crop acre	_____	\$6.59	\$5.44	\$7.47
Crop & gen. mach. exp. per crop acre	_____	\$6.36	\$5.36	\$7.04

AMOUNT OF LIVESTOCK

The farmers cooperating in this study are predominantly livestock farmers. 44% of these farmers maintained dairy cattle, 63% kept poultry, 22% raised sheep, 29% kept beef cattle and 85% raised hogs.

Table 12. Amount of Livestock. 1955

	Your farm	Average of 59 farms	19 most profitable farms	19 least profitable farms
Number of milk cows	_____	8.1	11.0	6.2
Number of other dairy cattle	_____	8.6	11.0	6.9
Number of beef cattle(incl. Feeders)	_____	14.0	7.1	21.0
Number of ewes	_____	6.3	1.8	9.6
Number of hens	_____	188.3	136.8	272.9
Litters of pigs raised	_____	18.9	18.8	18.8
Pounds of hogs produced	_____	29928.0	30177.0	27335.0

TOTAL FEED COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES

The total "return over feed costs" for each class of livestock is shown in Table 13. 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 total return is the same as the returns and net increases shown on page 5. The value of milk consumed by calves is included in the total returns from dairy or dual purpose cows and in the total feed cost for other dairy or other dual purpose cattle. The value of milk consumed by calves is not included in either the total returns or the feed cost of "all dairy" or "all dual purpose" cattle. The return over feed is not a net return, but rather the amount available from the gross income, after paying the feed bill, to cover the outlay for hired labor, power, equipment, taxes, insurance, interest and veterinary bills and to provide a return for the use of family labor and capital.

Table 13. Total Feed Costs and Returns From Your Livestock Enterprises, 1955

	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, However, the proportion of the total cost represented by feed varies considerably 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. Consequently, it is necessary to secure a relatively higher return over feed from dairy cattle and poultry than from the other livestock enterprises in order to be able to cover all the costs other than feed.

DAIRY AND DUAL PURPOSE CATTLE

The quantity of feed consumed, value of feeds and returns from dairy cattle are presented in Tables 14, 15, and 16. The return over feed cost per cow varied from \$19.83 to \$372.00 among the 26 herds covered by this report. Some of the important factors that affected the return over feed were:

1. Rate of production (pounds butterfat per cow)
2. Price received for butterfat
3. Feeding efficiency
4. Quality of ration
5. Economy of ration (Feed cost per pound butterfat)

Table 14. Factors of Cost and Returns from Dairy Cows. 1955

Items	Your Farm	Average of 26 farms	8 farms highest in butterfat per cow	8 farms lowest in butterfat per cow
Pounds of butterfat per cow	_____	301.6	374.4	221.8
Price rec. per lb. B.F. sold (cents)	_____	.87	.88	.84
Feed per cow, lbs.:				
Corn	_____	2021.7	2440.4	1683.5
Small grain	_____	1083.8	960.8	654.4
Commercial feed	_____	398.6	523.4	216.1
Legume hay	_____	5087.1	5479.4	4339.8
Other hay	_____	653.9	319.2	1805.9
Fodder and stover	_____	20.9	_____	_____
Total concentrates	_____	3504.1	3924.6	2554.0
Total dry roughage	_____	5761.9	5798.6	6145.7
Silage	_____	7044.9	6860.0	6202.2
Feed cost per cow:				
Concentrates	_____	\$ 84.81	\$ 99.10	\$ 58.13
Roughages	_____	68.27	66.54	57.96
Pasture	_____	10.77	12.11	11.07
TOTAL FEED COSTS	_____	163.85	177.75	127.16
Value of produce per cow:				
B. F. sales	_____	259.66	337.85	179.86
Dairy produce used in house	_____	8.84	8.65	11.70
Milk fed to livestock	_____	13.45	13.61	20.67
Net increases in value of cows	_____	11.25	7.26	7.55
TOTAL VALUE PRODUCED	_____	293.20	367.37	219.78
RETURNS ABOVE FEED COST PER COW	_____	129.35	189.62	92.62
RETURNS FOR \$100 OF FEED	_____	187.00	218.00	177.00
Feed cost per lb. B.F. (cents)	_____	.56	.47	.59
Number of cows	_____	16.4	20.1	14.1

Table 15. Feed costs and Returns from Other Dairy and Dual Purpose Cattle 1955

Items	Your Farm	Average of 26 farms	8 farms highest in butterfat per cow	8 farms lowest in butterfat per cow
Feed per head, lbs.:				
Concentrates	_____	1164.6	108.7	1030.5
Hay and fodder	_____	3920.1	2762.7	6647.4
Silage	_____	2432.9	2778.3	1881.8
Skim milk	_____	42.5	29.3	108.9
Whole milk	_____	125.2	21.9	88.6
Feed cost per head:				
Concentrates	\$ _____	\$ 23.18	\$ 24.32	\$ 24.19
Roughages	_____	28.46	31.80	22.82
Milk	_____	7.97	8.67	5.94
Pasture	_____	5.04	6.14	5.04
TOTAL FEED COSTS PER HEAD	_____	64.65	70.93	57.99
Net inc. in value of other cattle	_____	58.62	43.58	49.11
RETURNS ABOVE FEED COST PER HEAD	_____	-6.03	-27.35	-8.88
RETURNS FOR \$100 OF FEED	_____	101.00	78.00	91.00
Number of head of other cattle	_____	17.5	21.3	16.3

Table 16. Feed Costs and Returns from All Dairy and Dual Purpose Cattle, 1955

Items	Your Farm	Average of 26 farms	8 farms highest in butterfat per cow	8 farms lowest in butterfat per cow
Feed per animal unit, lbs.:				
Concentrates	_____	3186.8	3261.2	2352.6
Hay and fodder	_____	6338.5	5610.4	8254.3
Silage	_____	6485.1	6439.3	5212.7
TOTAL FEED COSTS PER ANIMAL UNIT	\$ _____	\$ 147.91	\$ 157.95	\$ 118.08
Value of produce per animal unit:				
Dairy products	_____	184.78	234.00	134.05
Net inc. in val. of dairy cattle	_____	54.16	39.60	45.45
TOTAL VALUE PRODUCED	_____	238.94	273.60	179.50
RETURNS ABOVE FEED PER ANIMAL UNIT	\$ _____	91.03	115.65	61.42
RETURNS PER \$100 OF FEED	\$ _____	168.00	183.00	154.00
Animal units of cattle	_____	25.4	30.8	22.4

Table 17. Feed Costs and Returns from Hogs, 1955

Items	Your Farm	Average of 50 farms	15 farms highest in returns above feed	15 farms lowest in returns above feed
Feed per cwt. hogs produced, lbs.:				
Corn	_____	296.7	245.2	360.9
Small grain	_____	67.5	53.1	87.2
Commercial feeds	_____	47.0	35.1	65.0
Total concentrates	_____	411.2	333.4	513.1
Skim milk, buttermilk & whey	_____	14.4	18.1	22.0
Alfalfa hay	_____	6.1	3.0	12.2
Feed cost per cwt. hogs produced:				
Concentrates	\$ _____	\$10.33	\$ 8.34	\$12.76
Skim milk, buttermilk and whey	_____	.14	.05	.40
Pasture	_____	.09	.10	.08
Alfalfa hay	_____	.06	.03	.11
TOTAL FEED COSTS	_____	\$10.62	\$ 8.52	\$13.35
Net increase in value per cwt. hogs \$ _____		11.60	12.42	11.33
prod.				
RETURNS ABOVE FEED COST PER CWT.				
HOGS PRODUCED	\$ _____	\$.98	\$ 3.90	\$-2.02
RETURNS FOR \$100 OF FEED	\$ _____	\$115.00	\$150.00	\$ 86.26
Price received per cwt. hogs sold	\$ _____	\$ 15.09	\$ 14.44	\$ 16.44
No. of spring litters raised	_____	12.5	17.6	11.2
No. of fall litters raised	_____	8.4	9.2	8.8
Total no. of litters raised	_____	20.9	26.8	20.0
No. of pigs born per litter	_____	8.3	8.5	8.5
No. of pigs weaned per litter	_____	6.4	6.9	6.4
Pounds of hogs produced	_____	33617	44825	30585

Table 28. Feed Costs and Returns from Beef Cattle, 1955

Items	Your farm	Average of all farms
<u>Beef breeding herd: No. of farms</u>		<u>5</u>
Feeds per animal unit, lbs.:		
Concentrates	_____	991.9
Legume	_____	5034.5
Other hay	_____	---
Fodder and stover	_____	---
Silage	_____	6026.4
Feed Cost per animal unit:		
Concentrates	\$ _____	20.51
Roughages	_____	57.19
Pasture	_____	19.14
TOTAL FEED COST	_____	<u>96.84</u>
Value of produce per animal unit.		
Dairy products	\$ _____	1.08
Net increase in value of animal	_____	75.71
TOTAL VALUE PRODUCED	_____	<u>76.79</u>
RETURNS ABOVE FEED COST PER ANIMAL UNITS	\$ _____	\$ <u>-20.05</u>
RETURNS FOR \$100 OF FEED	\$ _____	\$ 92.31
Number of cows and herd bulls	_____	20.7
Number of animal units in the herd	_____	26.9
<u>Feeding Cattle: No. of farms</u>		<u>12</u>
Feeds per cwt. beef produced, lbs.:		
Corn	_____	594.3
Small grain	_____	8.6
Commercial feeds	_____	60.7
Legume hay	_____	218.4
Other hay	_____	40.2
Fodder and stover	_____	---
Total concentrate	_____	663.6
Total hay and fodder	_____	258.6
Silage	_____	375.8
Feed cost per cwt. beef produced		
Concentrates	\$ _____	15.55
Roughages	_____	3.04
Pasture	_____	.52
TOTAL FEED COSTS	_____	<u>19.11</u>
Net increase in value of feeders	_____	22.10
RETURNS ABOVE FEED COST PER CWT. BEEF PROD.	_____	<u>2.99</u>
RETURNS FOR \$100 OF FEED	\$ _____	\$125.00
Price paid per cwt. beef bot.	\$ _____	17.17
Price rec'd for feeder cattle sold	\$ _____	19.56
Number of animal units	_____	41.2
Pounds of beef produced	_____	34813

Table 22. Summary of Farm Earnings by Tenure, 1955 (Operator's Share)

Items	Your farm	21 owners	14 part owners	22 renters
FARM RECEIPTS				
Dairy and dual-purpose cattle		\$ 429	\$ 178	\$ 630
Dairy products		2395	1024	2350
Beef cattle (including feeders)		4412	1041	3758
Hogs		4600	4562	3549
Sheep and wool (including feeders)		189	391	378
Horses		2	16	---
Poultry (including turkeys)		112	414	87
Eggs		1058	844	622
Corn		3650	2346	1672
Small grain		550	11	65
Other crops		1370	791	553
Machinery and equipment sold		223	147	157
Income from work off the farm		97	91	173
Miscellaneous		174	63	124
(1) Total farm sales		19261	11919	14118
(2) Increase in farm capital		1564	226	882
(3) Family living from the farm		270	312	249
(4) Total farm receipts (1)+(2)+(3)		21095	12457	15249
FARM EXPENSES				
Dairy and dual-purpose cattle bought		35	9	153
Beef cattle bought (incl. feeders)		1983	507	2236
Hogs bought		489	221	283
Sheep bought (including feeders)		75	167	240
Horses bought		---	---	---
Poultry bought (including turkeys)		105	126	62
Misc. livestock expense		301	289	333
Feed bought		3074	2013	2171
Fertilizers		557	400	316
Other crop expense		590	535	380
Custom work hired		739	486	422
Gas, oil and grease bought (farm share)		867	691	550
Rep. & op. tractor, truck, auto (farm share)		447	298	315
Rep. and upkeep of real estate		259	130	132
Rep. & upkeep of crop & gen. mach.		339	156	209
Rep. & upkeep of livestock equip.		90	54	92
Wages of hired labor		946	162	215
Electricity expense (farm share)		211	119	159
Real estate & pers. prop. taxes		587	278	68
Cash rent		---	199	663
Gen. farm exp. and telephone exp.		302	150	190
Interest paid		566	159	147
Total cash operating exp.		12562	7149	9336
Mech. power bought (farm share)		1520	299	735
Crop & gen. mach. bought		763	409	622
Livestock equip bought		204	86	92
New real estate improvements		428	262	152
(5) Total farm purchases		15477	8205	10937
(6) Decrease in farm capital		1383	1614	1075
(7) Interest on farm capital		2891	1392	1381
(8) Unpaid family labor		166	113	25
(9) Board furnished hired labor		70	39	66
(10) Total farm expenses (5)+(6)+(7)+(8)+(9)		19988	11363	13484
(11) Labor earnings (4) - (10)		1107	1094	1765
(12) Ret. to cap. & fam. lab. (7)+(8)+(11)		4164	2599	3171

