

1970 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**

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1970 REPORT OF THE VOCATIONAL AGRICULTURE FARM MANAGEMENT
PROGRAM IN NORTHEASTERN MINNESOTA

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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 1970 report represents the fifteenth 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 Gail Wonders, Anna Cackowski, and Dair Nichols, and his clerical class.

Directing locally in a supervisory capacity were: Dr. Donald H. Peckenpau, Superintendent of Duluth Public School and Dr. James Flis, Assistant Director, Adult Education.

Cooperating agencies were represented by: Mr. Paul Day and Mr. Robert Van Tries of the Vocational Division, State Department of Education, and Dr. R. Paul Marvin 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 account books from the Staples area.

This report deals with farmers enrolled in adult programs of school and county agent programs shown below. One-hundred twenty-three records were submitted for analysis with averages of one-hundred six included in this report.

1970 Records for analysis were received from:

<u>School</u>	<u>No. of Farmers</u>	<u>Instructors</u>
Bagley	12	Ken Ostlund
Baudette	3	Otto Lee (County Agent), Robert Borchardt
Eagle Bend	19	Bill Ladwig
Cherry	2	Ed Takala
Pine City	16	Arvid Anderson
Staples	22	Lennen Naley
Staples	17	Donald Baustian
Staples	12	Wayne Haglin
Staples	2	Thomas Kajer
Sebekka	19	Orville Thomas

The cooperating centers submitted records from nine (9) 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	1	Ottertail	15
Cass	8	Pine	16
Clearwater	12	St. Louis	2
Lake of Woods	3	Todd	46
		Wadena	<u>20</u>
	Total		123

Records this year, for the 7th year, were analyzed by electronic data processing with the work being done by Agriculture Records Cooperative at Madison, Wisconsin.

IRRIGATED CROPS

This year we started allocating irrigation costs to the crops irrigated. The operational costs are calculated according to the actual water pumped on each crop. The depreciation is pro-rated to the crops that are intended to be irrigated.

There were 13 farms that had varying amounts of irrigation on a variety of crops. It appears that the mechanics of handling this phase of the analysis works. We anticipate a considerable increase in the number of irrigated farms in our averages next year.

FARM INVESTMENT

The average capital investment per farm varied from 11,000 to 183,000. The average investment for all farms included in this report and for the high and low groups operators labor earnings are 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 F 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. Veterans education assistance payments are found in this item. However 67 farms in the report showed outside income ranging from a low of \$8 to a high of \$8,038 per farm involved. Non-farm income is not included in this report as a part of farm labor earnings.

TABLE 1 SUMMARY OF FARM INVENTORIES, 1970

(Average 106 Farms)

1.	Size of Farm - Total Acres	361.9	
2.	- Tillable Acres	190.8	
3.	Work Units - Crops	85.39	
4.	- Livestock	251.85	
5.	- Other	6.25	
6.	TOTAL SIZE OF BUSINESS IN WORK UNITS	343.49	
7.	Number of Workers	1.5	
7A.	Farm Capital Investment Per Worker	35481	
		Jan. 1	Dec. 31
8.	PRODUCTIVE LIVESTOCK		
9.	Dairy Cows	7852	8124
10.	Other Dairy Cattle	3517	4355
11.	Beef Breeding Cattle	2217	2648
12.	Beef Feeder Cattle	329	133
13.	Hogs	403	400
14.	Sheep (incl. feeders)	37	41
15.	Poultry (incl. turkeys)	7	7
16.	Other Productive Livestock	20	18
17.	TOTAL PRODUCTIVE LIVESTOCK	\$ 14382	\$ 15726
18.	Crop, Seed and Feed	3929	4625
19.	POWER, MACHINERY AND EQUIPMENT		
20.	Auto and Truck (farm share)	1062	1131
21.	Power and Machinery	6371	7300
22.	Livestock Equipment	2550	2788
23.	TOTAL POWER, MACHINERY & EQUIPMENT	\$ 9983	\$ 11219
24.	Land	12616	13537
25.	Buildings - Fences - etc.	8402	9196
26.	TOTAL FARM CAPITAL	\$ 49312	\$ 54303

TABLE 1 (continued)

		21 High	21 Low		
1	Size of Farm - Total Acres	487.2	323.7		
2	- Tillable Acres	264.0	171.0		
3	Work Units - Crops	119.51	74.33		
4	- Livestock	373.14	199.77		
5	- Other	4.95	8.0		
6	TOTAL SIZE OF BUSINESS IN WORK UNITS	497.60	282.10		
7	Number of Workers	1.7	1.6		
7A	Farm Capital Investment Per Worker	49847.0	29773.0		
		Jan 1	Dec 31	Jan 1	Dec 31
8	PRODUCTIVE LIVESTOCK				
9	Dairy Cows	11266	11539	6738	6737
10	Other Dairy Cattle	5630	6895	2706	2756
11	Beef Breeding Cattle	4248	4477	3466	3748
12	Beef Feeder Cattle	145	175	340	17
13	Hogs	582	434	441	585
14	Sheep (incl. feeders)	58	57	32	33
15	Poultry (incl. turkeys)			4	6
16	Other Productive Livestock	17	17	45	49
17	TOTAL PRODUCTIVE LIVESTOCK	\$ 21946	23594	13772	13931
18	Crop, Seed and Feed	7212	9379	3013	2926
19	POWER, MACHINERY AND EQUIPMENT				
20	Auto and Truck (farm share)	1293	1291	770	898
21	Power and Machinery	9611	10654	5637	6867
22	Livestock Equipment	3735	3956	3448	3560
23	TOTAL POWER, MACHINERY AND EQUIPMENT	\$ 14639	15901	9855	11325
24	Land	18629	20949	8976	10300
25	Buildings-Fences-etc.	13256	13874	6007	7335
26	TOTAL FARM CAPITAL	\$ 75682	83697	41623	45817

TABLE BA. WHOLE FARM SUMMARY OF CASH RECEIPTS - 1970		Average of 106 Farms	21 High	21 Low
1	SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2	Dairy Cows	\$ 1736	2941	1432
3	Dairy Products	14435	23672	9307
4	Other Dairy Cattle	1231	1708	875
5	Beef Breeding Cattle	726	1731	990
6	Beef Feeder Cattle	366	301	419
7A	Hogs Complete	298	1380	122
7B	Hogs Finishing	19		90
7C	Hogs Producing Weaning Pigs	602	52	904
8A	Sheep and Wool, Farm Flock	42	59	18
8B	Sheep and Wool, Feeder Lambs			
9	Chickens (Incl. Hens and Broilers)	4		
10	Turkeys			
11	Eggs	35		17
12	Other Productive Livestock	4		
12A	TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$19546	31844	14174
13	SALE OF CROPS			
14	Corn	22	23	35
15	Soybeans, Flax, Sunflowers			
16	Wheat, Oats, Barley, Rye	260	892	127
17	Potatoes, Sugar Beets, Canning & Other Crops A&B	14		13
18	Hay, Silage and Other Crops	652	1879	94
19	Diverted Acre Payment	427	555	445
19A	Total Sales From Crops	\$ 1375	3349	714
20	Capital Assets Sold	107	275	177
21	Gas Tax Refund	84	102	75
22	Income From Work Off The Farm	195	199	299
23	Patronage Refunds	107	122	61
24	Miscellaneous Farm Income	150	183	164
25	TOTAL FARM SALES	\$21564	36074	15664
26	Increase In Farm Capital	5546	8389	6226
27	Family Living From The Farm	352	441	245
28	TOTAL FARM RECEIPTS (25)+(26)+(27)	\$27462	44904	22135

TABLE 23 - WHOLE FARM SUMMARY OF CASH EXPENSES - 1970				
	Average cf 106 Farms	21 High	21 Low	
1 PURCHASE OF LIVESTOCK				
2 Dairy Cows	\$ 517	335	814	
3 Other Dairy Cattle	282	91	170	
4 Beef Breeding Cattle	58	122	99	
5 Beef Feeder Cattle	33		4	
6A Hogs Complete	49	19	206	
6B Hogs Finishing	11		52	
6C Hogs Producing Weaning Pigs	47		94	
7A Sheep, Farm Flock	6	3		
7B Sheep, Feeder Lambs				
8 Chickens (incl. hens and broilers)	7		1	
9 Turkeys				
10 Other Productive Livestock				
11 Miscellaneous Livestock Expense	916	1494	753	
12 Feed Bought	3677	5670	2870	
13 Fertilizer	734	1398	589	
14 Chemicals	162	262	106	
15 Other Crop Expense	417	623	341	
16 Custom Work Hired	1108	1860	650	
17 Repair + Upkeep of Livestock Equip.	189	258	166	
18 Repair + Upkeep of Farm Real Estate	296	420	271	
19 Gas, Oil, Grease Bought (farm share)	755	1046	730	
20 Repair + Oper of March, Tractor, Truck, Auto (F.S.)	1111	1517	1342	
21 Wages of Hired Labor	485	1033	397	
22 Personal Property + Real Estate Taxes	487	759	464	
23 General Farm Expense	344	562	278	
24 Telephone Expense (Farm Share)	81	91	74	
25 Electricity Expense (Farm Share)	342	459	293	
26 Total Cash Operating Expense	\$ 12114	18022	10764	
27 Power, Crop and General Mach Bought (Farm Share)	2826	3264	3566	
28 Livestock Equipment Bought	687	710	890	
29 New Real Estate + Improvement	2360	3766	3552	
30 Total Farm Purchases (26) Thru (29)	\$ 17987	25762	18772	
31 Decrease In Farm Capital	557	375	2030	
32 Interest On Farm Capital	3108	4781	2623	
33 Unpaid Family Labor	1060	832	1606	
34 Labor Charge For Partners + Other Operators	223	487	143	
35 Board Furnished Hired Labor	57	42	18	
36 Total Farm Expense (30) Thru (35)	\$ 22992	32279	25192	
37 Labor Earnings (Whole Farm) (2A/28)-(36)	\$ 4473	12625	(-3058)	
38 Number of Operators	1	1	1	

TABLE 3 - ENTERPRISE STATEMENTS - 1970

	Average of 106 Farms	21 High	21 Low
1 RETURNS AND NET INCREASES			
2 PRODUCTIVE LIVESTOCK			
3 Dairy Cattle	\$ 14410	\$ 23678	\$ 8828
4 Other Dairy Cattle	3816	6455	2106
5 Beef Breeding Cattle	1082	1915	1186
6 Feeder Cattle	130	130	113
7 Complete Hog Enterprise	273	1244	118
8 Hog Finishing Enterprise	12		55
9 Producing Weaning Pigs	540	21	755
10 Farm Flock of Sheep	40	55	18
11 Feeder Lambs			
12 Chickens (Incl. Hens and Broilers)	35		25
13 Turkeys			
14 Other Productive Livestock	1		5
15 ALL PRODUCTIVE LIVESTOCK	\$ 20339	\$ 33498	\$ 13209
16 Value of Feed Fed to Livestock	9670	14467	8241
17 Return Over Feed from Livestock	10669	19031	4968
18 Crop, Seed and Feed	6645	11894	4891
19 Income from Labor off the Farm	125	99	160
20 Cooperative Patronage Refunds	107	122	61
21 Miscellaneous Farm Income	150	183	164
22 TOTAL RETURNS AND NET INCREASES	\$ 17696	\$ 31329	\$ 10244
23 EXPENSES AND NET DECREASES			
24 Truck and Auto (Farm Share)	\$ 1344	\$ 1554	\$ 1532
25 Tractors and Crop Machinery	2861	4241	2918
26 Electricity	342	459	293
27 Livestock Equipment	651	767	944
28 Buildings, Fences and Tiling	906	1414	828
29 Bare Land	(-50)	(-405)	171
30 Misc. Livestock Expense	916	1494	753
31 Labor	2011	2499	2282
32 Labor Charge for Other Operator(s)	223	487	143
33 Property Tax	487	759	464
34 General Farm Expense and Telephone	425	653	352
35 Interest on Farm Capital	3108	4781	2623
36 TOTAL EXPENSES AND NET DECREASES	\$ 13224	\$ 18703	\$ 13303
37 Labor Earnings	\$ 4472	\$ 12626	\$ (-3059)
38 Number of Farm Operators	1	1	1

TABLE 4 - HOUSEHOLD EXPENSE - 1970		Average of 82 Farms	16 High	16 Low
1.	Number of Persons - Family	6	6	6
2.	Number of Adult Equivalent - Family	4.0	4.4	4.3
3.	Church and Welfare	\$ 144	239	93
4.	Medical Care and Health Insurance	537	694	461
5.	Food and Meals Bought	987	1251	839
6.	Operating Expense and Supplies	290	398	229
7.	Furnishings and Equipment	280	422	46
8.	Clothing and Clothing Materials	287	394	135
9.	Personal Care, Personal Spending	82	88	55
10.	Education	105	113	126
11.	Recreation	85	169	17
12.	Gifts and Special Events	154	218	39
13.	Pers. Share Truck and Auto Exp.	228	230	169
14.	Oper. Share Upkeep on Dwelling	66	149	20
15.	Pers. Share Tel. and Elect. Exp.	177	206	168
16.	TOTAL CASH LIVING EXPENSES	\$3422	4571	2397
17.	Pers. Share New Truck and Auto	258	382	228
18.	New Dwelling Bought	287	794	
19.	Taxes and Other Deductions	252	621	7
20.	Life Insurance and Other Savings and Investments	324	792	21
21.	TOTAL HOUSEHOLD AND PERSONAL (16) - (20)	\$4543	7160	2653
22.	TOTAL FAMILY LIVING FROM THE FARM (33)	369	483	292
23.	TOTAL CASH AND NON-CASH EXPENSES (21)+(22)	\$4912	7643	2945
24.	FAMILY LIVING FROM THE FARM			
25.		\$OPR. SHARE	OPR. SHARE	OPR. SHARE
26.	Milk and Cream	\$ 123	142	120
27.	Beef	182	315	82
28.	Pork	18	2	24
29.	Lamb			
30.	Poultry	3		
31.	Eggs	2		
32.	Veg., Fruit, Spuds, and Fuel-Also Other Produce	41	24	66
33.	TOTAL FAMILY LIVING FROM THE FARM	\$ 369	483	292

TABLE 5 - NET WORTH STATEMENT - OPERATOR - 1970

	Ave. of 105 Farms		21 High		20 Low	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31	Jan. 1	Dec. 31
1. Total Productive Livestock	\$ 14183	15495	22450	23595	11498	12181
2. Crop, Seed and Feed	3921	4640	7822	9670	2851	2840
3. Total Power, Machinery and Equipment	9774	10970	15491	17122	7309	8511
4. Land	12736	13666	20671	23010	9625	11015
5. Buildings, Fences, etc.	8317	9125	13168	13788	5300	6762
6. TOTAL FARM CAPITAL	48931	53896	79602	87185	36583	41309
7. Non-Farm Assets	5064	5417	10276	10993	3036	3153
8. Dwelling	5114	5207	8889	9099	5326	5319
9. TOTAL ASSETS	\$ 59109	64520	98767	107277	44945	49781
10. Real Estate Mortgages	12602	12894	16976	17313	13015	12513
11. Chattel Mortgages	8485	9344	13832	12665	7093	9087
12. Notes	1189	1533	1165	2150	1773	1776
13. Accounts Payable	531	566	233	263	229	475
14. TOTAL LIABILITIES	\$ 22807	24337	32206	32391	22110	23851
15. FARMERS NET WORTH	\$ 36302	40183	66561	74886	22835	25930
16. GAIN, OR (LOSS) IN NET WORTH		\$ 3881		\$ 8325		\$ 3095
17. SUPPLEMENTARY MANAGEMENT INFORMATION						
18. Operators Labor Earnings (6B/39)	\$ 4409		\$ 11488		\$ (2429)	
19. Return To Capital and Family Labor (6B/40)	7223		15616		(-36)	
20. Non-Farm Income						
21. Outside Investment Income	50		116		3	
22. Other Personal Income	661		395		691	
23. TOTAL NON-FARM INCOME	\$ 711		\$ 511		\$ 694	
24. Total Money Borrowed	5810		4985		7837	
25. Total Paid on Debt (Principal)	4867		6117		5854	
26. Total Household and Pers. Cash Expense (4/23)	4164		6365		2530	
27. Ratio Farm Exp. to Farm Receipts	.837		.746		1.122	
28. Ratio Assets to Liabilities	2.592	2.651	3.067	3.312	2.033	2.087
29. Ratio Non-Real Est. Assets-Non-Real Est. Liabilities	3.23	3.19	3.68	4.07	2.72	2.35
30. Ratio Real Estate Assets to Real Estate Liabilities	2.08	2.17	2.52	2.65	1.56	1.85
31. Ratio Net Worth to Total Liabilities	1.59	1.65	2.07	2.31	1.03	1.09
32. *Ratio Cash Operating Exp. to Adj. Total Farm Sales		.64		.57		.82

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

TABLE 6A OPERATORS SHARE OF CASH RECEIPTS-1970		Average of 106 Farms	21 High	21 Low
1	SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2	Dairy Cows	\$ 1761	3125	915
3	Dairy Products	14326	21778	9400
4	Other Dairy Cattle	1220	1605	736
5	Beef Breeding Cattle	726	1811	709
6	Beef Feeder Cattle	366	892	419
7A	Hogs Complete	298	1502	
7B	Hogs Finishing	19		90
7C	Hogs Producing Weaning Pigs	602		904
8A	Sheep and Wool, Farm Flock	42	59	18
8B	Sheep and Wool, Feeder Lambs			
9	Chickens (Incl. Hens and Broilers)	4		
10	Turkeys			
11	Eggs	33		17
12	Other Productive Livestock	4		
12A	TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$19401	30772	13208
13	<u>SALE OF CROPS</u>			
14	Corn	22	23	35
15	Soybeans, Flax, Barley, Rye			
16	Wheat, Oats, Barley, Rye	238	908	127
17	Potatoes, Sugar Beets, Canning, Other Crops A+B	10		13
18	Hay, Silage and Other Crops	619	2649	14
19	Diverted Acre Payment	427	727	428
19A	TOTAL SALES FROM CROPS	\$ 1316	4307	617
20	Capital Assets Sold	107	267	177
21	Gas Tax Refund	83	122	67
22	Income From Work Off the Farm	195	196	284
23	Patronage Refunds	107	118	59
24	Miscellaneous Farm Income	150	204	164
25	TOTAL FARM SALES	\$21359	35986	14576
26	Increase in Farm Capital	5580	8829	6197
27	Family Living From the Farm	352	455	264
28	TOTAL FARM RECEIPTS (25)+(26)+(27)	\$27291	45270	21037
29	Adjusted Total Farm Sales (25)-(20)	21252	35719	14399
30	Total Cash Farm Operating Expense	13567	20187	11588
31	Net Cash Operating Income	\$ 7685	15532	2811

TABLE 6B - OPERATOR'S SHARE OF CASH EXPENSE - 1970		Average of 106 Farms	21 High	21 Low
1	PURCHASE OF LIVESTOCK			
2	Dairy Cows	\$ 517	\$ 129	\$ 814
3	Other Dairy Cattle	282	91	170
4	Beef Breeding Cattle	58	139	99
5	Beef Feeder Cattle	33		4
6A	Hogs Complete	49	225	
6B	Hogs Finishing	11		52
6C	Hogs Producing Weaning Pigs	47		94
7A	Sheep, Farm Flock	6	3	
7B	Sheep, Feeder Lambs			
8	Chickens	7		1
9	Turkeys			
10	Other Productive Livestock			
11	Miscellaneous Livestock Expense	908	1307	788
12	Feed Bought	3669	5409	2763
13	Fertilizer	733	1578	590
14	Chemicals	161	274	108
15	Other Crop Expense	415	644	331
16	Custom Work Hired	1105	1849	623
17	Repair & Upkeep of Livestock Equipment	189	247	144
18	Repair & Upkeep of Farm Real Estate	296	430	271
19	Gas, Oil, Grease Bought (Farm Share)	755	1145	709
20	Repair & Oper. of Mach., Tractor, Truck, Auto (F.S.)	1111	1573	1247
21	Wages of Hired Labor	485	1056	357
22	Personal Property & Real Estate Taxes	487	832	442
23	Cash Rent	190	276	41
24	General Farm Expense	344	602	241
25	Telephone Expense (Farm Share)	81	90	71
26	Electricity Expense (Farm Share)	342	447	283
27	Interest Expense	1287	1839	1346
28	TOTAL CASH OPERATING EXPENSE	\$ 13568	\$ 20185	\$ 11589
29	Power, Crop and General Mach. Bought (Farm Share)	2826	3683	3434
30	Livestock Equipment Bought	687	710	890
31	New Real Estate & Improvements	2360	3785	3567
32	TOTAL FARM PURCHASES (28) THRU (31)	\$ 19441	\$ 28363	\$ 19480
33	Decrease in Farm Capital	558	1247	1167
34	Interest on Farm Capital	1817	3165	1123
35	Unpaid Family Labor	1060	964	1609
36	Board Furnished Hired Labor	57	42	18
37	TOTAL FARM EXPENSE (32) THRU (37)	\$ 22933	\$ 33781	\$ 23397
38	Labor Earnings (Operators Share) (6A/28)-(38)	\$ 4358	\$ 11488	\$ -2359
39	Return to Capital and Family Labor	\$ 7235	\$ 15617	\$ 373

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	Cat 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

AVERAGE PRICES OF FEED AND OTHER PRICES USED IN 1970 REPORT

SMALL GRAIN & CORN

Corn	\$1.30/Bu.
Oats	.75/Bu.
Soybeans	2.75/Bu.
Wheat	1.45/Bu.
Rye	1.15/Bu.
Barley	1.00/Bu.
Flaxseed	3.00/Bu.
Bluegrass	.245/Lb.

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	\$25.00
O. Leg. & Mix	20.00
Annual & Tame	16.00
Wild Hay	16.00
Corn Silage	9.00
Oats Silage	6.00
Leg. & Grass Sil.	8.00

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	\$10.00
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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.

TABLE 8 - MEASURES OF FARM ORGANIZATION - 1970		AVERAGE OF 106 FARMS	21 HIGH	21 LOW
1	LABOR EARNINGS	\$ 4473	12625	(-3058)
2	CROP YIELDS - INDEX	99	107	82
3	PERCENT TILL. LAND IN H.R. CROPS	59.5	58.2	57.7
4	GROSS RETURN PER TILL. ACRE (EXCL. PASTURE)	54.11	70.66	44.21
5	RETURN FOR \$100 TO PROD. LIVESTOCK-INDEX	99	114	67
6	LIVESTOCK UNITS PER 100 ACRES*	23.0	26.5	20.7
7	SIZE OF BUSINESS - WORK UNITS	343.5	497.5	282.1
8	WORK UNITS PER WORKER	229.3	306.7	185.1
9	POWER MACH., EQUIP., BLDG., EXP. PER WORK UNIT	17.97	16.55	23.83
10	FARM CAPITAL INVESTMENT PER WORKER	35481	49847	29773
11	INDEX OF RETURN FOR \$100 FEED FROM			
12	COMPLETE HOG ENTERPRISE	100	127	31
13	HOG FINISHING ENTERPRISE	100		100
14	PRODUCING WEANING PIGS	100		109
15	DAIRY CATTLE	100	110	75
16	OTHER DAIRY	100	105	90
17	ALL DAIRY AND DUAL PURPOSE CATTLE	100	109	77
18	BEEF BREEDING CATTLE	100	101	73
19	BEEF FEEDER CATTLE	100	187	48
20	SHEEP FARM FLOCK	100	113	70
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	56.9	83.2	50.1
28	WORK UNITS			
29	CROPS	85.4	119.5	74.3
30	PRODUCTIVE LIVESTOCK	251.8	373.1	199.7
31	OTHER PRODUCTIVE WORK UNITS	6.3	4.9	8.0
32	EXPENSES PER WORK UNIT			
33	TRACTOR AND CROP MACHINERY EXPENSE	\$8.20	8.25	10.42
34	FARM SHARE OF AUTO AND TRUCK EXPENSE	4.09	3.09	5.63
35	FARM SHARE OF ELECTRICITY EXPENSE	1.03	.94	1.09
36	LIVESTOCK EQUIPMENT EXPENSE	1.85	1.43	3.05
37	BUILDING, FENCING, AND TILING EXPENSE	2.79	2.82	3.62
38	TRACTOR AND CROP MACH. EXPENSE PER CROP ACRE**	15.34	18.04	16.04
39	*ACRES INCLUDE ALL TILLABLE LAND, NON-TILLABLE HAY AND PASTURE			
40	**ACRES INCLUDE ALL TILLABLE LAND PLUS ACRES IN WILD HAY			

MEASURES OF FARM ORGANIZATION AND EFFICIENCY

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

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 OR 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 were changed in 1968 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.

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.

Dotted lines across the center of the page.

	Labor earn- ings	Crop Yields	High Ret. Crops	Return from Pro- ductive Livestock	Pr.L.S. units per 100 A.	Work Units per Worker	Work Units per Worker	P.M.E.& B. Exp. per Work Unit
\$20,000	180	92	180	47	660	450	6.00	
18,000	170	88	170	44	620	420	7.50	
16,000	160	84	160	41	580	390	9.00	
14,000	150	80	150	38	540	360	10.50	
12,000	140	76	140	35	500	330	12.00	
10,000	130	72	130	32	460	300	13.50	
8,000	120	68	120	29	420	270	15.00	
6,000	110	64	110	26	380	240	16.50	
4,473	100	59.5	100	23.0	343.5	229.3	17.97	
4,000	90	56	90	20	300	210	19.50	
2,000	80	52	80	17	260	180	21.00	
0	70	48	70	14	220	150	22.50	
-2,000	60	44	60	11	180	120	24.00	
-4,000	50	40	50	8	140	90	25.50	
-6,000	40	36	40	5	100	60	27.00	
-8,000	30	32	30	2	60	30	28.50	

Every study of farm earnings shows a wide variation in earnings among farmers in a given year. The average operator's earnings of farmers ranking in the upper one fourth of the range according to earnings was \$11,514. Those in the lower one fourth averaged \$-2,158. This is a range of \$13,672 between the average earnings of the 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:

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 expenses

AVERAGE OF 121 CASES: \$4,522

26,000
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
- 200
- 400
- 600
- 800
- 1,000
- 1,200
- 1,400
- 1,600
- 1,800
- 2,000
- 4,000
- 6,000
- 8,000
-10,000
-12,000
-14,000
-16,000

RANGE IN LABOR EARNINGS

Low 25%
\$-2,158

The line represents the labor earnings of the farms with a total of 121 farms in all.

LABOR EARNINGS CORRELATED WITH EXCELLED FACTORS

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

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 management factors are also those reporting the highest labor earnings.

No. of Factors in which farmers excelled	No. of farms	-2,000	-1,000	0	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000
0-1	14	-51,678													
2-3	55						\$2,964								
4-5	35									\$6,310					
6-7	17													\$10,667	

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.

TABLE 9 - CROP PRODUCTION - 1970

	CROP RANK	NUMBER GROWING	ACRES	YIELD PER ACRE	
1	Oats and Mixtures	C	83	30.2	40.5 Bu.
2	Oats Silage	B	8	1.2	3.3 T.
3	Canning Peas (Irrigated Oats)	C	2	.2	30.0 Bu.
4	Wheat	C	6	1.5	19.3 Bu.
5	Barley	C	4	1.0	14.0 Bu.
6	Flax	C			
7	Rye	C	4	1.1	11.8 Bu.
8	Total Small Grain and Peas			35.2	
9	Canning Corn (Irrigated)	B	1	.1	80.00 \$
10	Corn Grain (Incl. Irrigated)	B	43	11.5	59.2 Bu.
11	Soybeans - Grain	C	8		
12	Corn and Cane Silage	B	82	24.0	7.7 T.
13	Corn and Cane Silage (Irrigated)	B	7	1.2	9.2 T.
14	Potatoes				
15	Sugar Beets				
16	Sunflowers (Irrigated Alfalfa)	A	4	.7	
17	Other Cultivated Crops - A			.3	16.67 \$
18	Other Cultivated Crops - B				
19	Total Cultivated Crops			37.8	
20	Alfalfa Hay	A	86	45.9	2.7 T.
21	Other Legume Hay and Mixtures	B	38	22.3	2.0 T.
22	Tame Grass Hay	C	13	3.4	2.1 T.
23	Annual Hay	D	2	.8	1.3 T.
24	Legume and Grass Silage	B	3	.3	6.7 T.
25	Legume Seed (Timothy)	A	4	2.8	499.6 Lbs.
26	Grass Seed (Blue Grass)	A	3	4.7	380.9 Lbs.
27	Total Hay			80.2	
28	Alfalfa and Mixed Pasture			.6	
29	Other Legume Pasture				
30	Other Tillable Pasture			10.5	
31	Total Tillable Pasture			11.1	
32	Diverted Acres Income	A	45	14.3	29.86 \$
33	Summer Fallow - Tilled			4.6	
34	Other Tillable Land Idle			2.6	
35	Total Tillable Land			185.8	
36	Wild Hay			12.1	.33
37	Non-Tillable Pasture			80.6	
38	Timber			39.0	1.46
39	Roads and Waste			32.9	
40	Farmstead			6.5	
41	Total Acres in Farm			356.9	
42	SUPPLEMENTARY MANAGEMENT INFORMATION				
43	Percent Land Tillable				52.1
44	Percent in High Return Crops				58.2
45	* Fertilizer Cost Per Acre				4.20
46	* Crop Chemicals Per Acre				.93
47	* Seed and Other Costs Per Acre				2.39
48	* Gas, Oil, Grease Bought Per Acre, Crop Machinery				2.96
49	* Tillable Land Minus Pasture				

TABLE 9 (Continued)

		Crop Rating	21 High in Labor Earnings		21 Low in Labor Earnings	
			Acres	Average Yield	Acres	Average Yield
1	Oats and Mixtures	C	36.2	48.7 Bu.	27.1	38.7 Bu.
2	Oats Silage	B	2.0	3.5 T.	.2	5.0 T.
3	Canning Peas (Irrigated Oats)	C			.4	27.50 Bu.
4	Wheat	C			.3	20.0 Bu.
5	Barley	C				
6	Flax	C				
7	Rye	C	1.8		.9	14.4
8	TOTAL SMALL GRAIN & PEAS		40.0		28.9	
9	Canning Corn (Irrigated)	B				
10	Corn Grain (Irrigated)	B	20.4	74.2 Bu.	8.1	53.7 Bu.
11	Soybeans-Grain	C				
12	Corn and Cane Silage	B	35.7	10.1 T.	21.5	5.6 T.
13	Corn and Cane Fodder (Irrigated)	B	1.2	14.2 T.	2.7	5.9 T.
14	Potatoes					
15	Sugar Beets					
16	Sunflowers(Irrigated Alfalfa)	A	1.8	2.8 T.	1.4	1.4 T.
17	Other Cultivated Crops - A					
18	Other Cultivated Crops - B					
19	TOTAL CULTIVATED CROPS		59.1		34.9	
20	Alfalfa Hay	A	56.2	3.3	37.2	2.3 T.
21	Other Legume Hay & Mixtures	B	18.4	2.0	25.4	2.0 T.
22	Tame Grass Hay	C	7.3	2.9	6.0	.8 T.
23	Annual Hay	D			2.9	1.0 T.
24	Legume & Grass Silage	B	.6	6.7	.9	5.6 T.
25	Legume Seed (Timothy)	A	5.9	440.8 LBS.		
26	Grass Seed (Bluegrass)	A	17.2	406.7 LBS.		
27	TOTAL HAY		105.6		72.4	
28	Alfalfa & Mixed Pasture		2.1			
29	Other Legume Pasture					
30	Other Tillable Pasture		8.4		12.0	
31	TOTAL TILLABLE PASTURE		10.5		12.0	
32	Diverted Acres Income	A	17.8	31.18	16.9	26.33
33	Summer Fallow - Tilled		16.5		1.4	
34	Other Tillable Land Idle		8.5		2.2	
35	TOTAL TILLABLE LAND		258.0		168.7	
36	Wild Hay		17.1	.23	9.7	.31
37	Non-Tillable Pasture		86.2		92.5	
38	Timber		41.1	1.68	20.5	
39	Roads and Waste		71.0		23.9	
40	Farmstead		7.8		6.1	
41	TOTAL ACRES IN FARM		481.2		321.4	
42	Supplementary Management Information					
43	Percent Land Tillable		53.6		52.5	
44	Percent In High Return Crops		57.9		55.4	
45	*Fertilizer Cost Per Acre		5.65		3.76	
46	*Crop Chemicals Per Acre		1.06		.68	
47	*Seed and Other Costs Per Acre		2.52		2.18	
48	*Gas, Oil, Grease Bought Per Acre					
	Crop Mach.		3.10		3.14	
49	*Tillable Land Minus Pasture					

TABLE 10 CROP DATA FOR CORN AND CANE SILAGE - 1970 ---- 82 FARMS

	TOTAL	PER ACRE
1. Acres	31.1	
2. Yield/Acre		7.7
3. Value/Unit		\$ 9.00
4. Gross Return	\$2155.23	69.30
5. SUPPLEMENTAL COSTS		
6. Fertilizer		8.26
7. Chemicals		4.18
8. Seed and Other		3.44
9. Hired Labor		
10. Custom Work		2.38
11. TOTAL SUPPLEMENTAL COSTS	567.89	18.26
12. RETURN OVER SUPPLEMENTAL COSTS	1587.34	51.04
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expense		25.44
15. Land Cost		9.97
16. Miscellaneous Costs		
17. TOTAL ALLOCATED COSTS	1101.25	35.41
18. TOTAL LISTED COSTS	Per Unit \$ 6.98	53.67
19. RETURN OVER TOTAL LISTED COSTS	\$ 486.09	\$ 15.63

TABLE 10 CROP DATA FOR IRRIGATED CORN SILAGE - 1970 ---- 7 FARMS

	TOTAL	PER ACRE
1. Acres	18.6	
2. Yield/Acre		8.8
3. Value/Unit		\$ 9.00
4. Gross Return	\$1473.12	79.20
5. SUPPLEMENTAL COSTS		
6. Fertilizer		10.81
7. Chemicals		4.52
8. Seed and Other		3.49
* 9. Hired Labor	Per Acre Inch 1.29	6.99
10. Custom Work		3.17
11. TOTAL SUPPLEMENTAL COSTS	539.03	28.98
12. RETURN OVER SUPPLEMENTAL COSTS	934.09	50.22
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expense		25.44
15. Land Cost		10.00
** 16. Miscellaneous Costs		10.16
17. TOTAL ALLOCATED COSTS	848.16	45.60
18. TOTAL LISTED COSTS	Per Unit \$ 8.51	74.58
19. RETURN OVER TOTAL LISTED COSTS	\$ 85.93	\$ 4.62
ACRE INCHES OF WATER APPLIED \$5.50		

* Line 9 is the operating costs for irrigation.

** Line 16 is the depreciation for irrigation equipment. This sum does not include interest on investment, taxes or a charge for storage.

TABLE 10 - CROP DATA FOR CORN FOR GRAIN - 1970 ---- 43 FARMS

	TOTAL	PER ACRE
1. Acres	25.4	
2. Yield/Acre		57.2
3. Value/Unit		1.30
4. Gross Return	1888.74	74.36
5. SUPPLEMENTAL COSTS		
6. Fertilizer		11.54
7. Chemicals		4.76
8. Seed and Other		4.13
9. Hired Labor		
10. Custom Work		1.73
11. TOTAL SUPPLEMENTAL COSTS	562.86	22.16
12. RETURN OVER SUPPLEMENTAL COSTS	1325.88	52.20
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expense		17.49
15. Land Cost		10.24
16. Miscellaneous Costs		
17. TOTAL ALLOCATED COSTS	704.34	27.73
	PER UNIT	
18. TOTAL LISTED COSTS	.87	49.89
19. RETURN OVER TOTAL LISTED COSTS	621.54	24.47

TABLE 10 - CROP DATA FOR IRRIGATED CORN FOR GRAIN - 1970 ---- 8 FARMS

	TOTAL	PER ACRE
1. Acres	16.6	
2. Yield/Acre		72.7
3. Value/Unit		1.30
4. Gross Return	1568.87	94.51
5. SUPPLEMENTAL COSTS		
6. Fertilizer		13.37
7. Chemicals		8.19
8. Seed and Other		4.88
* 9. Hired Labor Per Acre Inch 1.25		8.86
10. Custom Work		.84
11. TOTAL SUPPLEMENTAL COSTS	599.92	36.14
12. RETURN OVER SUPPLEMENTAL COSTS	968.95	58.37
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expense		17.49
15. Land Cost		9.28
**16. Miscellaneous Costs		6.75
17. TOTAL ALLOCATED COSTS	556.43	33.52
	PER UNIT	
18. TOTAL LISTED COSTS	.96	69.66
19. RETURN OVER TOTAL LISTED COSTS	412.52	24.85
ACRE INCHES OF WATER APPLIED 7.10		

* Line 9 is the operating costs for irrigation.

** Line 16 is the depreciation for irrigation equipment. This sum does not include interest on investment, taxes or a charge for storage.

TABLE 10 CROP DATA FOR OATS AND MIXTURES - 1970 ---- 83 FARMS

	TOTAL	PER ACRE
1. Acres	38.6	
2. Yield/Acre		40.5
3. Value/Unit		.75
4. Gross Return	1172.67	30.38
5. SUPPLEMENTAL COSTS		
6. Fertilizer		1.99
7. Chemicals		.08
8. Seed and Other		1.76
9. Hired Labor		
10. Custom Work		.98
11. TOTAL SUPPLEMENTAL COSTS	185.67	4.81
12. RETURN OVER SUPPLEMENTAL COSTS	987.00	25.57
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expense		9.54
15. Land Cost		8.73
16. Miscellaneous Costs		
17. TOTAL ALLOCATED COSTS	705.22	18.27
18. TOTAL LISTED COSTS	Per Unit .57 890.89	23.08
19. RETURN OVER TOTAL LISTED COSTS	281.78	7.30

TABLE 10 CROP DATA FOR IRRIGATED OATS AND MIXTURES - 1970 ---- 2 FARMS

	TOTAL	PER ACRE
1. Acres	10.0	
2. Yield/Acre		31.30
3. Value/Unit		.75
4. Gross Return	234.70	23.47
5. SUPPLEMENTAL COSTS		
6. Fertilizer		12.10
7. Chemicals		
8. Seed and Other		10.20
* 9. Hired Labor Per Acre Inch .70		1.40
10. Custom Work		2.20
11. TOTAL SUPPLEMENTAL COSTS	259.00	25.90
12. RETURN OVER SUPPLEMENTAL COSTS	(-24.30)	(-2.43)
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expense		9.54
15. Land Cost		10.00
**16. Miscellaneous Costs		2.20
17. TOTAL ALLOCATED COSTS	217.40	21.74
18. TOTAL LISTED COSTS	Per Unit 1.52 476.40	47.64
19. RETURN OVER TOTAL LISTED COSTS	(-241.70)	(-24.17)
ACRE INCHES OF WATER APPLIED 2.0		

* Line 9 is the operating costs for irrigation.

** Line 16 is the depreciation for irrigation equipment. This sum does not include interest on investment, taxes or a charge for storage.

TABLE 10 CROP DATA FOR ALFALFA HAY - 1971 - 86 FARMS

		TOTAL	PER ACRE
1.	Acres	55.7	
2.	Yield/Acre		2.7
3.	Value/Unit		25.00
4.	Gross Return	3720.76	66.80
5.	SUPPLEMENTAL COSTS		
6.	Fertilizer		2.69
7.	Chemicals		
8.	Seed and Other		2.57
9.	Hired Labor		
10.	Custom Work		.79
11.	TOTAL SUPPLEMENTAL COSTS	336.99	6.05
12.	RETURN OVER SUPPLEMENTAL COSTS	3383.77	60.75
13.	ALLOCATED COSTS		
14.	Power and Crop Machinery Expense		19.08
15.	Land Cost		9.14
16.	Miscellaneous Costs		
17.	TOTAL ALLOCATED COSTS	1571.85	28.22
	Per Unit		
18.	TOTAL LISTED COSTS	1908.84	34.27
19.	RETURN OVER TOTAL LISTED COSTS	1811.92	32.53

TABLE 10 CROP DATA FOR IRRIGATED ALFALFA HAY - 1971 - 4 FARMS

		TOTAL	PER ACRE
1.	Acres	21.2	
2.	Yield/Acre		2.1
3.	Value/Unit		25.00
4.	Gross Return	1113.00	52.50
5.	SUPPLEMENTAL COSTS		
6.	Fertilizer		4.60
7.	Chemicals		
8.	Seed and Other		1.83
*9.	Hired Labor Per Acre Inch 1.37		8.03
10.	Custom Work		
11.	TOTAL SUPPLEMENTAL COSTS	306.55	14.46
12.	RETURN OVER SUPPLEMENTAL COSTS	806.44	38.04
13.	ALLOCATED COSTS		
14.	Power and Crop Machinery Expense		13.18
15.	Land Cost		10.00
**16.	Miscellaneous Costs		3.09
17.	TOTAL ALLOCATED COSTS	556.92	26.27
	Per Unit		
18.	TOTAL LISTED COSTS	863.47	40.73
19.	RETURN OVER TOTAL LISTED COSTS	249.53	11.77
	ACRE INCHES OF WATER APPLIED		
	6.14		

* Line 9 is the operating costs for irrigation.

** Line 16 is the depreciation for irrigation equipment. This sum does not include interest on investment, taxes or a charge for storage.

TABLE 10 CROP DATA FOR OTHER LEGUME HAY AND MIXTURES - 1970 - - - 38 Farms

	TOTAL	PER ACRE
1. Acres	60.6	
2. Yield/Acre		1.8
3. Value/Unit		19.53
4. Gross Return	2130.09	35.15
5. SUPPLEMENTAL COSTS		
6. Fertilizer		1.67
7. Chemicals		
8. Seed and Other		1.67
9. Hired Labor		
10. Custom Work		.38
11. TOTAL SUPPLEMENTAL COSTS	225.43	3.72
12. RETURN OVER SUPPLEMENTAL COSTS	1904.66	31.43
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expence		12.72
15. Land Cost		8.17
16. Miscellaneous Costs		
17. TOTAL ALLOCATED COSTS	1265.93	20.89
18. TOTAL LISTED COSTS	Per Unit 13.32	24.61
19. RETURN OVER TOTAL LISTED COSTS	638.73	10.54

TABLE 10 CROP DATA FOR TAME GRASS HAY - 1970 - - - 13 Farms

	TOTAL	PER ACRE
1. Acres	28.0	
2. Yield/Acres		1.9
3. Value/Unit		16.00
4. Gross Return	851.20	30.40
5. SUPPLEMENTAL COSTS		
6. Fertilizer		1.81
7. Chemicals		
8. Seed and Other		1.11
9. Hired Labor		
10. Custom Work		
11. TOTAL SUPPLEMENTAL COSTS	81.76	2.92
12. RETURN OVER SUPPLEMENTAL COSTS	769.44	27.48
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expence		6.36
15. Land Cost		10.00
16. Miscellaneous Costs		
17. TOTAL ALLOCATED COSTS	458.08	16.36
18. TOTAL LISTED COSTS	Per Unit 10.19	19.28
19. RETURN OVER TOTAL LISTED COSTS	311.36	11.12

TABLE 10 CROP DATA FOR CORN AND SORGHUM - 1970 - - - - - 8 Farms

		TOTAL	PER ACRE
1	Acres	16.3	
2	Yield/Acre		3.6
3	Value/Unit		6.63
4	Gross Return	389.08	23.87
5	SUPPLEMENTAL COSTS		
6	Fertilizer		7.42
7	Chemicals		.55
8	Seed and Other		2.15
9	Hired Labor		.74
10	Custom Work		.86
11	TOTAL SUPPLEMENTAL COSTS	191.04	11.72
12	RETURN OVER SUPPLEMENTAL COSTS	198.04	12.15
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		12.72
15	Land Cost		8.65
16	Miscellaneous Costs		2.02
17	TOTAL ALLOCATED COSTS	381.26	23.39
	Per Unit		
18	TOTAL LISTED COSTS	572.30	35.11
19	RETURN OVER TOTAL LISTED COSTS	(-183.22)	(-11.24)

TABLE 10 CROP DATA FOR LEGUME AND GRASS SILAGE - 1970 - - - - - 3 Farms

		TOTAL	PER ACRE
1	Acres	10.00	
2	Yield/Acre		6.7
3	Value/Unit		6.67
4	Gross Return	446.90	44.69
5	SUPPLEMENTAL COSTS		
6	Fertilizer		2.10
7	Chemicals		
8	Seed and Other		1.00
9	Hired Labor		
10	Custom Work		
11	TOTAL SUPPLEMENTAL COSTS	31.00	3.10
12	RETURN OVER SUPPLEMENTAL COSTS	415.90	41.59
13	ALLOCATED COSTS		
14	Power and Crop Machinery Expense		12.72
15	Land Cost		10.00
16	Miscellaneous Costs		
17	TOTAL ALLOCATED COSTS	227.20	22.72
	Per Unit		
18	TOTAL LISTED COSTS	258.20	25.82
19	RETURN OVER TOTAL LISTED COSTS	188.70	18.87

TABLE 10 CROP DATA FOR GRASS SEED - 1970 ---- 3 FARMS

	TOTAL	PER ACRE
1. Acres	165.3	
2. Yield/Acres		382.7
3. Value/Unit		.18
4. Gross Return	11387.52	68.89
5. SUPPLEMENTAL COSTS		
6. Fertilizer		10.96
7. Chemicals		.77
8. Seed and Other		.24
9. Hired Labor		
10. Custom Work		4.20
11. TOTAL SUPPLEMENTAL COSTS	2672.90	16.17
12. RETURN OVER SUPPLEMENTAL COSTS	8714.62	52.72
13. ALLOCATED COSTS		
14. Power and Crop Machinery Expence		12.72
15. Land Cost		9.76
16. Miscellaneous Costs		
17. TOTAL ALLOCATED COSTS	3715.94	22.48
18. TOTAL LISTED COSTS Per Unit	6388.84	38.65
19. RETURN OVER TOTAL LISTED COSTS .10	4998.68	30.24

TABLE 10 CROP DATA FOR LEGUME SEED - 1970 ---- 4 FARMS

	TOTAL	PER ACRE
1. Acres	74.3	
2. Yield/Acre		499.1
3. Value/Unit		.16
4. Gross Return	5933.60	79.86
5. SUPPLEMENTAL COSTS		
6. Fertilizer		6.37
7. Chemicals		.13
8. Seed and Other		1.29
9. Hired Labor		
10. Custom Work		1.06
11. TOTAL SUPPLEMENTAL COSTS	657.56	8.85
12. RETURN OVER SUPPLEMENTAL COSTS	5276.04	71.01
13. ALLOCATED COSTS		12.72
14. Power and Crop Machinery Expense		9.65
15. Land Cost		
16. Miscellaneous Costs	1662.09	22.37
17. TOTAL ALLOCATED COSTS Per Unit .06	2319.65	31.22
18. TOTAL LISTED COSTS	3613.95	48.64
19. RETURN OVER TOTAL LISTED COSTS		

TABLE 10 - CROP DATA FOR DIVERTED ACRES - 1970 ----- 45 FARMS

	AVERAGE - 45 FARMS	TOTAL	PER ACRE
1 Acres		33.6	
2 Yield /Acre			29.94
3 Value/Unit			1.00
4 Gross Return		1005.98	29.94
5 SUPPLEMENTAL COSTS			
6 Fertilizer			.22
7 Chemicals			
8 Seed and Other			
9 Hired Labor			
10 Custom Work			
11 TOTAL SUPPLEMENTAL COSTS		7.39	.22
12 RETURN OVER SUPPLEMENTAL COSTS		998.59	29.72
13 ALLOCATED COSTS			
14 Power and Crop Machinery Expence			6.36
15 Land Cost			9.91
16 Miscellaneous Costs			
17 TOTAL ALLOCATED COSTS		546.67	16.27
	PER UNIT		
18 TOTAL LISTED COSTS	.55	554.06	16.49
19 RETURN OVER TOTAL LISTED COSTS		451.92	13.45

TABLE 10 - CROP DATA FOR WHEAT - 1970 ----- 6 FARMS

1 Acres		26.0	
2 Yield/Acre			19.5
3 Value Unit			1.45
4 Gross Return		735.28	28.28
5 SUPPLEMENTAL COSTS			
6 Fertilizer			2.04
7 Chemicals			.27
8 Seed and Other			2.04
9 Hired Labor			
10 Custom Work			.46
11 TOTAL SUPPLEMENTAL COSTS		125.06	4.81
12 RETURN OVER SUPPLEMENTAL COSTS		610.22	23.47
13 ALLOCATED COSTS			
14 Power and Crop Machinery Expence			9.54
15 Land Cost			4.88
16 Miscellaneous Costs			
17 TOTAL ALLOCATED COSTS		374.92	14.42
	PER UNIT		
18 TOTAL LISTED COSTS	.99	499.98	19.23
19 RETURN OVER TOTAL LISTED COSTS		235.30	9.05

TABLE 10 CRO: DATA FOR BARLEY - 1970 - - - 4 Farms

	TOTAL	PER ACRE
1 Acres	26.5	
2 Yield/Acre		13.9
3 Value/Unit		1.00
4 Gross Return	368.35	13.90
5 SUPPLEMENTAL COSTS		
6 Fertilizer		1.70
7 Chemicals		.08
8 Seed and Other		3.55
9 Hired Labor		
10 Custom Work		.04
11 TOTAL SUPPLEMENTAL COSTS	142.31	5.37
12 RETURN OVER SUPPLEMENTAL COSTS	226.04	8.53
13 ALLOCATED COSTS		
14 Power and Crop Machinery Expense		9.54
15 Land Cost		9.13
16 Miscellaneous Costs		
17 TOTAL ALLOCATED COSTS	494.76	18.67
18 TOTAL LISTED COSTS	Per Unit 1.73	24.04
19 RETURN OVER TOTAL LISTED COSTS	637.07 (-268.72)	(-10.14)

TABLE 10 CROP DATA FOR RYE - 1970 - - - 4 Farms

	TOTAL	PER ACRE
1 Acres	28.0	
2 Yield/Acre		12.6
3 Value/Unit		.61
4 Gross Return	215.32	7.69
5 SUPPLEMENTAL COSTS		
6 Fertilizer		3.04
7 Chemicals		
8 Seed and Other		4.07
9 Hired Labor		
10 Custom Work		
11 TOTAL SUPPLEMENTAL COSTS	199.08	7.11
12 RETURN OVER SUPPLEMENTAL COSTS	16.24	.58
13 ALLOCATED COSTS		
14 Power and Crop Machinery Expense		9.54
15 Land Cost		10.00
16 Miscellaneous Costs		
17 TOTAL ALLOCATED COSTS	547.12	19.54
18 TOTAL LISTED COSTS	Per Unit 2.11	26.65
19 RETURN OVER TOTAL LISTED COSTS	746.20 (-530.88)	(-18.96)

TABLE 11A - COSTS AND RETURNS FROM COMPLETE HOG ENTERPRISE - 1970

Average Farms 2		Herd Total	Per Cwt. Pork
1	Pounds of Hogs Produced	80047	
2	Total Value Produced	\$ 14298	17.86
3	<u>Pounds of Feed Fed</u>		
4	Corn		35.0
5	Small Grain		59.9
6	Protein, Salt and Mineral		36.6
7	Complete Ration		310.4
8	TOTAL CONCENTRATES		441.9
9	Forages		9.4
10	<u>Feed Cost</u>		
11	Concentrates and Forages		13.20
12	Pasture		
13	TOTAL FEED COSTS	\$ 10566	13.20
14	RETURN OVER FEED COSTS	\$ 3732	4.66
15	<u>Supplemental Costs</u>		
16	Miscellaneous Livestock Expense		
17	Veterinary Expense		.14
18	Custom Work		
19	TOTAL SUPPLEMENTAL COSTS	\$ 112	.14
20	RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$ 3620	4.52
21	SUPPLEMENTARY MANAGEMENT INFORMATION		
22	Return for \$100 Feed Fed		\$ 135.32
23	Price Received Per Cwt.		23.08
24	Number of Litters Farrowed		48
25	Number of Pigs Weaned Per Litter		6.1
26	Number of Pigs Born Per Litter		7.9
27	Per Cent Death Loss		15.2
28	Average Weight of Hogs Sold		244.9
29	Price Per Cwt. Concentrate Fed		\$ 2.97
30	Pounds of Pork Purchased		6070

TABLE 11C - COSTS AND RETURNS FROM PRODUCING WEANING PIGS - 1970

	Average 16 Farms		5 High		5 Low	
	Herd	Per	Herd	Per	Herd	Per
	Total	Litter	Total	Litter	Total	Litter
1 Number of Litters Farrowed	27		34		23	
2 Total Value Produced	\$ 3228	119.56	\$ 6223	183.03	\$ 1575	68.48
3 <u>Pounds of Feed Fed</u>						
4 Corn		1086.4		1995.6		396.9
5 Small Grain		498.0		407.9		660.6
6 Protein, Salt and Mineral		32.6		62.4		4.3
7 Complete Ration		760.7		615.3		1196.5
8 TOTAL CONCENTRATES		2377.7		3081.2		2258.3
9 Forages		47.5		47.1		8.7
10 <u>Feed Cost</u>						
11 Concentrates and Forages		62.89		74.41		67.87
12 Pasture						
13 TOTAL FEED COSTS	\$ 1698	62.89	\$ 2530	74.41	\$ 1561	67.87
14 RETURN OVER FEED COST	\$ 1530	56.67	\$ 3693	108.62	\$ 14	.61
15 <u>Supplemental Costs</u>						
16 Miscellaneous Livestock Expense		1.15		1.44		1.30
17 Veterinary Expense		1.52		2.15		1.09
18 Custom Work		2.89		6.71		.26
19 TOTAL SUPPLEMENTAL COSTS	\$ 150	5.56	\$ 350	10.30	\$ 61	2.65
20 RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$ 1380	51.11	\$ 3343	98.32	\$ (-47)	(-2.04)
21 <u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>						
22 Return for \$100 Feed Fed	\$ 190.11		\$ 245.97		\$ 100.90	
23 Average Price Received Per Pig Sold	\$ 22.68		\$ 28.76		\$ 17.82	
24 Number of Pigs Produced	186		261		147	
25 Number of Pigs Born Per Litter	8.6		9.8		7.9	
26 Number of Pigs Weaned Per Litter	7.0		7.9		6.3	
27 Per Cent Death Loss	15.8		16.1		16.6	
28 Price Per Cwt. Concentrate \$ Fed	2.63		\$ 2.40		\$ 3.00	
29 Feed and Suppl. Costs Per \$ Pig Produced	9.94		\$ 11.03		\$ 11.03	

TABLE 12 - DAIRY COWS - 1970		Average of 96 Farms	31 Farms High in Return Above Feed	31 Farms Low in Return Above Feed
		Per Cow	Per Cow	Per Cow
1	Average Number of Cows	29.8	33.9	24.1
2	Pounds of Milk	11117	12743	8445
3	Pounds of Butterfat	420.5	525.8	294.8
4	Per Cent of Butterfat in Milk	3.8	4.1	3.5
5	<u>Value of Produce</u>			
6	Dairy Products Sold	527.75	623.86	380.50
7	Dairy Products Used in Home	4.13	3.48	4.94
8	Milk Fed to Livestock	5.27	5.49	4.23
9	Net Increases in Value of Cows	(-10.50)	3.33	(-27.22)
10	TOTAL VALUE PRODUCED	\$526.65	\$636.16	\$362.45
11	<u>Pounds of Feed Fed</u>			
12	Corn	1185.7	1476.6	565.2
13	Small Grain & Complete Dairy Ration	3288.8	3506.4	2945.4
14	Protein, Salt & Mineral	220.9	340.7	92.8
15	TOTAL CONCENTRATES	4695.4	5323.7	3603.4
16	Legume Hay	6777.8	6393.7	8091.5
17	Other Hay and Dry Roughage	58.5	138.3	
18	Silage	10326.5	11149.9	9410.5
19	<u>Feed Costs</u>			
20	Concentrates	123.99	135.07	94.69
21	Roughages	105.84	105.34	114.52
22	Pasture	3.89	3.66	4.61
23	TOTAL FEED COSTS	\$233.72	\$244.07	\$213.82
24	RETURN OVER FEED COST	\$292.93	\$392.09	\$148.63
25	<u>Supplemental Costs</u>			
26	Miscellaneous Livestock Expense	22.38	26.93	14.40
27	Veterinary Expense	8.29	11.03	5.27
28	Custom Work	23.66	28.23	14.73
29	TOTAL SUPPLEMENTAL COSTS	\$54.33	\$66.19	\$34.40
30	RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$238.60	\$325.90	\$114.23
31	<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
32	Return for \$100 Feed Fed	\$225.33	\$260.65	\$169.51
33	Feed Cost Per Cwt. Milk	\$ 2.10	\$ 1.92	\$ 2.53
34	Feed Cost Per Pounds of Butterfat	\$.556	\$.464	\$.725
35	Pounds of Milk Per Pound of Concentrate	2.368	2.394	2.344
36	Average Price Per Cwt. Milk Sold	\$ 4.84	\$ 4.98	\$ 4.61
37	Average Price Per Pound of Butterfat	\$ 1.28	\$ 1.21	\$ 1.33

TABLE 12A - DAIRY COWS BY HERD SIZE - 1970

	Average of 114 Farms	48 Herds Over 30 Cows	66 Herds Under 30 Cows
1. Cows	30.5	40.0	20.9
2. Pounds of Milk	10528	11248	9819
3. Pounds of Butterfat	403.5	446.8	360.2
4. Percent of Butterfat in Milk	3.6	3.6	3.6
10. Total Value Produced	\$ 505.88	\$ 561.82	\$ 449.93
23. Total Feed Costs	\$ 238.35	\$ 243.84	\$ 232.86
24. Return Over Feed Costs	\$ 239.23	\$ 311.57	\$ 166.88
29. Supplement Costs	\$ 53.05	\$ 58.94	\$ 47.05
30. Return Over Feed and Supplement Costs	\$ 146.71	\$ 258.87	\$ 34.56
34. Feed Cost Per Pound of Butterfat	\$.615	\$.590	\$.639
35. Pounds of Milk Per Pound of Concentrate	2.63	2.41	2.84
36. Average Price Per Cwt. Milk Sold	\$ 4.73	\$ 4.91	\$ 4.55

* This is a new table designed to offer a different view of the dairy enterprise. Several farms included in columns two and three are not averages of column one as they were not available at averaging time.

TABLE 13 - OTHER DAIRY CATTLE - 1970

	Average of 92 Farms	30 Farms High in Return Above Feed	30 Farms Low in Return Above Feed
	Per Cow	Per Cow	Per Cow
1 Number of Head	35.9	28.8	35.5
2 Net Inc. in Value	\$ 119.67	167.74	84.45
3 Pounds of Feed Fed			
4 Concentrates	559.7	618.6	511.4
5 Hay and Roughage	2847.2	2189.3	3619.7
6 Silage	2667.5	2769.7	3484.5
7 Milk	108.2	126.4	110.2
8 Feed Cost			
9 Concentrates	16.02	17.74	13.97
10 Roughages	35.54	29.41	45.72
11 Milk	4.37	5.28	4.28
12 Pasture	2.31	1.94	2.70
13 TOTAL FEED COSTS	\$ 58.24	54.37	66.67
14 RETURN OVER FEED COST	\$ 61.43	113.37	17.78
15 Supplemental Costs			
16 Miscellaneous Livestock Expense	.42	.38	.23
17 Veterinary Expense	.58	.38	.37
18 Custom Work	1.09	2.12	.68
19 TOTAL SUPPLEMENTAL COSTS	\$ 2.09	2.88	1.28
20 RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$ 59.34	110.49	16.50
21 SUPPLEMENTARY MANAGEMENT INFORMATION			
22 Return for \$100 Feed Fed	\$ 205.45	308.49	126.66
23 Per Cent Death Loss	7.7	6.7	6.7

TABLE 14 - ALL DAIRY AND DUAL PURPOSE CATTLE		Average of 96 Farms	31 Farms High in Return Above Feed	31 Farms Low in Return Above Feed
		Per Cow	Per Cow	Per Cow
1	Average Number of Cows	29.6	32.3	25.4
2	Value of Dairy Products	537.15	611.70	396.57
3	Net Inc. In Value	129.19	175.51	72.91
4	TOTAL VALUE PRODUCED	666.34	787.21	469.48
5	<u>Pounds of Feed Fed</u>			
6	Concentrates	5366.7	5741.5	4140.1
7	Hay and Dry Roughage	10151.6	9530.8	11527.8
8	Silage	13414.6	13996.8	10271.3
9	<u>Feed Cost</u>			
10	Concentrates	148.09	157.21	115.35
11	Roughage	147.18	138.39	144.61
12	Pasture Costs	6.54	6.22	6.73
13	TOTAL FEED COSTS	301.81	301.82	226.69
14	RETURN OVER FEED COST	364.53	485.39	202.79
15	<u>Supplemental Cost</u>			
16	Miscellaneous Livestock Expense	22.85	25.88	16.28
17	Veterinary Expense	8.93	11.80	5.00
18	Custom Work	24.93	29.91	15.75
19	TOTAL SUPPLEMENTAL COSTS	56.71	67.59	37.01
20	RETURN OVER FEED AND SUPPLEMENTAL COSTS	307.82	417.80	165.78
21	SUPPLEMENTARY MANAGEMENT INFORMATION			
22	Return for \$100 Feed Fed	220.78	260.82	176.04

TABLE 15A - BEEF BREEDING CATTLE - 1970			
	Average 15 Farms	5 Farms High in Return Above Feed	5 Farms Low in Return Above Feed
1 Average Number of Beef Cows	49.1	35.5	38.8
2 Average Number of Other Beef Animals and Bulls	38.9	40.4	24.1
3 Pounds of Beef Produced	24022	24228	14440
4 Net Increase in Value	142.65	216.08	88.45
5 <u>Pounds of Feed Fed</u>			
6 Grain	647.2	907.4	706.1
7 Protein, Salt and Mineral	18.9	42.6	30.6
8 Legume Hay	4843.2	4510.4	3340.2
9 Other Hay and Dry Roughage	1236.7	1335.2	2314.4
10 Silage	3701.3	3032.6	6475.6
11 <u>Feed Cost</u>			
12 Concentrates	16.64	21.94	16.11
13 Roughages	58.43	64.11	64.33
14 Pasture	10.77	10.85	10.77
15 TOTAL FEED COSTS	85.84	96.90	91.21
16 RETURN OVER FEED COSTS	56.81	119.18	(-2.76)
17 <u>Supplemental Costs</u>			
18 Miscellaneous Livestock Expense	1.75	1.69	1.68
19 Veterinary Expense	.98	1.24	.67
20 Custom Work	2.59	4.17	
21 TOTAL SUPPLEMENTAL COSTS	5.32	7.10	2.35
22 RETURN OVER FEED AND SUPPLEMENTAL COSTS	51.49	112.08	(-5.11)
23 <u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
24 Return for \$100 Feed Fed	166.17	222.99	96.98
25 Price Per Cwt. Sold	30.27	28.93	29.99
26 Average Weight Per Head Sold	516	630	439
27 Percent Death Loss	3.3	2.8	6.7
28 Percent Calf Crop			

TABLE 15B - FEEDER CATTLE - 1970			
	Average of 4 Farms	2 Farms High in Return Above Feed	2 Farms Low in Return Above Feed
	PER CWT.	PER CWT.	PER CWT.
1 Average Number of Beef Feeders	35.1	21.3	48.9
2 Pounds of Beef Produced	20201	19058	21343
3 Net Increase in Value of Animals	17.45	17.44	17.46
4 <u>Pounds of Feed Fed</u>			
5 Grain	231.6	94.8	353.8
6 Protein, Salt and Mineral	14.9	13.8	15.9
7 Legume Hay	420.8		796.5
8 Other Hay and Dry Roughage			
9 Silage			
10 <u>Feed Cost</u>			
11 Concentrates	4.78	2.16	7.11
12 Roughages	4.57		8.66
13 Pasture	.53		1.01
14 TOTAL FEED COSTS	9.88	2.16	16.78
15 RETURN OVER FEED COST	7.57	15.28	.68
16 <u>Supplemental Costs</u>			
17 Miscellaneous Livestock Expense			
18 Veterinary Expense	.02		.04
19 Custom Work	.81	.22	1.33
20 TOTAL SUPPLEMENTAL COSTS	.83	.22	1.37
21 RETURN OVER FEED AND SUPPLEMENTAL COSTS	6.74	15.06	(-.69)
22 SUPPLEMENTARY MANAGEMENT INFORMATION			
23 Return for \$100 Feed Fed	176.60	806.55	104.08
24 Price Per Cwt. Sold	25.54	23.62	27.39
25 Average Weight Per Head Sold	973.2	1062.4	900.5
26 Price Per Cwt. Bought	52.55	52.54	
27 Average Weight Per Head Bought	229.4	229.5	
28 Number of Head Bought	7	14	
29 Percent Death Loss			

Table 16A - SHEEP FLOCK - 1970	Average of 6 Farms	2 Farms High in Return Above Feed	2 Farms Low in Return Above Fee
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1	Average Number of Ewes	29.9	22.8	28.8
2	Pounds of Lamb and Mutton Produced	2024	3300	875
3	Pounds of Wool Produced	239	232	234
4	Value of Produce			
5	Wool	4.85	6.80	4.27
6	Net Increase in Value of Animals	18.93	40.26	7.36
7	Total Value Produced	23.78	47.06	11.63
8	<u>Pounds of Feed Fed</u>	<u>Per Ewe</u>	<u>Per Ewe</u>	<u>Per Ewe</u>
9	Grain	84.6	97.5	69.2
10	Protein, Salt and Mineral	3.6	4.4	4.3
11	Legume Hay	1182.8	1934.2	763.9
12	Other Hay and Dry Roughage	497.3	476.8	555.6
13	Silage			
14	<u>Feed Cost</u>			
15	Concentrates	2.34	2.06	3.30
16	Roughages	9.23	19.17	3.23
17	Pasture	1.40	.66	1.49
18	TOTAL FEED COSTS	12.97	21.89	8.02
19	RETURN OVER FEED COST	10.81	25.17	3.61
20	<u>Supplemental Costs</u>			
21	Miscellaneous Livestock Expense	.27	.75	.28
22	Veterinary Expense	.13	.26	
23	Custom Work	.77	1.32	.63
24	TOTAL SUPPLEMENTAL COSTS	1.17	2.33	.91
25	RETURN OVER FEED AND SUPPLEMENTAL COSTS	9.64	22.84	2.70
26	SUPPLEMENTARY MANAGEMENT INFORMATION			
27	Return for \$100 Feed Fed	183.25	215.03	145.02
28	Price Per Cwt. Lamb and Mutton Sold	22.47	24.43	19.25
29	Pounds of Wool Per Sheep Sheared	7.0	6.6	7.8
30	Number of Ewes kept for Lambing	29	33	20
31	Percent Lamb Crop	131	133	135
32	Percent Death Loss	15.0	7.7	20.7

SUMMARY OF FARM EARNINGS, 1966-1970

Items	1966	1967	1968	1969	1970
<u>FARM RECEIPTS</u>					
Dairy Cattle	1750	1979	2827	2739	3017
Dairy Products	7054	8650	12420	11663	14435
Beef Cattle (incl. feeders)	464	894	609	836	1092
Hogs	901	840	696	740	919
Sheep and Wool	104	173	70	91	42
Horses	--	--	--	--	--
Poultry (incl. turkeys)	30	6	19	4	4
Eggs	83	35	128	26	33
Other Productive Livestock	--	1	--	2	4
Corn	41	49	37	62	22
Small Grains	238	431	860	467	274
Diverted Acre Income	309	126	134	266	427
Other Crops	631	658	652	590	652
Gas Tax Refunds + Cap. Assets Sold	141	238	159	536	191
Income From Work Off the Farm	259	405	333	394	195
Miscellaneous Farm Income	186	300	124	303	150
1 Total Farm Sales	12191	14785	19068	18719	21564
2 Increase in Farm Capital	4108	3229	3427	4554	5546
3 Family Living From the Farm	415	345	380	405	352
4 Total Farm Receipts 1+2+3	16714	18359	22875	23678	27462
<u>FARM EXPENSES</u>					
Dairy Cattle Bought	753	677	360	1011	799
Beef Cattle Bought (incl. feeders)	74	94	189	47	91
Hogs Bought	84	45	30	44	107
Sheep Bought (incl. feeders)	3	13	9	21	6
Horses Bought	--	--	--	--	--
Poultry Bought (incl. turkeys)	24	5	16	10	7
Other Productive Livestock	--	2	--	4	--
Miscellaneous Livestock Expense	385	481	727	742	916
Feed Bought	2004	2284	3049	2437	3677
Fertilizer	389	611	800	648	734
Other Crop Expense	431	508	579	471	579
Custom Work Hired	560	712	903	957	1108
Gas-Oil-Grease Bought (farm share)	654	740	835	732	755
Repair + Oper. of Mach., Tractor, Truck and Auto (farm share)	650	636	902	838	1111
Repair and Upkeep of Farm Real Estate	119	149	186	199	296
Repair and Upkeep of Livestock Equip.	70	83	101	137	189
Wages of Hired Labor	202	301	451	341	485
Electricity Expense (farm share)	214	227	268	271	342
Real Estate & Pers. Property Taxes	494	537	381	397	487
Telephone & General Farm Expense	215	236	333	323	425
5 Total Cash Operating Expense	7325	8341	10119	9630	12114
6 Power, Crop & Gen. Mach. Bought	1548	2039	2131	2197	2826
7 Livestock Equipment Bought	405	409	626	496	687
8 New Real Estate + Improvements	1081	1473	1346	2876	2360
9 Total Farm Purchases 5-8	10359	12262	14222	15199	17987
10 Decrease in Farm Capital	--	425	325	324	557
11 Interest on Farm Capital	1563	1822	2311	2705	3108
12 Unpaid Family Labor	615	498	613	685	1060
13 Labor Charge for Partners = Other Partners	--	127	98	273	223
14 Board Furnished Hired Labor	34	31	44	33	57
15 Total Farm Expense 9-14	12568	15174	17613	19219	22992
16 Labor Earnings 4-15	4146	3186	5262	4458	4473

1966-1967-1968-1969-1970 IN A CAPSULE

	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
FARM SIZE (ACRES)	295	332	383	343	362
SIZE OF BUSINESS (WORK UNITS)*	368	408	352	313	343
RETURN TO CAPITAL & FAMILY LABOR	5356	4536	6953	6910	7235
LABOR EARNINGS	4146	3186	5350	4458	4473
NET WORTH (AVG. JAN. 1 & DEC. 31)	23246	25139	37044	35529	38242
RATIO OF ASSETS TO LIABILITIES	2.60:1	2.47:1	3.02:1	2.81:1	2.62:1
EXPENSES PER DOLLAR INCOME	.75	.83	.77	.81	.83
RETURN PER DOLLAR INVESTED	.13	.09	.12	.10	.13
% OF GROSS RECEIPTS SAVED AS RETURN TO CAPITAL & FAMILY LABOR	32.1%	24.8%	31.1%	36.9%	33.5%

SOURCE OF INCOME

INCOME FROM LIVESTOCK	85%	85%	87.9%	84.4%	90.6%
INCOME FROM CROPS	10%	8.6%	8.8%	13.0%	6.5%
MISCELLANEOUS INCOME	5%	6.4%	3.3%	3.6%	2.9%

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* One work unit equals one 10 hour working day.