

1968 Annual Report

FARM MANAGEMENT PROGRAM NORTHEASTERN MINNESOTA

In Cooperation with

**Minnesota Department of Education
Vocational Division**

and

**Agricultural Education Department
University of Minnesota
Institute of Agriculture**

and

**Duluth Area Institute of Technology
Duluth, Minnesota**

April, 1969

1968 REPORT OF THE VOCATIONAL AGRICULTURE FARM MANAGEMENT
PROGRAM IN NORTHEASTERN MINNESOTA

Rodger Palmer -- Vocational Agriculture Program Coordinator

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INTRODUCTION

The Duluth Area Institute of Technology, in cooperation with the University of Minnesota and the Vocational Division of the Minnesota State Department of Education, is charged with the responsibility for operation and maintenance of the Vocational Agriculture Farm Management Program in Northeastern Minnesota. This 1968 report represents the thirteenth annual report for this area.

The main purposes of the program of farm record analysis are; (1) To aid individual farmers in the study of their farm business through analysis reports; (2) To provide case study materials that can be used by farmers and farm groups in the study of farm management problems; (3) To provide information related to the adaptability and success of various farm enterprises in the area; (4) To provide a basis for determining the possibilities of encouraging or discouraging new agricultural enterprises for the area; (5) To secure information on farm management practices that tend to increase farm income; and (6) To provide a profile of agricultural production and income in the area.

The report and analysis of records were completed under the direction of Rodger Palmer, Area Vo Ag Coordinator at the Duluth Area Institute of Technology. Clerical assistance was provided by Judy Anderson, Barbara Floodstrom, and Dair Nichols, and his clerical class.

Directing locally in a supervisory capacity were: Dr. L.V. Rasmussen, Superintendent of Duluth Public Schools and Mr. Robert Bergstrom, Director of the Duluth Area Institute of Technology, and Mr. Wayne Little, Assistant Director.

Cooperating agencies were represented by: Mr. G. R. Cochran and Mr. Robert Van Tries of the Vocational Division, State Department of Education, and Dr. Milo J. Peterson and Dr. Edgar Persons of the Agricultural Education Department of the University of Minnesota. Special acknowledgement is made of the excellent professional assistance rendered by Dr. Truman Nodland of the University Agricultural Economics Department.

We wish to express also, our appreciation to Mr. Arthur Vieira, Printing Instructor, Duluth Public Schools and to his class for their help in the publishing of this report.

Special thanks are also extended to William Guelker, Vo Ag Coordinator from Staples. Preliminary analysis work was done at Staples again this year on a number of account books from the Staples area.

Special thanks also, to Robert Anderson, former Vo Ag Coordinator at Duluth, for his help in the completion of this report.

This report deals with farmers enrolled in adult programs of schools and county agent programs shown below. Fifty-five (55) records were submitted for analysis with averages of forty-eight (48) included in this report. Several books came in too late for the analysis.

1968 Records for analysis were received from:

Ed Takala, Vo Ag Instructor, Embarrass
Martin Klingenberg, Vo Ag Instructor, Park Rapids
Albert Wanous, Adult Ag Instructor, Pine City
Chris Back, Adult Ag Instructor, Staples
Lemmen Maley, Adult Ag Instructor, Staples
Ken Ostlund, Adult Ag Instructor, Bagley
Bill Ladwig, Adult Ag Instructor, Eagle Bend
Robert Borchardt, Vo Ag Instructor, Baudette

County Agents:

John Eix, Park Rapids, Hubbard
Otto Lee, Baudette, Lake of the Woods

The cooperating centers submitted records from eight (8) counties for analysis with some centers having participating farmers in more than one county. The number of farm records submitted from each county is shown below:

Becker	3	Lake of Woods	3
Cass	3	Pine	12
Clearwater	7	St. Louis	2
Hubbard	10	Todd	15
		Total	<u>55</u>

Records this year, for the 5th year, were analyzed by electronic data processing with the work being done by Agricultural Records Cooperative at Madison, Wisconsin.

Very little change was made in the analysis form this year. The electronic processing is near perfect. The two main sources of errors in arriving at an analysis for a farmers account book fall in these areas; (1) Improper copying at the record center from the book to the computer work sheets, and (2) Improper information or missing information in the account book.

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

FARM INVENTORIES

The average capital investment per farm varied from \$7500 to \$166,000. The average investment for all farms included in this report and for the high and low groups operators labor earnings is shown in Table 1.

FARM EARNINGS

Operators earnings are a measure of relative financial success of a farmer as compared with other farmers and represents the returns above all farm expenses and a charge for the use of farm capital and family labor.

There are two methods of computing labor earnings. Tables 2A and 2B show the earnings statement on a cash basis while Table 3 shows the earnings on an enterprise or accrual basis. The principal difference in the two statements is in the method of handling the net increase or decrease in 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.

NON-FARM INCOME

Numerous Northeastern Minnesota farmers, in addition to their regular farm income, are earning additional income in full or part-time work not related to farming. Records submitted for this report cannot be considered as completely reliable in respect to non-farm income as this entry can be frequently omitted from the farm account books. However 24 farms in the report showed outside income ranging from a low of \$6 to a high of \$2506 per farm involved. Non-farm income is not included in this report as a part of farm labor earnings.

FINANCIAL POSITION OF ANNUAL REPORT

The annual report from the Duluth area has been financed in the past, with exception of one year, by the Iron Range Resources and Rehabilitation Commission. They chose not to fund this report in 1968.

We are now in the position of having to charge each cooperating farmer for his analysis and annual report. The charge involves processing costs at the Agricultural Records Cooperative, clerical help at the records center, supplies and materials used in making up the annual report and the cost of printing the report.

One-third of the original projection for number of records in this report were submitted for analysis. It was unfortunate that the other two-thirds who did not submit records could not have been notified earlier of the pending situation. However, we are confident that the number of cooperating farmers will grow in the coming years under the instruction of the many fine Vo Ag Instructors and County Agents serving them.

TABLE 1 SUMMARY OF FARM INVENTORIES, 1968

(Average 48 Farms)

1	Size of Farm - Total Acres	383.1	
2	- Tillable Acres	209.2	
3	Work Units - Crops	94.19	
4	- Livestock	249.02	
5	- Other	9.25	
6	TOTAL SIZE OF BUSINESS IN WORK UNITS	352.46	
7	Number of Workers	1.5	
7A	Farm Capital Investment Per Worker	28682	
		Jan. 1	Dec. 31
8	PRODUCTIVE LIVESTOCK		
9	Dairy Cows	6065	6070
10	Other Dairy Cattle	3009	3306
11	Beef Breeding Cattle	1068	1213
12	Beef Feeder Cattle	190	486
13	Hogs	429	281
14	Sheep (incl. feeders)	46	64
15	Poultry (incl. turkeys)	30	24
16	Other Productive Livestock		
17	TOTAL PRODUCTIVE LIVESTOCK	\$ 10837	11444
18	Crop, Seed and Feed	4720	5358
19	POWER, MACHINERY AND EQUIPMENT		
20	Auto and Truck (farm share)	879	1081
21	Power and Machinery	5948	6528
22	Livestock Equipment	1833	2107
23	TOTAL POWER, MACHINERY & EQUIPMENT	\$ 8660	9716
24	Land	14028	14472
25	Buildings-Fences-etc.	6611	7085
26	TOTAL FARM CAPITAL	\$ 44856	48075

TABLE 1 (continued)

8. Most Profitable

1	Size of Farm - Total Acres	375.9	
2	- Tillable Acres	244.9	
3	Work Units - Crops	114.26	
4	- Livestock	332.69	
5	- Other	18.05	
6	TOTAL SIZE OF BUSINESS IN WORK UNITS	465.00	
7	Number of Workers	1.6	
7A	Farm Capital Investment Per Worker	344.12	
		Jan 1	Dec. 31
8	PRODUCTIVE LIVESTOCK		
9	Dairy Cows	8725	8318
10	Other Dairy Cattle	3657	4024
11	Beef Breeding Cattle	2460	3011
12	Beef Feeder Cattle		1173
13	Hogs	342	168
14	Sheep (incl. feeders)		
15	Poultry (incl. turkeys)		
16	Other Productive Livestock		
17	TOTAL PRODUCTIVE LIVESTOCK	\$ 15184	16694
18	Crop, Seed and Feed	11030	11480
19	POWER, MACHINERY AND EQUIPMENT		
20	Auto and Truck (farm share)	620	1131
21	Power and Machinery	10533	11879
22	Livestock Equipment	4150	4081
23	TOTAL POWER, MACHINERY & EQUIPMENT	\$ 15303	17091
24	Land	25901	26060
25	Building-Fences-etc.	11014	10918
26	TOTAL FARM CAPITAL	\$ 78432	82171

TABLE 1 (continued)

8 Least Profitable

1	Size of Farm - Total Acres	340.6	
2	- Tillable Acres	150.0	
3	Work Units - Crops	59.43	
4	- Livestock	163.86	
5	- Other	2.35	
6	TOTAL SIZE OF BUSINESS IN WORK UNITS	230.64	
7	Number of Workers	1.2	
7A	Farm Capital Investment Per Worker	27921	
		Jan 1	Dec. 31
8	PRODUCTIVE LIVESTOCK		
9	Dairy Cows	3919	3970
10	Other Dairy Cattle	2456	2343
11	Beef Breeding Cattle	1077	1226
12	Beef Feeder Cattle		
13	Hogs	295	317
14	Sheep (incl. feeders)	5	86
15	Poultry (incl. turkeys)	2	
16	Other Productive Livestock		
17	TOTAL PRODUCTIVE LIVESTOCK	\$ 7754	7948
18	Crop, Seed and Feed	2393	2691
19	POWER, MACHINERY AND EQUIPMENT		
20	Auto and Truck (farm share)	1348	1200
21	Power and Machinery	4878	4914
22	Livestock Equipment	1085	1363
23	TOTAL POWER, MACHINERY AND EQUIPMENT	\$ 7311	7477
24	Land	10408	10771
25	Buildings-Fences-ect.	5922	5657
26	TOTAL FARM CAPITAL	\$ 33788	34544

TABLE 2A WHOLE FARM SUMMARY OF CASH RECEIPTS - 1968		Average of 46 Farms	8 High	8 Low
1	SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2	Dairy Cows	\$ 1789	3244	624
3	Dairy Products	12420	21564	6622
4	Other Dairy Cattle	1038	1756	1265
5	Beef Breeding Cattle	420	631	785
6	Beef Feeder Cattle	189	249	
7A	Hogs Complete	56	58	
7B	Hogs Finishing	24		
7C	Hogs Producing Weaning Pigs	616	453	702
8A	Sheep and Wool, Farm Flock	70		6
8B	Sheep and Wool, Feeder Lambs			
9	Chickens (Incl. Hens and Broilers)	19		
10	Turkeys			
11	Eggs	128		
12	Other Productive Livestock			
12A	TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$16769	27955	10004
13	SALE OF CROPS			
14	Corn	37	90	
15	Soybeans, Flax, Sunflowers	125	57	
16	Wheat, Oats, Barley, Rye	735	2307	70
17	Potatoes, Sugar Beets, Canning & Other Crops A&B	1		6
18	Hay, Silage and Other Crops	651	2609	113
19	Diverted Acre Payment	134		55
19A	TOTAL SALES FROM CROPS	\$ 1683	5063	244
20	Capital Assets Sold	64	16	30
21	Gas Tax Refund	95	119	78
22	Income From Work Off The Farm	333	641	51
23	Patronage Refunds	86	94	26
24	Miscellaneous Farm Income	124	50	154
25	TOTAL FARM SALES	\$19154	33938	10587
26	Increase in Farm Capital	3427	3781	1295
27	Family Living From The Farm	380	262	463
28	TOTAL FARM RECEIPTS (25)+(26)+(27)	\$22961	37981	12345
29	Adjusted Total Farm Sales (25)-(20)	19090	33922	10557
30	Total Cash Farm Operating Expense	10119	16302	6496
31	Net Cash Operating Income	\$ 8971	17620	4061

TABLE 2B - WHOLE FARM SUMMARY OF CASH EXPENSE - 1968		Average of Farms	8 High	8 Low
1	PURCHASE OF LIVESTOCK			
2	Dairy Cows	\$ 200	147	
3	Other Dairy Cattle	160	20	21
4	Beef Breeding Cattle	59	50	38
5	Beef Feeder Cattle	130	745	
6A	Hogs Complete	2		
6B	Hogs Finishing	1		
6C	Hogs Producing Weaning Pigs	27		17
7A	Sheep, Farm Flock	9		46
7B	Sheep, Feeder Lambs			
8	Chickens (incl. hens and broilers)	16		4
9	Turkeys			
10	Other Productive Livestock			
11	Miscellaneous Livestock Expense	727	1556	480
12	Feed Bought	3049	4550	1914
13	Fertilizer	800	1710	313
14	Chemicals	140	267	22
15	Other Crop Expense	439	631	393
16	Custom Work Hired	903	1356	700
17	Repair + Upkeep of Livestock Equip.	101	153	47
18	Repair + Upkeep of Farm Real Estate	186	412	169
19	Gas, Oil, Grease Bought (farm share)	835	1013	694
20	Repair + Oper of Mach, Tractor, Truck, Auto (F.S.)	902	1490	776
21	Wages of Hired Labor	451	674	129
22	Personal Property + Real Estate Taxes	381	693	269
23	General Farm Expense	264	389	158
24	Telephone Expense (farm share)	69	88	64
25	Electricity Expense (farm share)	268	358	242
26	TOTAL CASH OPERATING EXPENSE	\$ 10119	16302	6496
27	Power, Crop and General Mach Bought (farm share)	2131	3317	1360
28	Livestock Equipment Bought	626	421	485
29	New Real Estate + Improvement	1346	1521	597
30	TOTAL FARM PURCHASES (26) THRU (29)	\$ 14222	21561	8938
31	Decrease In Farm Capital	325	43	540
32	Interest On Farm Capital	2311	4015	1708
33	Unpaid Family Labor	613	758	477
34	Labor Charge For Partners + Other Operators	98		
35	Board Furnished Hired Labor	44	96	15
36	TOTAL FARM EXPENSE (30) THRU (35)	\$ 17613	26473	11678
37	Labor Earnings (whole farm) (2A/28)-(36)	\$ 5350	11507	668
38	Number of Operators	1	1	1

TABLE 3 - ENTERPRISE STATEMENT - 1968		Average of 46 Farms	8 High	8 Low
1 RETURNS AND NET INCREASES				
2 PRODUCTIVE LIVESTOCK				
3	Dairy Cattle	\$ 12651	21708	6821
4	Other Dairy Cattle	3143	5358	2271
5	Beef Breeding Cattle	700	1150	908
6	Feeder Cattle	113	267	
7	Complete Hog Enterprise	21		
8	Hog Finishing Enterprise	2		
9	Producing Weaning Pigs	519	358	719
10	Farm Flock of Sheep	79		40
11	Feeder Lambs			
12	Chickens (incl. hens and broilers)	129		7
13	Turkeys			
14	Other Productive Livestock			
15	ALL PRODUCTIVE LIVESTOCK	\$ 17357	28841	10766
16	Value of Feed Fed to Livestock	8345	12647	6042
17	Return Over Feed From Livestock	9012	16194	4724
18	Crop, Seed and Feed	6055	10853	3709
19	Income From Labor Off the Farm	193	361	47
20	Cooperative Patronage Refunds	86	94	26
21	Miscellaneous Farm Income	124	50	154
22	TOTAL RETURNS AND NET INCREASES	\$ 15470	27552	8660
23 EXPENSES AND NET DECREASES				
24	Truck and Auto (farm share)	\$ 1114	1502	1200
25	Tractors and Crop Machinery	2225	2903	2075
26	Electricity	268	358	242
27	Livestock Equipment	516	643	255
28	Buildings, Fences and Tiling	873	1857	666
29	Bare Land	(-155)	13	
30	Misc. Livestock Expense	727	1556	480
31	Labor	1439	2027	875
32	Labor Charge for Other Operator (s)	98		
33	Property Tax	381	693	269
34	General Farm Expense and Telephone	333	477	222
35	Interest on Farm Capital	2311	4015	1708
36	TOTAL EXPENSES AND NET DECREASES	\$ 10130	16044	7992
37	Labor Earnings	\$ 5350	11508	668
38	Number of Farm Operators	1	1	1

TABLE 4 - HOUSEHOLD EXPENSE - 1968		Average of 35 Farms	8 High	7 Low
1.	Number of Persons - Family	6	6	6
2.	Number of Adult Equivalent - Family	3.8	4.0	4.1
3.	Church and Welfare	\$ 219	216	201
4.	Medical Care and Health Insurance	545	562	632
5.	Food and Meals Bought	1047	1252	920
6.	Operating Expense and Supplies	300	430	186
7.	Furnishings and Equipment	334	475	188
8.	Clothing and Clothing Materials	335	518	257
9.	Personal Care, Personal Spending	103	131	38
10.	Education	174	35	68
11.	Recreation	141	264	64
12.	Gifts and Special Events	195	230	114
13.	Pers. Share Truck and Auto Exp.	240	236	282
14.	Oper. Share Upkeep on Dwelling	101	328	63
15.	Pers. Share Tel. and Elect. Exp.	153	182	133
16.	TOTAL CASH LIVING EXPENSES	\$ 3887	4859	3146
17.	Pers. Share New Truck and Auto	129	207	80
18.	New Dwelling Bought	242	316	206
19.	Taxes and Other Deductions	429	658	274
20.	Life Insurance and Other Savings and Investments	614	508	123
21.	TOTAL HOUSEHOLD AND PERSONAL (16)-(20)	\$ 5301	6548	3829
22.	TOTAL FAMILY LIVING FROM THE FARM (33)	352	306	317
23.	TOTAL CASH AND NON-CASH EXPENSES (21)+(22)	\$ 5653	6854	4146
24.	FAMILY LIVING FROM THE FARM			
25.		\$ OPR. SHARE	OPR. SHARE	OPR. SHARE
26.	Milk and Cream	135	142	90
27.	Beef	177	128	161
28.	Pork	15	20	39
29.	Lamb			
30.	Poultry	1		
31.	Eggs	2		7
32.	Veg., Fruit, Spuds, and Fuel-Also Other Produce	22	16	20
33.	TOTAL FAMILY LIVING FROM THE FARM	\$ 352	306	317

TABLE 5 - NET WORTH STATEMENT - OPERATOR - 1968

	Ave. of 45 Farms		9 High		8 Low	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31	Jan. 1	Dec. 31
1. Total Livestock	\$ 10915	11617	14833	16557	7817	8000
2. Crop, Seed & Feed	4877	5564	10312	10563	2519	3019
3. Total Power, Machinery	8767	9822	14365	16028	5761	7463
4. Land	13316	13718	25023	25165	10644	10644
5. Buildings, Fences, etc.	6258	6812	10709	10614	5552	5780
6. TOTAL FARM CAPITAL	\$ 44133	47533	75242	78927	32293	34906
7. Non-Farm Assets	5254	6497	6442	8869	3403	3672
8. Dwelling	3602	3712	3006	3089	5228	5253
9. TOTAL ASSETS	\$ 52989	57742	84690	90885	40924	43831
10. Real Estate Mortgages	8002	8371	18279	16738	3191	3059
11. Chattel Mortgages	6898	7085	12481	11677	3426	4220
12. Notes	2291	2365	2638	1826	994	1700
13. Accounts Payable	849	782	1054	698	664	603
14. TOTAL LIABILITIES	\$ 18040	18603	34452	30939	8275	9582
15. FARMERS NET WORTH	\$ 34949	39139	50238	59946	32649	34249
16. GAIN, OR LOSS IN NET WORTH		\$ 4190		\$ 9708		\$ 1600
17. SUPPLEMENTARY MANAGEMENT INFORMATION						
18. Operators Labor Earnings	\$ 4859		11074		83	
19. Ret. to Capital & Family Labor	6965		14380		2597	
20. Non-Farm Income						
21. Outside Investment Income	95		181		37	
22. Other Personal Income	1020		463		2186	
23. TOTAL NON-FARM INCOME	\$ 1115		644		2223	
24. Total Money Borrowed	\$ 4566		2519		1503	
25. Total Paid on Debt (Principal)	4205		5776		1743	
26. Total Household & Pers. Expense	4911		7287		3809	
27. Ratio Farm Exp. to Farm Receipts	.793		.697		.994	
28. Ratio Assets to Liabilities	2.937	3.104	2.458	2.938	4.945	4.574
29. Ratio Non-Real Est. Assets - Non-Real Est. Liabilities	2.97	3.27	2.84	3.66	3.84	3.40
30. Ratio Real Estate Assets To Real Estate Liabilities	2.90	2.90	2.12	2.32	6.71	7.09
31. Ratio Net Worth To Total Liab.	1.94	2.10	1.46	1.94	3.95	3.57
32. *Ratio Cash Operating Exp. to Adj. Total Farm Sales		.60		.53		.69

*ADJUSTED TOTAL FARM SALES DOES NOT INCLUDE SALE OF CAPITAL ASSETS

TABLE 6A OPERATORS SHARE OF CASH RECEIPTS - 1968		Average of 44 Farms	9 High	9 Low
1	SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2	Dairy Cows	\$ 1770	3037	1083
3	Dairy Products	12087	20917	6271
4	Other Dairy Cattle	1063	1695	591
5	Beef Breeding Cattle	378	561	698
6	Beef Feeder Cattle	197	221	85
7A	Hogs Complete	59	52	
7B	Hogs Finishing	13		
7C	Hogs Producing Weaning Pigs	543	403	827
8A	Sheep and Wool, Farm Flock	36		5
8B	Sheep and Wool, Feeder Lambs			
9	Chickens (Incl. Hens and Broilers)	20		31
10	Turkeys			
11	Eggs	134		348
12	Other Productive Livestock			
12A	TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$ 16300	26886	9939
13	<u>SALE OF CROPS</u>			
14	Corn	4	80	(-107)
15	Soybeans, Flax, Sunflowers	101	51	15
16	Wheat, Oats, Barley, Rye	731	2053	4
17	Potatoes, Sugar Beets, Canning, Other Crops A+B	1		5
18	Hay, Silage and Other Crops	530	2319	(-191)
19	Diverted Acre Payment	134	44	202
19A	TOTAL SALES FROM CROPS	\$ 1501	4547	72-
20	Capital Assets Sold	57	14	88
21	Gas Tax Refund	90	119	109
22	Income From Work Off the Farm	347	751	461
23	Patronage Refunds	87	122	34
24	Miscellaneous Farm Income	120	44	165
25	TOTAL FARM SALES	\$ 18502	32483	10724
26	Increase in Farm Capital	3505	3722	2541
27	Family Living From the Farm	371	287	318
28	TOTAL FARM RECEIPTS (25)+(26)+(27)	\$ 22378	36492	13583
29	Adjusted Total Farm Sales (25)-(20)	18445	32469	10636
30	Total Cash Farm Operating Expense	10959	17090	7281
31	Net Cash Operating Income	\$ 7486	15379	3355

TABLE 6B OPERATORS SHARE OF CASH EXPENSES - 1968		Average of 44 Farms	9 High	9 Low
1	PURCHASE OF LIVESTOCK			
2	Dairy Cows	\$ 209	131	
3	Other Dairy Cattle	141	51	
4	Beef Breeding Cattle	62	44	50
5	Beef Feeder Cattle	135	662	
6A	Hogs Complete	2		
6B	Hogs Finishing	1		7
6C	Hogs Producing Weaning Pigs	18		75
7A	Sheep, Farm Flock	8		41
7B	Sheep, Feeder Lambs			
8	Chickens	17		14
9	Turkeys			
10	Other Productive Livestock			
11	Miscellaneous Livestock Expense	707	1416	473
12	Feed Bought	2904	4314	1854
13	Fertilizer	789	1622	439
14	Chemicals	140	251	71
15	Other Crop Expense	440	608	441
16	Custom Work Hired	897	1325	553
17	Repair + Upkeep of Livestock Equip.	103	152	52
18	Repair + Upkeep of Farm Real Estate	187	369	193
19	Gas, Oil, Grease Bought (farm share)	808	1006	796
20	Repair + Oper. Mach., Tractor, Auto, Truck (F.S.)	890	1439	909
21	Wages of Hired Labor	452	813	233
22	Personal Property + Real Estate Taxes	377	683	239
23	Cash Rent	319	184	108
24	General Farm Expense	256	370	193
25	Telephone Expense (farm share)	65	83	58
26	Electricity Expense (farm share)	266	345	213
27	Interest Expense	764	1222	270
28	TOTAL CASH OPERATING EXPENSE	\$ 10957	17090	7282
29	Power, Crop and General Mach. Bought (farm share)	2066	3131	2187
30	Livestock Equipment Bought	652	374	675
31	New Real Estate + Improvements	1367	1392	439
32	TOTAL FARM PURCHASES (28) THRU (31)	\$ 15042	21987	10583
33	Decrease in Farm Capital	339	38	439
34	Interest on Farm Capital	1479	2632	1306
35	Unpaid Family Labor	621	673	1011
37	Board Furnished Hired Labor	41	88	16
38	TOTAL FARM EXPENSE (32) THRU (37)	\$ 17522	25418	13355
39	Labor Earnings (Operators Share) (6A/28)-(38)	\$ 4853	11074	230
40	Return to Capital and Family Labor	\$ 6953	14379	2547

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, or ten hours of work off the farm for pay. The work units values in Table 7 below were changed in 1968 to make this a more realistic measure.

TABLE 7 WORK UNITS FOR CROPS, LIVESTOCK, AND WORK OFF THE FARM*

Item	No. of Work Units	Item	No. of Work Units/Acre
Dairy Cows	7.0/cow	Barley, Wheat, Oats, Rye	.30/acre
Other Dairy Cattle	1.2/head	Canning Peas	.30/acre
Beef Breeding Cows	1.5/head	Oat Silage	.40/acre
Beef Feeders	.12/cwt.	Canning Corn	.40/acre
Hogs-Complete	.12/cwt.	Corn for Grain	.55/acre
Hogs-Finishing	.06/cwt.	Soybeans	.45/acre
Hogs-Wean. Pigs	1.4/litter	Corn & Cane Silage	.80/acre
Sheep, Farm Flock	.60/ewe	Alfalfa Hay	.60/acre
Lambs, Feeders	.30/cwt.	O. Leg. & Mix. Hay	.40/acre
Chickens, Lay. Flock	5.0/100	Tame Grass Hay	.20/acre
Broilers	.20/cwt.	Annual Hay	.30/acre
Turkeys, Lay. Flock	25.0/100	Leg. & Grass Silage	.40/acre
Turkey Poults	.12/cwt.	Legume & Grass Seed	.40/acre
Labor Off the Farm	1.0/\$20	Summer Fallow Tilled	.40/acre
Diverted Acres	.20/acre	Wild Hay	.20/acre

* See page 15 for explanation of change in work unit values.

AVERAGE PRICES OF FEED AND OTHER PRICES USED IN 1968 REPORT

SMALL GRAIN & CORN

Corn	\$1.05/Bu.
Oats	.60/Bu.
Soybeans	2.40/Bu.
Wheat	1.65/Bu.
Rye	1.05/Bu.
Barley	1.00/Bu.
Flaxseed	3.00/Bu.

PASTURE PER HEAD PER MONTH

Dairy cows, Beef cows	\$1.75
Other dairy & beef	1.00
Hogs	.20
Pigs	.10
Sheep	.25
Lambs	.12

ROUGHAGES

Alf. Hay	\$22.00
O. Leg. & Mix.	18.00
Annual & Tame	14.00
Wild Hay	10.00
Corn Silage	7.00
Oats Silage	5.00
Leg. & Grass Sil.	6.00

PRODUCTS USED IN THE HOME

Whole milk	\$.09/qt.
Cream	.70/qt.
Whole milk fed	4.00/cwt.
Skimmilk fed	.80/cwt.

UNPAID FAMILY LABOR

Per Day	\$7.50
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LAND COST used on Table 10 was considered to be the rental value of land on each farm. While this figure varied from farm to farm the normal range was \$7.00 to \$10.00 per acre.

MEASURES OF FARM ORGANIZATION AND EFFICIENCY

The following explanations and definitions are for use in interpreting Table 8 on page 16 and the Thermometer Chart on page 17.

1. LABOR EARNINGS - The basis for comparing the relationship between selected farm management factors and farm profit. "Labor Earnings" represents that share of the total farm income that is credited to the operator's labor and management. It is a whole farm figure taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. Tables 2B and 3 show two methods of determining labor earnings. The operator's share of labor earnings is shown on Table 6B and may be different from Whole Farm Labor Earnings.
2. CROP YIELD INDEX - A measure of the crop yield level for all crops produced. It is expressed as a percentage of the average; the average being 100%.
3. PERCENT OF TILLABLE LAND IN HIGH RETURN CROPS - A measure of crop selection based on a rating of individual crops. Ratings are on Table 9.
4. GROSS RETURN per ACRE - Reflects both crop selection and crop yield.
5. RETURN per \$100 FEED FED TO PRODUCTIVE LIVESTOCK - A measure of the general level of efficiency for all livestock. It is expressed as a percentage with 100% representing average efficiency.
6. LIVESTOCK UNITS per 100 ACRES - A measure of livestock density or population, particularly important for farms with limited cropland.
7. SIZE OF BUSINESS - WORK UNITS ** - A measure of the total work load. A Work Unit represents the average accomplishment of a worker in one 10-hour day. Work Unit values are assigned to each class of livestock, each crop, and to other tasks utilizing farm labor.
8. WORK UNITS per WORKER - A measure of labor efficiency. It is determined by dividing the work units by the total number of workers.
9. POWER, MACHINERY, EQUIPMENT AND BUILDING EXPENSE per WORK UNIT ** - A measure of expense control. It is the total cost of items 24 through 28 in Table 3 divided by the number of Work Units.
10. FARM CAPITAL INVESTMENT PER WORKER - Another indication of size of business. Useful in relating farm businesses to other industries.

** WORK UNIT values have been changed this year based on a study by the Department of Agricultural Economics, University of Minnesota. This study was undertaken because of increased mechanization in farming. As an example it reduced the Dairy Cow Work Units from 10 to 7 per cow. In attempting to compare data from this report where Work Units are involved, to reports from prior years, this change in Work Units should be remembered.

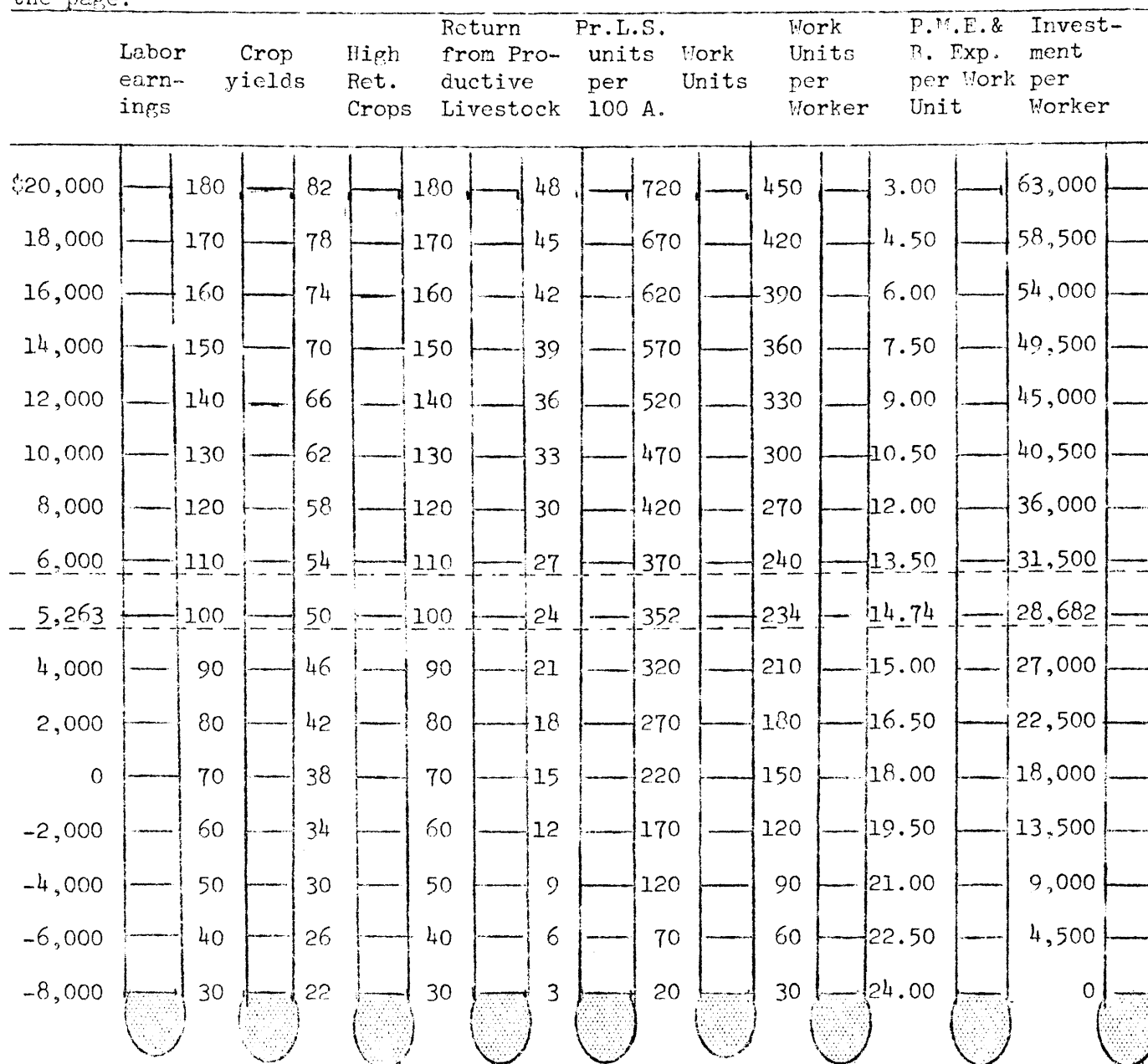
TABLE 8 - MEASURES OF FARM ORGANIZATION - 1968		Average of 48 Farms	8 High	8 Low
1	LABOR EARNINGS	\$ 5263	11507	668
2	CROP YIELDS-INDEX	100	123	76
3	PERCENT TILL. LAND IN H.R. CROPS	49.6	47.5	48.8
4	GROSS RETURN PER TILL. ACRE (EXCL. PASTURE)	\$ 46.67	61.50	38.39
5	RETURN FOR \$100 TO PROD. LIVESTOCK-INDEX	100	108	86
6	LIVESTOCK UNITS PER 100 ACRES*	23.6	32.7	20.6
7	SIZE OF BUSINESS - WORK UNITS	352.4	465.0	230.6
8	WORK UNITS PER WORKER	234.5	229.8	193.4
9	POWER MACH., EQUIP., BLDG. PER WORK UNIT	\$ 14.74	14.86	21.29
10	FARM CAPITAL INVESTMENT PER WORKER	\$ 28682	34412	27921
11	INDEX OF RETURN FOR \$100 FEED FROM			
12	COMPLETE HOG ENTERPRISE			
13	HOG FINISHING ENTERPRISE			
14	PRODUCING WEANING PIGS	101	105	87
15	DAIRY CATTLE	101	107	84
16	OTHER DAIRY	102	121	93
17	ALL DAIRY AND DUAL PURPOSE CATTLE	100	109	84
18	BEEF BREEDING CATTLE	101	102	87
19	BEEF FEEDER CATTLE	101	108	
20	SHEEP FARM FLOCK	100		137
21	FEEDER LAMBS			
22	CHICKENS-LAYING FLOCK	100		
23	CHICKENS-BROILERS			
24	TURKEYS-LAYING FLOCK			
25	TURKEY-POULTS			
26	OTHER PRODUCTIVE LIVESTOCK			
27	NUMBER OF ANIMAL UNITS	55.2	72.5	40.9
28	WORK UNITS			
29	CROPS	94.2	114.3	59.4
30	PRODUCTIVE LIVESTOCK	249.0	332.6	168.8
31	OTHER PRODUCTIVE WORK UNITS	9.2	18.1	2.3
32	EXPENSES PER WORK UNIT			
33	TRACTOR AND CROP MACHINERY EXPENSE	\$ 6.55	5.60	9.72
34	FARM SHARE OF AUTO AND TRUCK EXPENSE	\$ 3.57	3.31	6.34
35	FARM SHARE OF ELECTRICITY EXPENSE	\$.83	.77	1.09
36	LIVESTOCK EQUIPMENT EXPENSE	\$ 1.40	1.37	1.02
37	BUILDING, FENCING, AND TILING EXPENSE	\$ 2.38	3.81	3.10
38	TRACTOR AND CROP MACH. EXPENSE PER CROP ACRE**	\$ 12.23	13.17	14.48

39 *ACRES INCLUDE ALL TILLABLE LAND, NON-TILLABLE HAY AND PASTURE

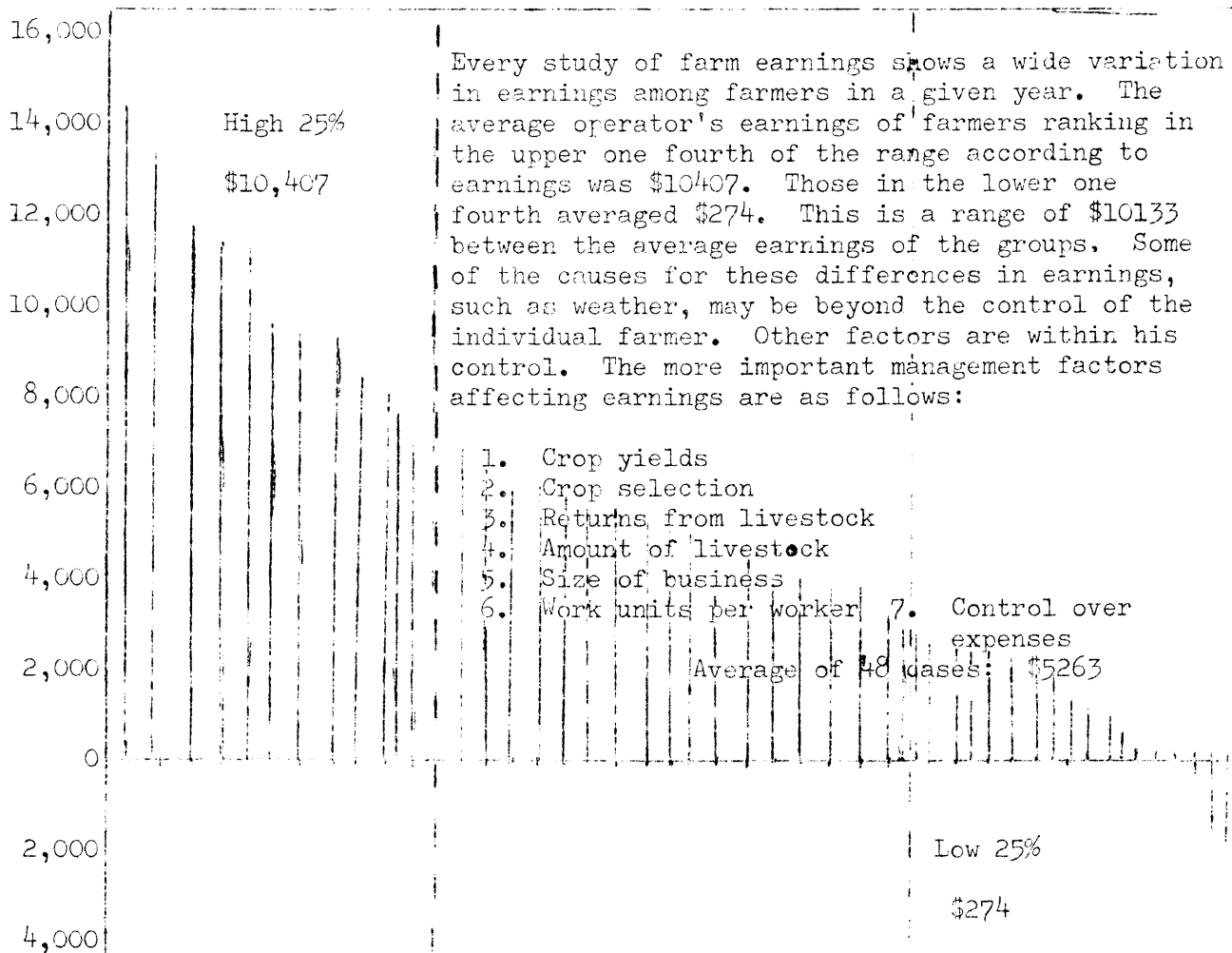
40 **ACRES INCLUDE ALL TILLABLE LAND PLUS ACRES IN WILD HAY

THERMOMETER CHART

Using your figures from Table 8, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the farms included in this summary are located between the dotted lines across the center of the page.



RANGE IN LABOR EARNINGS



Each line represents the labor earnings of one farm with a total of 48 farms in all.

LABOR EARNINGS CORRELATED WITH EXCELLED FACTORS

The thermometer chart shows eight major management factors that influence farm earnings within a given year. These eight factors are:

1. Crop yields
2. Crop selection
3. Returns from livestock
4. Amount of livestock
5. Size of business
6. Work units per worker
7. Control over power & machinery expenses
8. Farm Capital Investment Per Worker

The combined effect of those management factors as related to farm earnings is shown on the table below. Attention is called to the fact that farmers exceeding the average in most of the eight management factors are also those reporting the highest labor earnings.

No. of Factors in which farmers excelled	No. of farms	LABOR EARNINGS									
		0	1000	2000	3000	4000	5000	6000	7000	8000	
0 or 1	4	652									
2 or 3	17	3873									
4 or 5	16	5941									
6 or 7	11	8100									

This table should be studied along with the tables on Measures of Farm Organization and Management Efficiency and the Thermometer Chart. The importance of these three tables to determine the financial "heart beat" of a farm operation cannot be over emphasized.

PAST FIVE (5) YEARS AVERAGE OF LABOR EARNINGS CORRELATED WITH EXCELLED FACTORS 1963-1967

No. of Factors in which farmers excelled	Total No. of farms	LABOR EARNINGS									
		0	1000	2000	3000	4000	5000	6000	7000	8000	
0 or 1	87	621									
2 or 3	192	2079									
4 or 5	393	3342									
6 or 7	55	4449									

TABLE 2 - CROP PRODUCTION - 1968

	Crop Rating	Number Growing	Acres	Yield Per Acre
1 Oats and Mixtures	C	40	31.4	53.2 Bu.
2 Oats Silage	B	4	1.6	5.0 T.
3 Canning Peas				
4 Wheat	C	8	6.6	24.2 Bu.
5 Barley	C	2	1.6	33.1 Bu.
6 Flax	C	2	1.9	8.4 Bu.
7 Rye				
8 TOTAL SMALL GRAIN AND PEAS			43.1	
9 Canning Corn				
10 Corn Grain and Seed Corn	B/D	28	14.8	68.0 Bu.
11 Soybeans-Grain	C	3	1.9	6.3 Bu.
12 Corn and Cane Silage	B	36	22.4	8.8 T.
13 Corn and Cane Fodder				
14 Potatoes				
15 Sugar Beets				
16 Sunflowers				
17 Other Cultivated Crops - A				
18 Other Cultivated Crops - B				
19 TOTAL CULTIVATED CROPS			45.7	
20 Alfalfa Hay	A	28	30.9	2.5 T.
21 Other Legume Hay and Mixtures	B	24	35.7	1.9 T.
22 Tame Grass Hay	C	9	5.7	.9 T.
23 Annual Hay	D	4	.4	
24 Legume and Grass Silage				
25 Legume Seed	D	3	9.9	276.7 lbs.
26 Grass Seed	D	3	3.9	493.1 lbs.
27 TOTAL HAY			87.3	
28 Alfalfa and Mixed Pasture			2.2	
29 Other Legume Pasture			.9	
30 Other Tillable Pasture			17.1	
31 TOTAL TILLABLE PASTURE			20.2	
32 Diverted Acres Income	A	10	6.5	31.38
33 Summer Fallow - Tilled			6.1	
34 Other Tillable Land			.4	
35 TOTAL TILLABLE LAND			209.3	
36 Wild Hay			5.7	.35
37 Non-Tillable Pasture			71.8	
38 Timber			55.7	.74
39 Roads and Waste			34.4	
40 Farmstead			6.4	
41 TOTAL ACRES IN FARM			383.3	
42 SUPPLEMENTARY MANAGEMENT INFORMATION				
43 Percent Land Tillable				54.6
44 Percent in High Return Crops				46.8
45 *Fertilizer Cost Per Acre				4.53
46 *Crop Chemicals Per Acre				.79
47 *Seed and Other Costs Per Acre				2.37
48 *Gas, Oil, Grease Bought Per Acre				2.87
49 *Tillable Land Minus Pasture				

TABLE 9 (continued)

	Crop Rating	High in Labor Earnings		Low in Labor Earnings	
		Acres	Average Yield	Acres	Average Yield
1 Oats and Mixtures	C	37.8	73.7 Bu.	28.6	53.2 Bu.
2 Oats Silage	B			6.9	3.3 T.
3 Canning Peas					
4 Wheat	C	13.6	29.3 Bu.	2.1	16.7 Bu.
5 Barley	C				
6 Flax	C	2.5	9.2 Bu.		
7 Rye	C				
8 TOTAL SMALL GRAIN & PEAS		53.9		37.6	
9 Canning Corn					
10 Corn Grain and Seed Corn	B/D	28.6	82.9 Bu.	2.0	75.0 Bu.
11 Soybeans-Grain	C				
12 Corn and Cane Silage	B	35.9	9.2 T.	13.5	5.0 T.
13 Corn and Cane Fodder	D				
14 Potatoes				.3	
15 Sugar Beets					
16 Sunflowers				1.1	
17 Other Cultivated Crops - A				.1	
18 Other Cultivated Crops - B					
19 TOTAL CULTIVATED CROPS		64.5		17.0	
20 Alfalfa Hay	A	19.0	2.6 T.	41.1	2.6 T.
21 Other Legume Hay & Mixtures	B	38.8	2.9 T.	14.8	1.6 T.
22 Tame Grass Hay	C	.4	2.5 T.	.3	3.3 T.
23 Annual Hay	D	.3	3.3 T.	.3	
24 Legume and Grass Silage					
25 Legume Seed	D	38.8	240.2 Lbs.	1.3	48.5 Lbs.
26 Grass Seed	D	10.3	998.9 Lbs.	4.4	
27 TOTAL HAY		107.6		62.2	
28 Alfalfa & Mixed Pasture	A			.8	
29 Other Legume Pasture	B			2.9	
30 Other Tillable Pasture	D	2.5		26.1	
31 TOTAL TILLABLE PASTURES		2.5		29.8	
32 Diverted Acres Income	A			2.0	\$ 27.50
33 Summer Fallow - Tilled	C	16.0		1.6	
34 Other Tillable Land Idle		.5			
35 TOTAL TILLABLE LAND		245.0		150.2	
36 Wild Hay		2.8		.8	
37 Non-Tillable Land		74.9		80.1	
38 Timber		7.8		83.9	\$ 1.26
39 Roads and Waste		40.8		19.9	
40 Farmstead		4.8		6.0	
41 TOTAL ACRES IN FARM		376.1		340.9	
42 SUPPLEMENTARY MANAGEMENT INFORMATION					
43 Percent Land Tillable			65.2		44.0
44 Percent in High Return Crops			36.0		48.0
45 *Fertilizer Cost Per Acre			7.05		2.60
46 *Crop Chemicals Per Acre			1.10		.18
47 *Seed and Other Costs Per Acre			2.60		3.27
48 *Gas, Oil, Grease Bought Per Acre			2.69		2.83

49 *Tillable Land Minus Pasture

TABLE 10 - RETURNS ABOVE ALL COSTS PER A. ON CROPS - 1968

OATS AND MIXTURES - 40 FARMS		TOTAL	PER ACRE
1	Acres	37.6	
2	Yield/Acre		53.3
3	Value/Unit		.60
4	Gross Return	1259.60	33.50
5	SUPPLEMENTAL COSTS		
6	Fertilizer		1.76
7	Chemicals		.13
8	Seed and Other		2.58
9	Hired Labor		
10	Custom Work		.27
11	TOTAL SUPPLEMENTAL COSTS	178.22	4.74
12	RETURN OVER SUPPLEMENTAL COSTS	1081.38	28.76
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		6.96
15	Land Cost		7.15
16	Miscellaneous Costs		
17	TOTAL ALLOCATED COSTS	530.54	14.11
		Per Unit	
18	TOTAL COSTS	.35	708.76
19	RETURN OVER TOTAL COSTS	550.84	14.65

TABLE 10 - CROP DATA FOR WHEAT - 1968 ----- 8 FARMS

1	Acres	39.5	
2	Yield/Acre		24.3
3	Value/Unit		1.65
4	Gross Return	1417.66	35.89
5	SUPPLEMENTAL COSTS		
6	Fertilizer		4.99
7	Chemicals		.28
8	Seed and Other		2.58
9	Hired Labor		
10	Custom Work		.15
11	TOTAL SUPPLEMENTAL COSTS	316.00	8.00
12	RETURN OVER SUPPLEMENTAL COSTS	1101.66	27.89
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		6.96
15	Land Cost		6.96
16	Miscellaneous Costs		
17	TOTAL ALLOCATED COSTS	549.84	13.92
		Per Unit	
18	TOTAL COSTS	.90	865.84
19	RETURN OVER TOTAL COSTS	551.82	13.97

TABLE 10 CROP DATA FOR ALFALFA HAY - 1968 ----- 28 Farms

		TOTAL	PER ACRE
1	Acres	53.0	
2	Yield/Acre		2.5
3	Value/Unit		21.57
4	Gross Return	2868.36	54.12
5	SUPPLEMENTAL COSTS		
6	Fertilizer		2.66
7	Chemicals		
8	Seed and Other		2.72
9	Hired Labor		
10	Custom Work		.47
11	TOTAL SUPPLEMENTAL COSTS	310.05	5.85
12	RETURN OVER SUPPLEMENTAL COSTS	2558.31	48.27
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		13.92
15	Land Cost		9.06
16	Miscellaneous Costs		
17	TOTAL ALLOCATED COSTS	1217.94	22.98
		Per Unit	
18	TOTAL COSTS	11.58	28.83
19	RETURN OVER TOTAL COSTS	1340.37	25.29

TABLE 10 CROP DATA FOR CORN AND CANE SILAGE - 1968 ----- 36 Farms

1	Acres	29.9	
2	Yield/Acre		8.8
3	Value/Unit		7.00
4	Gross Return	1865.16	62.38
5	SUPPLEMENTAL COSTS		
6	Fertilizer		9.13
7	Chemicals		2.88
8	Seed and Other		3.11
9	Hired Labor		
10	Custom Work		2.11
11	TOTAL SUPPLEMENTAL COSTS	515.18	17.23
12	RETURN OVER SUPPLEMENTAL COSTS	1349.98	45.15
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		18.56
15	Land Cost		9.50
16	Miscellaneous Costs		
17	TOTAL ALLOCATED COSTS	838.99	28.06
		Per Unit	
18	TOTAL COSTS	5.13	45.29
19	RETURN OVER TOTAL COSTS	510.99	17.09

TABLE 10 CROP DATA FOR OTHER LEGUME HAY AND MIXTURES - 1968

		TOTAL	PER ACRE
1	Acres	71.5	
2	Yield/Acre		1.9
3	Value/Unit		17.83
4	Gross Return	2651.94	37.09
5	SUPPLEMENTAL COSTS		
6	Fertilizer		1.51
7	Chemicals		
8	Seed and Other		2.00
9	Hired Labor		
10	Custom Work		.08
11	TOTAL SUPPLEMENTAL COSTS	256.69	3.59
12	RETURN OVER SUPPLEMENTAL COSTS	2395.25	33.50
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		9.28
15	Land Cost		8.71
16	Miscellaneous Costs		
17	TOTAL ALLOCATED COSTS	1286.29	17.99
	Per Unit		
18	TOTAL COSTS	11.26	1542.98
19	RETURN OVER TOTAL COSTS	1108.96	21.58
			15.51

TABLE 10 CROP DATA FOR TAME GRASS HAY

- 1968

PER ACRE

		TOTAL	PER ACRE
1	Acres	30.2	
2	Yield/Acre		.8
3	Value/Unit		14.00
4	Gross Return	477.76	15.82
5	SUPPLEMENTAL COSTS		
6	Fertilizer		.60
7	Chemicals		
8	Seed and Other		.66
9	Hired Labor		
10	Custom Work		.36
11	TOTAL SUPPLEMENTAL COSTS	48.92	1.62
12	RETURN OVER SUPPLEMENTAL COSTS	428.84	14.20
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		4.64
15	Land Cost		6.89
16	Miscellaneous Costs		
17	TOTAL ALLOCATED COSTS	348.21	11.53
	Per Unit		
18	TOTAL COSTS	16.55	397.13
19	RETURN OVER TOTAL COSTS	80.63	13.15
			2.67

TABLE 10 CROP DATA FOR CORN FOR GRAIN - 1968 ----- 28 Farms

	TOTAL	PER ACRE
1. Acres	25.3	
2. Yield/Acre		68.2
3. Value/Unit		1.05
4. Gross Return	1761.39	
5. SUPPLEMENTAL COSTS		
6. Fertilizer		10.67
7. Chemicals		3.72
8. Seed and Other		3.99
9. Hired Labor		
10. Custom Work		.91
11. TOTAL SUPPLEMENTAL COSTS	488.04	19.29
12. RETURN OVER SUPPLEMENTAL COSTS	1273.35	50.33
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expense		12.76
15. Land Cost		10.79
16. Miscellaneous Costs		
17. TOTAL ALLOCATED COSTS	595.82	23.55
	PER UNIT	
18. TOTAL COSTS	.63	42.84
19. RETURN OVER TOTAL COSTS	677.53	26.78

TABLE 10 CROP DATA FOR BARLEY - 1968 ----- 2 Farms

1. Acres	38.5	
2. Yield/Unit		32.7
3. Value/Unit		1.00
4. Gross Return	1411.03	36.65
5. SUPPLEMENTAL COSTS		
6. Fertilizer		5.51
7. Chemicals		.47
8. Seed and Other		1.51
9. Hired Labor		
10. Custom Work		.05
11. TOTAL SUPPLEMENTAL COSTS	290.29	7.54
12. RETURN OVER SUPPLEMENTAL COSTS	1120.74	29.11
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expense		6.96
15. Land Cost		6.75
16. Miscellaneous Costs		
17. TOTAL ALLOCATED COSTS	527.84	13.71
	PER UNIT	
18. TOTAL COSTS	.65	21.25
19. RETURN OVER TOTAL COSTS	592.90	15.40

TABLE 10 CROP DATA FOR ANNUAL HAY - 1968 4 Farms

		TOTAL	PER ACRE
1	Acre	4.3	
2	Yield/Acre		1.4
3	Value/Unit		12.00
4	Gross Return	74.82	17.40
5	SUPPLEMENTAL COSTS		
6	Fertilizer		
7	Chemicals		
8	Seed and Other		.93
9	Hired Labor		
10	Custom Work		
11	TOTAL SUPPLEMENTAL COSTS	4.00	.93
12	RETURN OVER SUPPLEMENTAL COSTS	70.82	16.47
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		6.96
15	Land Cost		11.40
16	Miscellaneous Costs		
17	TOTAL ALLOCATED COSTS	78.95	18.36
18	TOTAL COSTS		
19	RETURN OVER TOTAL COSTS		
	Per Unit		
	13.83	82.95	19.29
		(-8.13)	(-1.89)

TABLE 10 CROP DATA FOR OATS SILAGE - 1968 4 Farms

		TOTAL	PER ACRE
1	Acres	19.3	
2	Yield/Acre		4.8
3	Value/Unit		5.00
4	Gross Return	636.90	33.00
5	SUPPLEMENTAL COSTS		
6	Fertilizer		
7	Chemicals		
8	Seed and Other		2.38
9	Hired Labor		
10	Custom Work		
11	TOTAL SUPPLEMENTAL COSTS	45.93	2.38
12	RETURN OVER SUPPLEMENTAL COSTS	590.97	30.62
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		9.28
15	Land Cost		5.44
16	Miscellaneous Costs		
17	TOTAL ALLOCATED COSTS	284.10	14.72
18	TOTAL COSTS		
19	RETURN OVER TOTAL COSTS		
	Per Unit		
	3.55	330.03	17.10
		(306.87)	(15.90)

TABLE 10 CROP DATA FOR DIVERTED ACRES - 1968 ----- 10 Farms

	TOTAL	PER ACRE
1 Acres	27.4	
2 Yield/Acre		35.80
3 Value/Unit		1.00
4 Gross Return	1041.75	38.02
5 SUPPLEMENTAL COSTS		
6 Fertilizer		.29
7 Chemicals		
8 Seed and Other		.04
9 Hired Labor		
10 Custom Work		.04
11 TOTAL SUPPLEMENTAL COSTS	10.14	.37
12 RETURN OVER SUPPLEMENTAL COSTS	1031.61	37.65
13 ALLOCATED COSTS		
14 Power and Crop Machinery Expense		4.64
15 Land Cost		9.42
16 Miscellaneous Costs		
17 TOTAL ALLOCATED COSTS	385.24	14.06
	Per Unit	
18 TOTAL COSTS	.40	14.43
19 RETURN OVER TOTAL COSTS	646.37	23.59

TABLE 10 CROP DATA FOR SOYBEANS-GRAIN - 1968 ----- 3 FARMS

	TOTAL	PER ACRE
1 Acres	29.7	
2 Yield/Acre		6.2
3 Value/Unit		2.40
4 Gross Return	465.70	15.68
5 SUPPLEMENTAL COSTS		
6 Fertilizer		
7 Chemicals		
8 Seed and Other		2.32
9 Hired Labor		
10 Custom Work		
11 TOTAL SUPPLEMENTAL COSTS	68.90	2.32
12 RETURN OVER SUPPLEMENTAL COSTS	396.80	13.36
13 ALLOCATED COSTS		
14 Power and Crop Machinery Expense		10.44
15 Land Cost		6.46
16 Miscellaneous Costs		
17 TOTAL ALLOCATED COSTS	501.93	16.90
	Per Unit	
18 TOTAL COSTS	3.09	19.22
19 RETURN OVER TOTAL COSTS	(-105.13)	(-3.54)

TABLE 11C - COSTS AND RETURNS FROM PRODUCING WEANING PIGS - 1968

	Average 7 Farms		2 High		2 Low	
	Herd	Per	Herd	Per	Herd	Per
	Total	Litter	Total	Litter	Total	Litter
1 Number of Litters Farrowed	29		44		26	
2 Total Value Produced	\$ 3086	106.41	4262	96.86	2447	94.12
3 <u>Pounds of Feed Fed</u>						
4 Corn		573.0		105.0		607.8
5 Small Grain		666.3		110.9		1007.4
6 Protein, Salt and Mineral		173.4				676.2
7 Complete Ration		731.0		1136.4		569.2
8 TOTAL CONCENTRATES		2143.7		1352.3		2860.6
9 Forages						
10 <u>Feed Cost</u>						
11 Concentrates and Forages		59.17		52.05		60.35
12 Pasture		.67				.56
13 TOTAL FEED COSTS	\$ 1735	59.84	2290	52.05	1584	60.91
14 RETURN OVER FEED COST	1351	46.57	1972	44.31	863	33.21
15 <u>Supplemental Costs</u>						
16 Miscellaneous Livestock Expense		1.23		1.84		1.27
17 Veterinary Expense		.83		.11		2.23
18 Custom Work		3.83		5.61		
19 TOTAL SUPPLEMENTAL COSTS	\$ 172	5.94	333	7.56	91	3.50
20 RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$ 1179	40.63	1639	37.25	772	29.71
21 <u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>						
22 Return for \$100 Feed Fed	\$ 177.87		186.11		154.48	
23 Average Price Rec. Per Pig Sold	\$ 17.66		17.25		18.83	
24 Number of Pigs Produced	197		270		140	
25 Number of Pigs Born Per Litter	9.0		8.2		8.5	
26 Number of Pigs Weaned Per Litter	6.8		6.2		5.5	
27 Per Cent Death Loss	19.9		22.3		26.5	
28 Price Per Cwt. Concentrate Fed	\$ 2.81		3.85		2.28	
29 Feed and Suppl. Costs Per Pig Produced	\$ 9.68		9.71		11.96	

TABLE 12 - DAIRY COWS - 1968		Average of 41 Farms	14 Farms High in Return Above Feed	14 Farms Low in Return Above Feed
		Per Cow	Per Cow	Per Cow
1	Average Number of Cows	30.2	43.1	19.5
2	Pounds of Milk	11130	12347	9518
3	Pounds of Butterfat	401.9	459.1	321.7
4	Per Cent of Butterfat in Milk	3.6	3.7	3.4
5	<u>Value of Produce</u>			
6	Dairy Products Sold	475.33	551.79	386.51
7	Dairy Products Used in Home	4.93	3.36	7.03
8	Milk Fed to Livestock	7.91	4.50	11.23
9	Net Increases in Value of Cows	(-3.87)	(-1.37)	(-6.67)
10	TOTAL VALUE PRODUCED	\$ 484.30	558.28	380.10
11	<u>Pounds of Feed Fed</u>			
12	Corn	1560.6	2279.2	694.1
13	Small Grain & Complete Dairy Ration	2661.6	2151.8	2667.8
14	Protein, Salt & Mineral	157.9	317.2	10.7
15	TOTAL CONCENTRATES	4380.1	4748.2	3372.6
16	Legume Hay	4196.1	3630.1	5495.2
17	Other Hay and Dry Roughage	1907.8	2063.3	1522.0
18	Silage	12002.4	13840.6	10476.2
19	<u>Feed Costs</u>			
20	Concentrates	113.05	121.83	85.28
21	Roughages	89.21	93.55	86.26
22	Pasture	6.22	5.57	6.67
23	TOTAL FEED COSTS	\$ 208.48	220.95	178.21
24	RETURN OVER FEED COST	\$ 275.82	337.33	201.89
25	<u>Supplemental Costs</u>			
26	Miscellaneous Livestock Expense	19.54	25.34	12.51
27	Veterinary Expense	6.56	8.77	4.51
28	Custom Work	23.31	26.08	20.97
29	TOTAL SUPPLEMENTAL COSTS	\$ 49.41	60.19	37.99
30	RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$ 226.41	277.14	163.90
31	<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
32	Return for \$100 Feed Fed	\$ 232.31	252.67	213.29
33	Feed Cost Per Cwt. Milk	\$ 1.87	1.79	1.87
34	Feed Cost Per Pounds of Butterfat	\$.519	.481	.554
35	Grain Fed Per Pound of Milk	2.541	2.600	2.822
36	Average Price Per Cwt. Milk Sold	\$ 4.41	4.54	4.15
37	Average Price Per Pound of Butterfat	\$ 1.22	1.22	1.21

TABLE 13 - OTHER DAIRY CATTLE - 1968	Average of 41 Farms	14 Farms	14 Farm
		High in Return Above Feed	Low in Return Above Feed

	Per cow	Per cow	Per Cow
1 Number of Head	37.7	46.6	38.3
2 Net Inc. in Value	\$ 95.73	113.99	68.64
3 <u>Pounds of Feed Fed</u>			
4 Concentrates	672.3	779.6	677.0
5 Hay and Roughage	2416.9	2245.3	2549.4
6 Silage	2869.3	2252.9	3268.9
7 Milk	237.1	79.5	489.4
8 <u>Feed Cost</u>			
9 Concentrates	19.08	21.85	18.49
10 Roughages	30.13	27.15	32.14
11 Milk	6.77	3.48	11.05
12 Pasture	3.29	3.43	2.93
13 TOTAL FEED COSTS	\$ 59.27	55.91	64.61
14 RETURN OVER FEED COST	\$ 36.46	58.08	4.03
15 <u>Supplement Costs</u>			
16 Miscellaneous Livestock Expense	.69	.97	.29
17 Veterinary Expense	.50	.69	.26
18 Custom Work	.98	.92	.81
19 TOTAL SUPPLEMENTAL COSTS	\$ 2.17	2.58	1.36
20 RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$ 34.29	55.50	2.67
21 SUPPLEMENTARY MANAGEMENT INFORMATION			
22 Return for \$100 Feed Fed	\$ 161.55	203.92	106.22
23 Per Cent Death Loss	7.2	6.9	6.1

TABLE 14 - ALL DAIRY AND DUAL PURPOSE CATTLE - 1968		Average of 42 Farms	14 Farms High in Return Above Feed	14 Farms Low in Return Above Feed
		Per Cow	Per Cow	Per Cow
1	Average Number of Cows	30.2	43.1	19.9
2	Value of Dairy Products	\$ 486.82	559.65	387.79
3	Net Inc. In Value	\$ 115.43	130.32	106.68
4	TOTAL VALUE PRODUCED	\$ 602.25	689.97	494.47
5	<u>Pounds of Feed Fed</u>			
6	Concentrates	4994.9	5531.2	4079.9
7	Hay and Dry Roughage	8923.0	8549.2	10840.7
8	Silage	15333.0	17602.6	12489.5
9	<u>Feed Cost</u>			
10	Concentrates	144.17	158.35	120.45
11	Roughage	125.86	131.81	119.90
12	Pasture Costs	9.19	8.24	10.94
13	TOTAL FEED COSTS	\$ 279.22	298.40	251.29
14	RETURN OVER FEED COST	\$ 323.03	391.57	243.18
15	<u>Supplemental Costs</u>			
16	Miscellaneous Livestock Expense	20.30	26.61	14.52
17	Veterinary Expense	7.15	9.63	4.82
18	Custom Work	24.47	26.84	22.11
19	TOTAL SUPPLEMENTAL COSTS	\$ 51.92	63.08	41.45
20	RETURN OVER FEED AND SUPPLEMENTAL COSTS	271.11	328.49	201.73
21	SUPPLEMENTARY MANAGEMENT INFORMATION			
22	Return for \$100 Feed Fed	\$ 215.70	231.23	196.76

TABLE 15A - BEEF BREEDING CATTLE - 1968		Average of 6 Farms	2 Farms High in Return Above Feed	2 Farms Low in Return Above Feed
1	Average Number of Beef Cows	44.9	78.9	23.9
2	Average Number of Other Beef Animals and Bulls	25.4	38.8	14.3
3	Pounds of Beef Produced	19309	36638	7260
4	Net Increase in Value (Per Cow) \$	115.10	115.29	101.72
5	<u>Pounds of Feed Fed</u>	<u>Per Cow</u>	<u>Per Cow</u>	<u>Per Cow</u>
6	Grain	117.8	45.4	
7	Protein, Salt and Mineral	9.4	.5	15.7
8	Legume Hay	2925.0	2839.0	2636.0
9	Other Hay and Dry Roughage	2939.9	3726.2	3807.5
10	Silage	705.3		
11	<u>Feed Cost</u>			
12	Concentrates	3.14	.95	.46
13	Roughages	47.51	49.02	45.73
14	Pasture	11.50	9.54	14.14
15	TOTAL FEED COSTS	\$ 62.15	59.51	60.33
16	RETURN OVER FEED COST	52.95	55.78	41.39
17	<u>Supplemental Costs</u>			
18	Miscellaneous Livestock Expense	.60	.27	2.05
19	Veterinary Expense	.27		
20	Custom Work	2.63	3.17	
21	TOTAL SUPPLEMENTAL COSTS	\$ 3.50	3.44	2.05
22	RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$ 49.45	52.34	39.34
23	SUPPLEMENTARY MANAGEMENT INFORMATION			
24	Return for \$100 Feed Fed	185.17	193.74	168.59
25	Price Per Cwt. Sold	25.16	21.16	25.46
26	Average Weight Per Head Sold	526	850	383
27	Percent Death Loss	2.0	1.8	1.7
28	Percent Calf Crop			

TABLE 16A - SHEEP FLOCK - 1968

	Average of 4 Farms	2 Farms High in Return Above Feed	2 Farms Low in Return Above Feed
1 Average Number of Ewes	52.1	77.5	26.8
2 Pounds of Lamb and Mutton Produced	2905	5280	530
3 Pounds of Wool Produced	331	454	209
4 Value of Produce			
5 Wool (Per Ewe)	3.74	3.69	3.92
6 Net Increase in Value of Animals (Per Ewe)	13.69	15.45	8.51
7 TOTAL VALUE PRODUCED (Per Ewe)	\$17.43	19.14	12.43
8 <u>Pounds of Feed Fed</u>	<u>Per Ewe</u>	<u>Per Ewe</u>	<u>Per Ewe</u>
9 Grain	57.2	59.3	50.7
10 Protein, Salt and Mineral	4.3	5.7	.3
11 Legume Hay	230.3	116.1	559.7
12 Other Hay and Dry Roughage	671.6	671.6	
13 Silage			
14 <u>Feed Cost</u>			
15 Concentrates	1.54	1.68	1.16
16 Roughages	4.45	4.25	5.04
17 Pasture	1.61	1.63	1.60
18 TOTAL FEED COSTS	7.60	7.56	7.80
19 RETURN OVER FEED COST	9.83	11.58	4.63
20 <u>Supplemental Costs</u>			
21 Miscellaneous Livestock Expense	.02		.04
22 Veterinary Expense			
23 Custom Work	.52	.46	.63
24 TOTAL SUPPLEMENTAL COSTS	.54	.46	.67
25 RETURN OVER FEED AND SUPPLEMENTAL COSTS	9.29	11.12	3.96
26 <u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
27 Return for \$100 Feed Fed	\$ 229.29	\$ 253.07	\$ 159.33
28 Price Per Cwt. Lamb and Mutton Sold	\$ 24.87	\$ 24.85	\$ 25.10
29 Pounds of Wool Per Sheep Sheared	6.9	6.7	7.5
30 Number of Ewes Kept for Lambing	44	63	25
31 Percent Lamb Crop	132	132	132
32 Percent Death Loss	16.3	10.2	32.8

SUMMARY OF FARM EARNINGS, 1963-1968

Items	1963	1964	1965	1966	1967	1968
<u>FARM RECEIPTS</u>						
Dairy Cattle	\$ 1162	1008	1404	1750	1979	2827
Dairy Products	5201	6031	5622	7054	8650	12420
Beef Cattle (incl. feeders)	718	943	559	464	894	609
Hogs	739	511	797	901	840	696
Sheep and Wool	100	97	123	104	173	70
Horses	8	--	--	--	--	--
Poultry (incl. turkeys)	6	20	8	30	6	19
Eggs	29	40	19	83	35	128
Other Productive Livestock	--	--	--	--	1	--
Corn	434	28	23	41	49	37
Small Grains	140	417	106	238	431	860
Diverted Acre Income	--	--	344	309	126	134
Other Crops	121	846	650	631	658	652
Gas Tax Refunds + Cap. Assets Sold	204	157	190	141	238	159
Income From Work Off the Farm	203	556	202	259	405	333
Miscellaneous Farm Income	391	591	209	186	300	124
1 Total Farm Sales	9456	11245	10256	12191	14785	19068
2 Increase in Farm Capital	2264	572	1949	4108	3229	3427
3 Family Living From the Farm	366	358	377	415	345	380
4 Total Farm Receipts 1+2+3	\$12086	12175	12582	16714	18359	22875
<u>FARM EXPENSES</u>						
Dairy Cattle Bought	\$ 271	69	417	753	677	360
Beef Cattle Bought (incl. feeders)	390	165	92	74	94	189
Hogs Bought	24	21	20	84	45	30
Sheep Bought (incl. feeders)	18	3	33	3	13	9
Horses Bought	1	--	--	--	--	--
Poultry Bought (incl. turkeys)	5	13	6	24	5	10
Other Productive Livestock	--	--	--	--	2	--
Miscellaneous Livestock Expense	285	360	301	385	481	727
Feed Bought	1310	1419	1593	2004	2284	3049
Fertilizer	297	467	412	389	611	800
Other Crop Expense	311	429	355	431	508	579
Custom Work Hired	529	606	514	560	712	903
Gas-Oil-Grease Bought (farm share)	673	679	634	654	740	835
Repair + Oper. of Mach., Tractor, Truck and Auto (farm share)	523	624	594	650	636	902
Repair and Upkeep of Farm Real Estate	77	106	91	119	149	186
Repair and Upkeep of Livestock Equip.	66	85	68	70	83	101
Wages of Hired Labor	276	340	199	202	301	451
Electricity Expense (farm share)	206	216	193	214	227	268
Real Estate & Pers. Property Taxes	434	518	453	494	537	381
Telephone & General Farm Expense	180	186	176	215	236	333
5 Total Cash Operating Expense	\$ 5876	6306	6151	7325	8341	10119
6 Power, Crop & Gen. Mach. Bought	1002	1236	1197	1548	2039	2131
7 Livestock Equipment Bought	407	208	162	405	409	626
8 New Real Estate + Improvements	985	536	913	1081	1473	1346
9 Total Farm Purchases 5-8	\$ 8270	8286	8423	10359	12262	14222
10 Decrease in Farm Capital	--	--	--	--	425	325
11 Interest on Farm Capital	1450	1749	1411	1563	1822	2311
12 Unpaid Family Labor	443	453	672	615	498	613
13 Labor Charge for Partners + Other Partners	--	--	--	--	127	98
14 Board Furnished Hired Labor	49	80	34	31	40	44
15 Total Farm Expense 9-14	\$10212	10568	10540	12563	15174	17613
16 Labor Earnings 4-15	\$ 1874	1607	2042	4146	3186	5262

1964-1965-1966-1967-1968 IN A CAPSULE

	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
FARM SIZE (ACRES)	409	332	295	332	385
SIZE OF BUSINESS (WORK UNITS)*	449	377	368	408	352
RETURN TO CAPITAL & FAMILY LABOR	3443	3366	5356	4536	6953
LABOR EARNINGS	1607	2042	4146	3186	5350
NET WORTH (AVG. JAN. 1 & DEC. 31)	32780	22404	23246	25139	37044
RATIO OF ASSETS TO LIABILITIES	4.10:1	2.94:1	2.60:1	2.47:1	3.02:1
EXPENSES PER DOLLAR INCOME	.87	.84	.75	.83	.77
RETURN PER DOLLAR INVESTED	.10	.07	.13	.09	.12
%OF GROSS RECEIPTS SAVED AS RETURN TO CAPITAL & FAMILY LABOR	28.3%	27.0%	32.1%	24.8%	31.1%

SOURCE OF INCOME

INCOME FROM LIVESTOCK	77%	83%	85%	85%	87.9%
INCOME FROM CROPS	11%	11%	10%	8.6%	8.8%
MISCELLANEOUS INCOME	12%	6%	5%	6.4%	3.3%

N.E. FARM MANAGEMENT PROGRAM
DULUTH AREA INSTITUTE OF TECHNOLOGY

*One work unit equals one 10 hour working day.