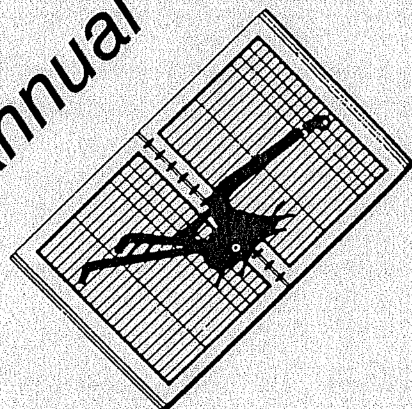
FARM BUSINESS MANAGEMENT

1989 Annual Report



April 1990

Mankato Technical College

In cooperation with the State Board of Vocational Technical Education and the Division of Agricultural Education, University of Minnesota

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AN ADULT EDUCATIONAL PROGRAM

ANNUAL FARM BUSINESS MANAGEMENT PROGRAM REPORT
MANKATO AREA OF SOUTHERN MINNESOTA

Dennis Jackson
Area Agriculture Program Coordinator

TABLE OF CONTENTS

Farm Business Management Program Areas ii
Introduction iii
Schools Participating iv
Explanation of Analysis tables 1 - 6 v
Table 1 - Resources Used in the Business .... 1&2
Table 3 - Summary of Farm Earnings-Enterprise Statement 3
Table 4 - Non-Farm Income & Household & Personal Expense ... 4
Explanation of Table 5.2 Ratios 5A
Table 5.1 & 5.2 - Operator's Financial Position 5-8
Table 2A&B, 6A&B - Summary of Cash Receipts & Expenses 9-12
Explanation of Table 8 .... 13A
Table 8 - Measures of Organization & Management Efficiency 13
Thermometer Chart 13B
Table 9 - Distribution of Acres 14
Explanation of Crop Enterprise Analyses 15
Table 10 - Crop Data for Oats 16
Table 10 - Crop Data for Spring Wheat 17
Table 10 - Crop Data for Winter Wheat 18
Table 10 - Crop Data for Canning Corn 19
Table 10 - Crop Data for Canning Peas 20
Table 10 - Crop Data for Corn, Grain 21
Table 10 - Crop Data for Soybeans 22
Table 10 - Crop Data for Set Aside & CRP Acres 23
Table 10 - Crop Data for Alfalfa Hay 24
Table 10 - Crop Data for Grass Hay, Oat Hay & Wild Hay 25
Table 10 - Crop Data for Oat Silage 26
Table 10 - Crop Data for Corn Silage 27
Explanation of Livestock Enterprise Analyses 28
Table 11A - Costs & Returns from Farrow to Finish Hogs ... 29&30
Table 11B - Costs & Returns from Finishing Hogs .... 31&32
Table 11C - Costs & Returns from Producing Feeder Pigs ... 33&34
Table 11D - Costs & Returns from Mixed Hog Enterprise .... 35&36
Table 12 - Costs & Returns from Dairy Cows .... 37&38
Table 13 - Costs & Returns from Other Dairy Cattle .... 39&40
Table 14 - Costs & Returns from All Dairy Cattle .... 41&42
Table 15B - Costs & Returns from Beef Feedlot .... 43&44
Table 15A - Costs & Returns from Beef Breeding Herd 45
Table 16 - Costs & Returns from Sheep Flock 46
Table 100 - Record Reliability Check 47
Table 500 - Summary Management Information 48
Table 600 - Trend Analysis 49-52
Average Prices for Farm Grown Feeds & Other Non-Cash Costs 53
Explanation of Work Units & Animal Units 54
Graph - Range of Returns to Labor & Management 55

Schools Participating

The following list indicates the schools and the names of the Farm Business Management instructors whose records are included in this report.

Class Location	Instructor
Alden	Curt Sheely
Glencoe	Kenneth Stenzel
Hutchinson Technical College	Joel Larson
LeCenter (MTC)	Dennis Kelly
Madelia	David Pace
Mankato Technical College	Paul Callanan
Mankato Technical College	Lyle Phelps
Mankato Technical College	Mark Kapsner
Montgomery	Ira Beckman
New Prague	John Gintner
New Richland	Mark Worthley
New Ulm (MTC)	Richard Baumann
Nicollet	Robin Schwieger
Sibley County Voc. Ctr. - Fairfax	Brad Augustin
Sleepy Eye (MTC)	Dan Persons
Springfield	John Woodford
Waseca	Norman Bohmbach
Watertown	Vernon Yetzer
Wells (MTC)	Jeff Vogelsang

Post Secondary Production Agriculture Programs

Mankato Technical College	Pete Neigebauer
Waseca, UM-W	Boyd Fuller

DESCRIPTION OF ANALYSIS TABLES 1-6

Table 1 lists the categories of farm capital for the average, 20% most profitable, and 20% least profitable farms. These averages include the landlord's share of the investment for rented farms.

Livestock, crops, seed and feed reflect a conservative market price at the time the inventory is taken. Machinery, equipment and building values reflect cost less depreciation. Land is generally valued at cost, but may have been adjusted to reflect long term changes in value.

Farm size is measured by investment, acres, number of workers and work units. Work units provide a measure of the work accomplished. A clue to the farm organization is indicated by the distribution of work units between crops and livestock.

Table 3 combines the information shown in Tables 1, 2A and 2B. Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each category of expense in order to show net increases and net decreases. The resulting labor earnings are the same as those shown on Table 2B.

Table 4 provides a listing on non-farm sources of income and expense for the farm family. Household and personal accounts are important if the family is to manage its financial affairs wisely. This is an "Operators Share" table, and includes only those farms where complete household and personal accounts were kept.

Table 5.1 and 5.2 show the financial position of the operator. Table 5.1 shows the distribution of capital invested by the operator in the farm business. All assets are based upon the modified cost (cost minus depreciation). Land may have been adjusted to reflect long term changes in value. Assets are separated into current, intermediate and long term categories. Table 5.2 shows the amount and distribution of operator liabilities. The liabilities represent actual farm and personal debt.

The Statement of Financial Position presents a picture of the financial structure of the operator's share of the farm business at the beginning and at the end of the year. The gain or loss in "net worth" is a measure of progress. This statement, accurately kept over a period of years, is one of the best measures of financial progress. The ratios listed in Table 5.2 are helpful in studying the debt structure of the farm business. They are explained in detail on pages

Tables 2A & 6A and 2B & 6B have been combined because they are derived the same way except that Tables 2A & 2B represent the whole farm, and Tables 6A & 6B represent the operator's share only. These tables provide a listing of the sources of cash income and expenses. In addition to traditional operating income and expense, the tables include the purchase and sale of capital assets, the change in capital inventory values, and a charge for interest on farm capital (7% opportunity cost) to arrive at a return to labor and management. The return to capital and family labor shown on Table 6B represents the amount available to the family for debt service, living expenses and savings.

YEAR END 1989

RESOURCES USED IN THE BUSINESS - TABLE 1

	MEASURES OF FARM SIZE	73 MOST PROFITABLE FARMS		73 LEAST PROFITABLE FARMS	
2	ACRES - Total	625.4		423.1	
3	- Tillable	592.3		398.4	
4	WORK UNITS - Crops	292.6		194.0	
5	- Livestock	421.1		185.4	
6	- Other	31.3		9.9	
7	- Total	745.0		389.4	
8	WORKERS - Operator(s) Yr Equiv	1.31		1.17	
9	- Hired	0.47		0.16	
10	- Custom	0.09		0.02	
11	- Unpaid Family	0.04		0.04	
12	- Total	1.91		1.39	
13	CAPITAL INVESTED - Per Worker	438158		440095	
14	- Per Work Unit	1123		1571	
	WHOLE FARM INVENTORIES	JAN 1	DEC 31	JAN 1	DEC 31
22	Feeder Cattle	7675	7875	6274	5103
23	Market Hogs	17179	19740	11358	11430
24	Feeder Lambs			7	2
25	Poultry - All Types				
26	Other Lvstk - Incl Other Dairy	4502	4614	2995	2954
27	Crops Held for Sale & Feed	79688	99130	69752	63875
28	Supplies/Prepaids, Fuel & Lube	9870	12920	7719	6517
29	Accts Rcvbl & Hedge Acct Equity	2609	2694	2248	1456
30	Dairy Cows	27104	28311	8654	9397
31	Other Dairy	12601	13400	2202	2486
32	Beef Breeding	84	71	209	387
33	Swine Breeding	6557	6420	4379	5305
34	Sheep Breeding			112	107
35	Other Breeding Livestock				
36	Auto & Truck (Farm Share)	4358	5708	4171	4990
37	Power & Machinery	42807	50080	41964	41136
38	Livestock Equipment	11020	11804	6718	6718
39	Custom Equipment	1253	1069	848	692
40	Irrigation Equipment			481	434
50	Bare Land	531403	535654	390529	399507
51	Land Improvements & Tile	7684	8446	8019	7470
52	Buildings-Fences-Etc.	50613	48819	42902	41956
60	TOTAL FARM CAPITAL	817007	856755	611541	611922
70	Incr. or Decr. in Total Farm Capital		39748		381

TABLE 4 - NON FARM INCOME & HHP EXPENSE - 1989

		AVERAGE OF 183 FARMS	PER ADULT EQUIVALENT AVERAGE	36 HIGH PROFIT	36 LOW PROFIT
4	Number of Persons - Family	4			
5	Number of Adult Equiv - Family	3.1			
6	Non Farm Income				
7	Outside Investment Income	1525			
8	Other Pers Income & Tax Refund	8087			
9	Sale of Dwell/Auto/Trk (Pers)	274			
10	Net Cash from Non Farm Business	371			
11	TOTAL NON FARM INCOME	10257	3308.71	2758.71	5090.63

			PER ADULT EQUIVALENT		
	HOUSEHOLD EXPENSE	TOTAL	AVERAGE	HIGH	LOW
14	Church & Charity	1024	330.32	324.52	235.63
15	Medical Care & Health Insurance	3409	1099.68	1183.55	975.00
16	Food & Meals Bought	4792	1545.81	1558.39	1487.81
17	Operating Expense & Supplies	2004	646.45	807.42	745.31
18	Furnishings & Equipment	1444	465.81	536.77	445.94
19	Clothing & Materials	1620	522.58	550.97	513.75
20	Personal Care & Spending	1716	553.55	861.61	612.19
21	Education	640	206.45	230.97	170.31
22	Recreation	1250	403.23	544.19	319.38
23	Gifts & Special Events	1206	389.03	481.94	280.00
24	Personal Interest	244	78.71	102.58	21.88
25	TOTAL CASH HOUSEHOLD EXPENSE	19350	6241.94	7182.58	5806.88
26	Truck & Auto Expense: Personal	1291	416.45	370.32	447.50
27	Upkeep on Dwelling: Personal	492	158.71	153.23	270.00
28	Cash Rent: Personal	39	12.58	10.65	7.81
29	Telephone & Elec Expense: Personal	938	302.58	333.87	292.81
30	General Farm Expense: Personal	155	50.00	67.42	35.63
31	TOTAL CASH LIVING & OPER EXPENSE	22266	7182.58	8117.74	6860.63
32	New Truck & Auto: Personal	1152	371.61	460.97	96.56
33	New Dwelling, Bldgs, Land: Personal	2592	836.13	1707.42	664.69
34	Taxes & Other Deductions	4342	1400.65	1529.68	1136.25
35	Life Insurance	1583	510.65	774.84	449.69
36	Paid on Personal Debt (Principal)	916	295.48	194.84	124.69
37	Savings & Invest (Excl Life Ins)	1701	548.71	517.74	960.63
38	TOTAL NON FARM CASH EXPENSES	34552	11145.81	13303.23	10293.13
39	TOTAL NON FARM EXP (L38-L11)	24295	7837.10	10544.52	5202.50
40	TOTAL FAMILY LIVING FROM FARM	506	163.23	203.23	133.75
41	TOTAL CASH/NON CASH EXPENSE	35059	11309.35	13506.45	10426.88

*************SUPPLEMENTARY INFORMATION***************************************

43	Family Living From The Farm	QTY	VALUE	VALUE	VALUE
44	Milk & Cream (Qts.)	179	53	33	16
45	Beef & Buffalo (LBS)	551	372	525	256
46	Pork (LBS)	198	76	72	153
47	Lamb, Mutton, Goat (LBS)	1	1		3
48	Poultry, All Fowl (LBS)	4	4		
49	Eggs (Doz)				
50	Veg, Other Produce & Wood				
51	TOTAL FAMILY LIVING FROM FARM		506	630	428
52	CALCULATED LIVING EXPENSE				
53	Total Family Income		49875	87870	27917
54	Minus Change in Net Worth		20237	45297	674
55	Apparent Family Living		29638	42573	27243
56	Total Family Living/WU Calc.		71.70	55.36	84.59
57	Net Family Living/WU		50.42	43.88	42.75

YEAR END 1989 AVERAGE OF 367 FARMS

OPERATOR'S FINANCIAL POSITION - TABLE 5.1

		JAN 1	DEC 31
	CURRENT ASSETS:		
4	Cash, Checking & Savings Account Balance: Pers	2948	3328
5	Cash, Checking & Savings Account Balance: Farm	5956	4693
6	Hedging Account Equity	182	167
7	Notes & Accounts Receivables: Personal	448	383
8	Notes & Accounts Receivables: Farm	1699	1366
9	Crops Held for Sale	38339	41472
10	Livestock Feed	18787	22964
11	Supplies/Prepaids	6335	7018
12	Feeder Cattle & Market Other Dairy	10890	11163
13	Market Hogs	10262	11561
14	Feeder Lambs & Goats	24	38
15	Poultry - All Types		
16	Other Livestock	142	76
17	Total Current Assets	96012	104231*
	INTERMEDIATE ASSETS:		
19	Dairy Cows	14553	15067
20	Other Dairy	5651	5781
21	Beef Breeding Cattle	572	635
22	Breeding Hogs	3990	4488
23	Breeding Sheep/Goats	65	52
24	Other Productive Livestock		7
25	Auto & Truck: Personal Share	1884	2343
26	Auto & Truck: Farm Share	3907	4766
27	Power, Machinery & Equipment	32494	35849
28	Livestock Equipment	6848	7541
29	Custom Work Equipment	759	673
30	Irrigation Equipment	96	86
31	Stocks & Bonds & Co-op Equity Farm	12685	13637
32	Stocks & Bonds & Co-op Equity Personal	2578	3147
35	Other Household Personal	9788	10203
36	Retirement Accounts & Life Insurance	6950	8158
37	Total Intermediate Assets	102818	112435*
	LONG TERM ASSETS:		
39	Buildings & Fences	35093	34959
40	Land & Land Improvements	139132	148031
41	Dwelling	24071	25576
42	Real Estate Personal	3114	3589
43	Total Long Term Assets	201410	212156*
44	Total Assets	400241	428822
45	Total Personal Assets (Incl Cash)	64466	70365
46	Total Farm Assets (Incl Cash)	335775	358457*

Does not include current portion of principal due within the next 12 months.

YEAR END 1989

AVERAGE OF 367 FARMS

OPERATOR'S FINANCIAL POSITION - TABLE 5.2

		JAN 1	DEC 31
	CURRENT LIABILITIES:		
4	Accounts Payable: Personal	96	83
5	Account Payable: Farm	2920	1961
6	Current Portion: Chattel & Real Estate Debt	13891	12847
6A	Current Portion: Notes & Line of Credit	15040	17901
7	Delinquent Interest	28	77
8	Rents & Lease Payments Due From Past Year	66	12
9	Total Current Liabilities	32041	32881*
	# INTERMEDIATE LIABILITIES:		
11	Notes Payable: Personal	274	342
12	Notes Payable: Farm	6793	9069
13	Chattel Mortgages: Personal	703	717
14	Chattel Mortgages: Farm	32143	32871
16	Total Intermediate Liabilities	39913	43000
	# LONG TERM LIABILITIES:		
18	Real Estate Mortgages & Contracts: Personal	1910	2224
19	Real Estate Mortgages & Contracts: Farm	108379	112483
21	Total Long Term Liabilities	110290	114707*
22	Total Liabilities	182243	190587*
23	Equity	217997	238235
24	Change in Equity		20237*

******************************** RATIOS ********************************

	Formula	Beg.Yr.	End Yr.	%
32	Current Debt T5.1 L17 / T5.2 L9	3.00	3.17	31.55
33	Intermediate Debt T5.1 L37 / T5.2 L16	2.58	2.61	38.24
34	Working Debt (T5.1L17+L37)/(T5.2L9+L16)	2.76	2.86	35.02
35	Fixed Debt T5.1 L43 / T5.2 L21	1.83	1.85	54.07
36	Net Capital Debt T5.1 L44 / T5.2 L22	2.20	2.25	44.44
37	Equity/Asset Eqty T5.2 L23 / T5.1 L44	0.54	0.56	55.56
38	Debt/Equity Debt T5.2 L22 / T5.2 L23	0.84	0.80	80.00
39	Current Debt T5.2 L9 / T5.2 L22	0.18	0.17	17.25

51	Return to Capital, Fam Labor, & Mgmt	39618*
52	Total Income From Non-Farm Sources	10257
53	Total Family Income	49875
54	Total Family Cash & Non-Cash Expense	35059
55	Total Money Borrowed	70152*
56	Total Paid on Debt	61878

TABLE 5.2 - OPERATOR'S FINANCIAL POSITION - 1989

		73 MOST PROFITABLE FARMS		73 LEAST PROFITABLE FARMS	
		JAN 1	DEC 31	JAN 1	DEC 31
	CURRENT LIABILITIES:				
4	Accounts Payable: Personal	3	5	30	82
5	Account Payable: Farm	6185	3147	1095	1295
6	Current Portion: Chattel & Real Estate Debt	19046	15998	11157	9964
6A	Current Portion: Notes & Line of Credit	17176	23942	14669	17846
7	Delinquent Interest	1	7	43	204
8	Rents & Lease Payments Due From Past Year	116	27	150	
9	Total Current Liabilities	42526	43128	27144	29391
	# INTERMEDIATE LIABILITIES:				
11	Notes Payable: Personal	75	119	181	185
12	Notes Payable: Farm	15160	14263	9890	10936
13	Chattel Mortgages: Personal	270	362	1336	1019
14	Chattel Mortgages: Farm	46543	46803	23190	23379
16	Total Intermediate Liabilities	62049	61547	34597	35519
	# LONG TERM LIABILITIES:				
18	Real Estate Mortgages & Contracts: Personal	1987	2892	905	754
19	Real Estate Mortgages & Contracts: Farm	162061	161979	87339	90644
21	Total Long Term Liabilities	164048	164871	88244	91398
22	Total Liabilities	268623	269545	149985	156308
23	Equity	259464	304761	268785	269459
24	Change in Equity		45297		674

**********************************RATIOS***

	Formula	Beg. Yr.	End Yr.	%	Beg.Yr.	End Yr.	%
32	Current Debt T5.1 L17 / T5.2 L9	2.92	3.45	28.97	3.75	3.19	31.31
33	Intermediate T5.1 L37 / T5.2 L16	2.20	2.44	40.91	2.92	2.99	33.42
34	Working Debt (T5.1L17+L37)/(T5.2L9+L16)	2.49	2.86	34.97	3.29	3.08	32.43
35	Fixed Debt T5.1 L43 / T5.2 L21	1.63	1.67	59.95	2.45	2.47	40.52
36	Net Capital Debt T5.1 L44 / T5.2 L22	1.97	2.13	46.93	2.79	2.72	36.71
37	Equity/Asset Eqty T5.2 L23 / T5.1 L44	0.49	0.53	53.07	0.64	0.63	63.29
38	Debt/Equity Debt T5.2 L22 / T5.2 L23	1.04	0.88	88.44	0.56	0.58	58.01
39	Current Debt T5.2 L9 / T5.2 L22	0.16	0.16	16.00	0.18	0.19	18.80

		Most Profitable	Least Profitable
51	Return to Capital, Family Labor, & Mgmt	79318	11627
52	Total Income From Non-Farm Sources	8552	16290
53	Total Family Income	87870	27917
54	Total Family Cash & Non-Cash Expense	41870	33366
55	Total Money Borrowed	81064	57488
56	Total Paid on Debt	80082	51171

Does not include current portion of principal due within the next 12 months.

	CASH EXPENSES - TABLE 2B & 6B	2B WHOLE FARM	6B OPER SHARE	6B % OF L 43
	Purchase of Livestock			
5	Dairy Cows	471	471	
6	Other Dairy Cattle	270	260	
7	Beef Breeding Cattle	83	83	
8	Beef Feeder Cattle	4585	4490	
9	Hogs Complete & Mixed	1164	1091	
10	Hogs Finishing	3111	2990	
11	Hogs Producing Feeder Pigs	326	279	
12	Sheep, Goats, Wool: Breeding	17	17	
13	Sheep, Wool: Feeders			
14	Poultry, All Fowl	1	1	
15	Custom, Contract Livestock Feeding	451	451	
16	Other Productive Livestock	5	5*	
17	Total Livestock Purchases	10483	10138	7.04
20	Vet, Breeding & Misc Livestock Exp	6080	5812	4.04
21	Purchase or Crops & Supp for Resale	9404	9272	6.44
22	Feed Bought	25063	23857	16.57
23	Fertilizer	10174	9554	6.63
24	Chemicals	7742	7312	5.08
25	Other Crop Expense	10679	10156	7.05
26	Irrigation Operation Cost	41	40	0.03
27	CW Oper Costs Excl Labor & Repair	536	534	0.37
28	Custom Work Hired	3666	3505	2.43
29	Gas, Diesel & Lubricants	4961	4775	3.32
30	Repair & Upkeep of Lvstk Equip	2089	1981	
31	Repair & Upkeep of Farm Real Estate	1515	1413	
32	Repair & Oper Mach, Trac, Trk, Auto	8360	8016	
33	Repair & Upkeep of Irrig Equip	14	14	
34	Repair & Upkeep of Custom Work Equip	448	444	
35	Total All Repairs	12425	11868	8.24*
36	Wages of Hired Labor	4384	4319	3.00
37	Personal Property & Real Est. Taxes	4111	1779	1.24
38	General Farm Expenses	3410	3297	2.29
39	Utilities	3094	2953	2.05
40	Farm Capital Lease Expense	1716	18625	12.93
41	Total Interest Payable This Year	XXX	16199	11.25
42	Operator Interest Actually Paid	XXX	(16151)	
43	Total Cash Operating Expense	117969	143994	100.00*
50	Auto, Truck & Machinery Bought	13801	13377	
51	Irrigation Equipment Bought	4	4	
52	Custom Work Equipment Bought	58	53	
53	Livestock Equipment Bought	2546	2450	
54	New Real Estate:Buildings & Fences	4143	4099	
55	New Real Estate:Land-Land Improvemen	10695	10582	
57	Total Capital Purchases	31248	30565*	
58	Total Farm Purchases	149217	174559*	
60	Decrease in Farm Capital (Not Incl Cash)			
61	Interest on Farm Capital: 7% Charge	41753	7726	
62	Unpaid Family Labor	425	425	
63	Board Furnished Hired Labor	92	91	
64	Total Farm Expense	191487	182801*	
70	Ret to Oper Labor & Mgmt(6A/62)-(64)	33086	30809*	
71	Number of Operators	1	XXX	
72	Full Time Operator Equivalents	1.11	XXX	
73	Ret/Oper/Full Time Op Equiv (70/72)	29807	XXX	
74	*Ret: Cap & Family Labor & Mgmt	XXX	39618*	

TABLE 2B & 6B - CASH EXPENSES

		73 FARMS HIGH		73 FARMS LOWS	
		2B WHOLE FARM	6B OPER SHARE	2B WHOLE FARM	6B OPER SHARE
	Purchase of Livestock				
5	Dairy Cows	486	486	269	269
6	Other Dairy Cattle	257	250	243	203
7	Beef Breeding Cattle			225	225
8	Beef Feeder Cattle	5422	4951	2996	2996
9	Hogs Complete & Mixed	833	790	2125	1920
10	Hogs Finishing	5442	5061	3994	3994
11	Hogs Producing Feeder Pigs	153	123	774	565
12	Sheep, Goats, Wool: Breeding			1	1
13	Sheep, Wool: Feeders				
14	Poultry, All Fowl			2	2
15	Custom, Contract Livestock Feeding				
16	Other Productive Livestock				
17	Total Livestock Purchases	12593	11661	10628	10174
20	Vet, Breeding & Misc Livestock Exp	8944	8430	4199	3638
21	Purchase or Crops & Supp for Resale	17873	17453	9049	8810
22	Feed Bought	37745	34426	20768	19054
23	Fertilizer	15325	13953	8826	7806
24	Chemicals	11502	10394	6974	6375
25	Other Crop Expense	15405	14275	9608	8740
26	Irrigation Operation Cost			77	77
27	CW Oper Costs Excl Labor & Repair	1306	1294	539	539
28	Custom Work Hired	5244	4959	2878	2526
29	Gas, Diesel & Lubricants	6861	6513	4823	4410
30	Repair & Upkeep of Lvstk Equip	3054	2778	1725	1534
31	Repair & Upkeep of Farm Real Estate	2265	2120	1714	1468
32	Repair & Oper Mach, Trac, Trk, Auto	11535	10972	8747	7952
33	Repair & Upkeep of Irrig Equip	62	62		
34	Repair & Upkeep of Custom Work Equip	751	730	550	550
35	Total All Repairs	17668	16662	12736	11504
36	Wages of Hired Labor	7616	7436	4194	4072
37	Personal Property & Real Est. Taxes	5971	2464	3288	1526
38	General Farm Expenses	4474	4288	4225	4007
39	Utilities	4461	4229	2852	2625
40	Farm Capital Lease Expense	2236	28293	1848	16221
41	Total Interest Payable This Year		25423		13211
42	Operator Interest Actually Paid		(25417)		(13050)
43	Total Cash Operating Expense	175224	212151	107512	125315
50	Auto, Truck & Machinery Bought	23758	23005	9567	8707
51	Irrigation Equipment Bought	21	21		
52	Custom Work Equipment Bought	56	28		
53	Livestock Equipment Bought	3420	3191	1690	1519
54	New Real Estate:Buildings & Fences	4764	4764	3327	3106
55	New Real Estate:Land-Land Improvement	7572	7572	9819	9819
57	Total Capital Purchases	39592	38582	24404	23151
58	Total Farm Purchases	214816	250733	131916	148466
60	Decrease in Farm Capital (Not Incl Cash)				
61	Interest on Farm Capital: 7% Charge	58582	7377	42821	11396
62	Unpaid Family Labor	458	458	552	552
63	Board Furnished Hired Labor	214	214	39	39
64	Total Farm Expense	274070	258782	175328	160453
70	Ret to Oper Labor & Mgmt(6A/62)-(64)	83619	70796	-3268	-1461
71	Number of Operators	1		1	
72	Full Time Operator Equivalents	1.31		1.17	
73	Ret/Oper/Full Time Op Equiv (70/72)	63831		-2793	
74	Ret: Cap & Family Labor & Mgmt		79318		11627

TABLE 8 - MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

		AVERAGE OF 367 FARMS	HIGHEST 73 FARMS	LOWEST 73 FARMS
2	Items	Farm	Farm	Farm
3	Return to Operator's Labor & Management	33086	83619	-3268
4	Crop Yield Index	100.0	103.0	101.3
5	Return Over All Listed Cost Per Tillable Acre (Excl. Pasture)	57.86	63.83	29.21
6	Gross Return Per Tillable Acre (Excl. Pasture)	302.20	283.56	253.07
7	Index Return / $100 Feed Fed	100.0	104.8	92.0
8	Livestock Units / 100 Acres #	23.28	23.27	18.59
9	Size of Business in Total Work Units	481.9	745.0	389.4
10	Work Units / Worker	336.99	390.05	280.14
11	Power, Machinery, Equipment, Building Expense Work / Unit	78.84	71.51	95.87
30	Number of Animal Units	98.37	139.53	74.75
31	Work Units:			
32	Crops	204.2	292.6	194.0
33	Productive Livestock	261.7	421.1	185.4
34	Other Productive Units	15.9	31.3	9.9
35	Expenses / Work Unit:			
36	Tractor & Crop Machinery	38.81	35.51	50.51
37	Auto & Truck: Farm Share	11.57	10.05	12.71
38	Electricity: Farm Share	5.54	5.25	6.16
39	Livestock Equipment	8.30	7.94	8.92
40	Building, Fence & Tiling	13.74	12.02	16.40
41	Other Expense Per Total Work Units			
42	General Farm, Telephone & Other Utilities	7.95	6.75	12.01
43	Wages for Hired Labor	9.10	10.22	10.77
44	Tractor, Crop Machinery Expense Crop Acre ##	44.27	44.05	48.82
45	Farm Power & Machinery Cost Allocated to Livestock	2751.28	4412.47	2520.21
46	Farm Power & Machinery Cost Allocated to Crops	18091.72	27446.53	20307.79
47	Building, Fence, Tile Cost Allocated to Livestock	3086.19	4875.68	2885.48
48	Building, Fence, Tile Cost Allocated to Crops	3787.28	4525.94	3809.37

49 # Acres include all tillable land, non-tillable hay & pasture.
50 ## Acres include all tillable land plus acres in non-tillable hay.

51	Supplementary Operator's Management Information			
52	Operator's Return to Capital & Family Labor	39618	79318	11627
53	Operator's Depreciation: Farm Power & Crop Machinery	8273	12127	8412
54	Operator's Depreciation: Irrigation Equip	14	21	47
55	Operator's Depreciation: Custom Work Equip	136	215	156
56	Operator's Depreciation: Livestock Equip	1687	2481	1373
57	Operator's Depreciation: Buildings, Fences	4115	5748	3232
58	Operator's Depreciation: Land Improv & Tile	980	1291	1099
59	Total Operator's Depreciation	15205	21883	14319

TABLE 9 - CROP ACRES - 1989

CROP	AVERAGE OF 367 FARMS	73 MOST PROFITABLE FARMS	73 LEAST PROFITABLE FARMS
Total Small Grain & Canning Peas	22.2	27.1	19.6
Total Row Crop	337.9	471.9	338.3
Total Legumes, Including Seed	27.0	44.7	17.3
Total Other Hay	1.2	2.2	0.4
Total Silage & Fodder	10.3	18.0	4.3
Total Tillable Pasture	0.7	0.2	0.5
Total Fallow & Set Aside Land	22.4	34.3	21.0
TOTAL TILLABLE LAND & RECROP ACRES	421.5	598.4	401.4
Total Non-Tillable Hay/Pasture	1.0	1.2	0.8
Wild Hay Not Harvested (Non-Tillable)	1.4	2.7	1.2
Pasture Not Harvested	4.2	5.1	3.5
Timber Not Harvested	2.5	1.8	1.2
Roads & Waste	9.6	13.6	8.9
Farmstead	7.9	8.8	7.6
TOTAL LAND NOT HARVESTED	25.6	32.0	22.4
TOTAL NON-TILLABLE LAND	26.7	33.1	23.1
TOTAL LAND IN FARM OR RANCH	445.7	625.4	423.1

*************** SUPPLEMENTARY MANAGEMENT INFORMATION ***************

Percent Land Tillable	94.0	94.9	94.3
Fertilizer Cost per Acre	23.24	23.73	23.73
Crop Chemicals per Acre	19.34	19.78	19.33
Seed & Other Cost per Acre	27.16	27.65	27.28
Fuel & Lubricants Used per Acre	11.78	11.61	11.65
Repair & Maintenance Cost per Acre	22.51	21.48	24.58
*TOTAL ACRES CROPPED	398.39	563.91	379.97

*Tillable acres plus recropped acres minus tillable pasture, fallow and idle acres.

TABLE 10 - CROP DATA PER ACRE - OATS - 1989

	ITEMS	AVERAGE OF 219 FARMS	HIGHEST 43 FARMS	LOWEST 43 FARMS
1	TOTAL VALUE PRODUCED $	2533	3196	1591
2	TOTAL PRODUCTION	1237	1632	752
3	TOTAL ACRES	18.1	17.3	17.2
		PER ACRE	PER ACRE	PER ACRE
4	Yield Per Acre	68.3	94.3	43.7
5	Value Per Unit	1.41	1.44	1.40
6	Crop Product Return	96.41	136.07	61.40
7	Other Crop Income	43.54	48.67	31.10
8	Total Crop Return	139.95	184.74	92.50
	Variable Costs			
10	Fertilizer	7.29	6.94	6.40
11	Chemicals	1.27	0.40	1.28
12	Seed Expense	11.55	10.75	10.64
13	Crop Drying			
14	Crop Insurance	0.99	1.33	1.28
15	Other Expenses	1.33	0.52	0.81
16	Special Hired Labor	0.66	0.75	0.12
17	Custom Work Hired Expense	7.96	6.07	3.90
18	Irrigation Operation			
19	Assigned Interest	0.06		
20	Total Variable Costs	31.10	26.76	24.42
21	Return Over Variable Costs	108.85	157.98	68.08
	Allocated Costs (Variable and Fixed)			
31	Farm Power & Machinery - Ownership	10.83	10.29	9.19
32	Farm Power & Machinery - Operation	19.45	17.80	21.28
33	Building & Fence Cost	4.92	4.80	4.07
34	Irrigation Ownership Cost			
37	Actual Land Ownership or Rental Cost	56.74	66.47	64.05
38	Utilities & General Farm Expense	4.31	4.10	3.60
39	Hired Labor	1.88	2.37	0.93
41	Actual Non-Real Estate Int Allocated	8.73	10.12	6.98
42	Total Allocated Costs	106.86	115.95	110.10
43	Total Listed Costs	137.96	142.72	134.53
44	Return Over Listed Costs	1.99	42.02	-42.03
	*************SUPPLEMENTARY INFORMATION**************************************			
50	Land Opportunity Ownership Cost	68.67	82.72	64.89
51	Total Cost Adj to a Min 7% Interest	147.02	154.80	133.43
52	Work Units Assigned / Acre	0.30	0.30	0.30
53	Power Cost Allocation Factor	0.96	0.96	0.96
54	Total Listed Cost/Unit of Production	2.02	1.51	3.08
55	Total Adjusted Cost/Unit of Production	2.15	1.64	3.05
56	Cash Variable Cost/Unit of Product	0.96	0.65	1.31
57	Return Over Listed Costs Per Unit	0.03	0.45	-0.96
58	Breakeven Yield/Unit of Production	97.8	99.1	96.1
59	Total Acre Inches Water Applied			
60	Cost of Irrg Excluding Interest			
61	Average Price Received / Unit Sold	1.56	1.67	1.46
62	Quantity Sold (O.S.)	377	597	79

TABLE 10 - CROP DATA PER ACRE - WINTER WHEAT - 1989

	ITEMS	AVERAGE OF 38 FARMS	HIGHEST 12 FARMS	LOWEST 12 FARMS
1	TOTAL VALUE PRODUCED $	4322	6211	2688
2	TOTAL PRODUCTION	914	1370	564
3	TOTAL ACRES	22.0	26.5	19.6
		PER ACRE	PER ACRE	PER ACRE
4	Yield Per Acre	41.5	51.7	28.8
5	Value Per Unit	3.81	3.81	3.74
6	Crop Product Return	158.09	197.06	107.60
7	Other Crop Income	38.36	37.32	29.54
8	Total Crop Return	196.45	234.38	137.14
	Variable Costs			
10	Fertilizer	10.82	7.47	10.41
11	Chemicals	1.32	0.08	2.91
12	Seed Expense	9.09	7.74	9.08
13	Crop Drying			
14	Crop Insurance	1.95	1.55	0.82
15	Other Expenses	1.27	1.70	1.38
16	Special Hired Labor	1.45	0.83	3.27
17	Custom Work Hired Expense	5.09	4.23	4.49
18	Irrigation Operation			
19	Assigned Interest			
20	Total Variable Costs	31.00	23.58	32.35
21	Return Over Variable Costs	165.45	210.80	104.79
	Allocated Costs (Variable and Fixed)			
31	Farm Power & Machinery - Ownership	11.86	11.85	9.49
32	Farm Power & Machinery - Operation	21.14	21.02	23.27
33	Building & Fence Cost	4.95	5.66	5.00
34	Irrigation Ownership Cost			
37	Actual Land Ownership Or Rental Cost	56.80	56.43	43.58
38	Utilities & General Farm Expense	4.27	4.83	4.39
39	Hired Labor	1.36	2.53	0.87
41	Actual Non-Real Estate Int Allocated	9.14	8.94	8.98
42	Total Allocated Costs	109.52	111.26	95.58
43	Total Listed Costs	140.55	134.87	127.91
44	Return Over Listed Costs	55.90	99.51	9.23
	*************SUPPLEMENTARY INFORMATION**************************************			
50	Land Opportunity Ownership Cost	65.18	71.94	50.29
51	Total Cost Adj to a Min 7% Interest	146.82	148.72	133.42
52	Work Units Assigned / Acre	0.30	0.30	0.30
53	Power Cost Allocation Factor	0.99	1.00	0.98
54	Total Listed Cost/Unit of Production	3.39	2.61	4.44
55	Total Adjusted Cost/Unit of Production	3.53	2.88	4.64
56	Cash Variable Cost/Unit of Product	1.61	1.18	2.43
57	Return Over Listed Costs Per Unit	1.35	1.92	0.32
58	Breakeven Yield/Unit of Production	36.9	35.4	34.2
59	Total Acre Inches Water Applied			
60	Cost of Irrg Excluding Interest			
61	Average Price Received / Unit Sold	3.83	3.79	3.76
62	Quantity Sold (O.S.)	861	1100	453

TABLE 10 - CROP DATA PER ACRE - CANNING PEAS - 1989

	ITEMS	AVERAGE OF 47 FARMS	HIGHEST 15 FARMS	LOWEST 15 FARMS
1	TOTAL VALUE PRODUCED $	8552	12310	5207
2	TOTAL PRODUCTION	8362	12310	4629
3	TOTAL ACRES	33.2	33.2	32.7
		PER ACRE	PER ACRE	PER ACRE
4	Yield Per Acre	251.9	370.8	141.6
5	Value Per Unit	1.00	1.00	1.00
6	Crop Product Return	251.87	370.78	141.56
7	Other Crop Income	5.72		17.68
8	Total Crop Return	257.59	370.78	159.24
	Variable Costs			
10	Fertilizer	12.92	10.90	11.41
11	Chemicals	5.78	4.58	8.56
12	Seed Expense	4.01	7.35	1.59
13	Crop Drying			
14	Crop Insurance	4.25	2.80	3.09
15	Other Expenses	0.93	0.63	0.49
16	Special Hired Labor	0.33		0.15
17	Custom Work Hired Expense	5.81	17.05	0.55
18	Irrigation Operation			
19	Assigned Interest			
20	Total Variable Costs	34.04	43.31	25.84
21	Return Over Variable Costs	223.55	327.47	133.40
	Allocated Costs (Variable and Fixed)			
31	Farm Power & Machinery - Ownership	11.63	12.05	9.97
32	Farm Power & Machinery - Operation	19.52	17.74	20.83
33	Building & Fence Cost	5.87	5.57	5.23
34	Irrigation Ownership Cost			
37	Actual Land Ownership Or Rental Cost	60.28	63.88	58.44
38	Utilities & General Farm Expense	6.42	5.18	7.06
39	Hired Labor	4.52	4.22	6.24
41	Actual Non-Real Estate Int Allocated	11.20	4.67	14.56
42	Total Allocated Costs	119.44	113.31	122.33
43	Total Listed Costs	153.46	156.63	148.17
44	Return Over Listed Costs	104.13	214.15	11.07
	*************SUPPLEMENTARY INFORMATION*************************************			
50	Land Opportunity Ownership Cost	71.02	70.15	78.21
51	Total Cost Adj to a Min 7% Interest	160.24	163.83	162.35
52	Work Units Assigned / Acre	0.40	0.40	0.40
53	Power Cost Allocation Factor	0.89	0.87	0.92
54	Total Listed Cost/Unit of Production	0.61	0.42	1.05
55	Total Adjusted Cost/Unit of Production	0.64	0.44	1.15
56	Cash Variable Cost/Unit of Product	0.30	0.20	0.53
57	Return Over Listed Costs Per Unit	0.41	0.58	0.08
58	Breakeven Yield/Unit of Production	153.5	156.6	148.2
59	Total Acre Inches Water Applied			
60	Cost of Irrg Excluding Interest			
61	Average Price Received / Unit Sold			
62	Quantity Sold (O.S.)			

TABLE 10 - CROP DATA PER ACRE - SOYBEANS - 1989

ITEMS		AVERAGES OF 649 FARMS	HIGHEST 129 FARMS	LOWEST 129 FARMS
1	TOTAL VALUE PRODUCED $	21646	22838	14581
2	TOTAL PRODUCTION	3953	4171	2647
3	TOTAL ACRES	90.7	82.0	76.8
		PER ACRE	PER ACRE	PER ACRE
4	Yield Per Acre	43.6	50.9	34.5
5	Value Per Unit	5.46	5.45	5.45
6	Crop Product Return	237.85	277.13	187.76
7	Other Crop Income	0.80	1.38	2.10
8	Total Crop Return	238.65	278.51	189.86
	Variable Costs			
10	Fertilizer	2.44	1.71	2.24
11	Chemicals	21.27	21.39	19.67
12	Seed Expense	12.00	13.13	10.29
13	Crop Drying	0.11		0.23
14	Crop Insurance	10.63	12.60	8.79
15	Other Expenses	1.04	1.76	0.98
16	Special Hired Labor	1.21	1.55	0.85
17	Custom Work Hired Expense	3.09	3.24	2.99
18	Irrigation Operation			
19	Assigned Interest	0.34	0.46	
20	Total Variable Costs	52.12	55.84	46.04
21	Return Over Variable Costs	186.53	222.67	143.82
	Allocated Costs (Variable and Fixed)			
31	Farm Power & Machinery - Ownership	15.88	21.35	12.04
32	Farm Power & Machinery - Operation	25.03	25.11	24.38
33	Building & Fence Cost	6.95	8.54	5.94
34	Irrigation Ownership Cost			
37	Actual Land Ownership Or Rental Cost	69.31	69.58	51.06
38	Utilities & General Farm Expense	6.84	7.74	6.30
39	Hired Labor	2.72	2.99	3.48
41	Actual Non-Real Estate Int Allocated	12.23	12.16	11.48
42	Total Allocated Costs	138.96	147.47	114.68
43	Total Listed Costs	191.06	203.32	160.72
44	Return Over Listed Costs	47.59	75.19	29.14
	*************SUPPLEMENTARY INFORMATION***********************************			
50	Land Opportunity Ownership Cost	80.03	87.69	66.16
51	Total Cost Adj to a Min 7% Interest	197.56	218.96	171.99
52	Work Units Assigned / Acre	0.45	0.45	0.45
53	Power Cost Allocation Factor	0.99	0.99	0.97
54	Total Listed Cost/Unit of Production	4.38	3.99	4.66
55	Total Adjusted Cost/Unit of Production	4.53	4.30	4.99
56	Cash Variable Cost/Unit of Product	2.27	2.04	2.66
57	Return Over Listed Costs Per Unit	1.09	1.48	0.84
58	Breakeven Yield/Unit of Production	35.0	37.3	29.5
59	Total Acre Inches Water Applied			
60	Cost of Irrg Excluding Interest			
61	Average Price Received / Unit Sold	6.31	6.30	6.52
62	Quantity Sold (O.S.)	2385	2477	1920

TABLE 10 - CROP DATA PER ACRE - ALFALFA HAY - 1989

	ITEMS	AVERAGE OF 296 FARMS	HIGHEST 59 FARMS	LOWEST 59 FARMS
1	TOTAL VALUE PRODUCED $	10124	19189	3006
2	TOTAL PRODUCTION	126	241	38
3	TOTAL ACRES	35.8	50.4	23.6
		PER ACRE	PER ACRE	PER ACRE
4	Yield Per Acre	3.5	4.8	1.6
5	Value Per Unit	80.10	79.48	79.11
6	Crop Product Return	281.93	380.06	127.37
7	Other Crop Income	0.87	0.67	
8	Total Crop Return	282.80	380.73	127.37
	Variable Costs			
10	Fertilizer	18.49	21.17	17.63
11	Chemicals	1.03	1.51	0.34
12	Seed Expense	11.15	9.37	19.32
13	Crop Drying	0.56	1.27	0.08
14	Crop Insurance	0.03		
15	Other Expenses	4.05	3.53	1.99
16	Special Hired Labor	1.15	1.47	0.68
17	Custom Work Hired Expense	4.36	4.80	3.09
18	Irrigation Operation			
19	Assigned Interest	0.08		0.17
20	Total Variable Costs	40.89	43.12	43.31
21	Return Over Variable Costs	241.91	337.61	84.06
	Allocated Costs (Variable and Fixed)			
31	Farm Power & Machinery - Ownership	23.60	27.16	21.44
32	Farm Power & Machinery - Operation	40.28	37.94	36.86
33	Building & Fence Cost	8.74	9.84	8.86
34	Irrigation Ownership Cost			
37	Actual Land Ownership Or Rental Cost	61.35	67.36	53.17
38	Utilities & General Farm Expense	7.77	7.58	7.92
39	Hired Labor	4.72	5.81	3.26
41	Actual Non-Real Estate Int Allocated	15.70	17.34	14.36
42	Total Allocated Costs	162.16	173.03	145.87
43	Total Listed Costs	203.04	216.15	189.19
44	Return Over Listed Costs	79.76	164.58	-61.82
	*************SUPPLEMENTARY INFORMATION**************************************			
50	Land Opportunity Ownership Cost	66.94	66.39	67.56
51	Total Cost Adj to a Min 7% Interest	204.11	211.61	198.98
52	Work Units Assigned / Acre	0.60	0.60	0.60
53	Power Cost Allocation Factor	0.95	0.97	0.87
54	Total Listed Cost/Unit of Production	58.01	45.03	118.24
55	Total Adjusted Cost/Unit of Production	57.99	44.25	123.58
56	Cash Variable Cost/Unit of Product	31.25	23.29	66.07
57	Return Over Listed Costs Per Unit	22.79	34.29	-38.64
58	Breakeven Yield/Unit of Production	2.5	2.7	2.4
59	Total Acre Inches Water Applied			
60	Cost of Irrg Excluding Interest			
61	Average Price Received / Unit Sold			
62	Quantity Sold (O.S.)			

TABLE 10 - CROP DATA PER ACRE - OAT SILAGE - 1989

	ITEMS	AVERAGE OF 31 FARMS	HIGHEST OF 10 FARMS	LOWEST OF 10 FARMS
1	TOTAL VALUE PRODUCED $	1870	3533	376
2	TOTAL PRODUCTION	94	166	21
3	TOTAL ACRES	17.2	18.9	9.3
		PER ACRE	PER ACRE	PER ACRE
4	Yield Per Acre	5.5	8.8	2.3
5	Value Per Unit	19.73	21.01	17.90
6	Crop Product Return	107.85	184.50	40.43
7	Other Crop Income	0.87	2.43	
8	Total Crop Return	108.72	186.93	40.43
	Variable Costs			
10	Fertilizer	4.13	5.93	
11	Chemicals	0.06	0.11	0.22
12	Seed Expense	8.78	9.47	4.19
13	Crop Drying	0.17	0.48	
14	Crop Insurance	0.12	0.11	
15	Other Expenses	0.23	0.48	0.43
16	Special Hired Labor	1.40	3.97	
17	Custom Work Hired Expense			
18	Irrigation Operation			
19	Assigned Interest			
20	Total Variable Costs	14.88	20.53	4.84
21	Return Over Variable Costs	93.84	166.40	35.59
	Allocated Costs (Variable and Fixed)			
31	Farm Power & Machinery - Ownership	13.43	10.90	5.38
32	Farm Power & Machinery - Operation	21.57	21.69	16.24
33	Building & Fence Cost	5.81	4.44	5.27
34	Irrigation Ownership Cost			
37	Actual Land Ownership Or Rental Cost	59.84	54.09	69.46
38	Utilities & General Farm Expense	4.36	3.97	3.44
39	Hired Labor	1.16	1.59	0.86
41	Actual Non-Real Estate Int Allocated	10.23	14.07	9.46
42	Total Allocated Costs	116.40	110.75	110.11
43	Total Listed Costs	131.28	131.27	114.95
44	Return Over Listed Costs	-22.56	55.66	-74.52
	*************SUPPLEMENTARY INFORMATION**************************************			
50	Land Opportunity Ownership Cost	73.61	89.19	62.37
51	Total Cost Adj to a Min 7% Interest	144.53	161.32	114.73
52	Work Units Assigned / Acre	0.40	0.40	0.40
53	Power Cost Allocation Factor	0.92	0.93	0.88
54	Total Listed Cost/Unit of Production	23.87	14.92	49.98
55	Total Adjusted Cost/Unit of Production	26.45	18.37	50.81
56	Cash Variable Cost/Unit of Product	9.49	7.03	15.15
57	Return Over Listed Costs Per Unit	-4.10	6.33	-32.40
58	Breakeven Yield/Unit of Production	6.7	6.2	6.4
59	Total Acre Inches Water Applied			
60	Cost of Irrg Excluding Interest			
61	Average Price Received / Unit Sold			
62	Quantity Sold (O.S.)			

COSTS AND RETURNS FROM LIVESTOCK ENTERPRISES

Productive livestock enterprises are an important part of many farm businesses in Minnesota. Farms involved in this report may have one or more livestock enterprises. The following tables pertain to these livestock enterprises.

Since feed is the largest single item of cost for all classes of livestock, return over feed costs has been used to classify farm livestock enterprises into high, low and average groups.

Other cash costs relatively easy to identify and classify in the farm records are listed in each of the tables as other direct costs.

Allocated costs include interest charges to the enterprise, allocated charges for hired labor, utilities, power and machinery, livestock equipment and building and fence costs. These costs are allocated to each livestock enterprise by the computer using a carefully devised formula to make the proper allocations.

Each enterprise table includes supplementary management information. This information can provide clues indicating the strengths and weaknesses of each enterprise.

TABLE 11A - HOGS, FARROW TO FINISH, GENERAL - 1989

	ITEMS	10 FARMS HIGHEST IN RETURN OVER FEED COST		10 FARMS LOWEST IN RETURN OVER FEED COST	
			PER CWT		PER CWT
1	Production	301939		220412	
2	Net Increase in Value: Hogs		49.38		42.05
3	Other Miscellaneous Income				0.01
4	Total Value Produced		49.38		42.06
	Feed Fed: Quantity & Cost	LBS/CWT		LBS/CWT	
6	Corn	267.70	10.23	298.63	12.31
7	Other Grain	0.36	0.04		
8	Complete Ration	1.70	0.22	28.56	2.46
9	Prot., Salt, Min.	75.70	12.69	64.77	16.84
10	Total Grain Mix	345.46	23.18	391.96	31.61
11	Forages	0.50	0.02		
12	Pasture				
13	Total Feed Cost		23.20		31.61
14	Return Over Feed Costs		26.18		10.45
	Other Direct Costs				
16	Veterinary		1.25		0.59
17	Breeding				0.07
18	Miscellaneous		0.84		0.72
19	Custom Work & Lease		0.72		0.22
20	Special Hired Labor		2.28		0.01
21	Assigned Interest				0.13
22	Total Other Direct Costs		5.09		1.74
23	Total Direct Costs Incl Feed		28.29		33.35
24	Return Over All Direct Costs		21.09		8.71
	Allocated Costs				
27	Act Int Pd Less Int Assigned-L21		1.65		1.28
28	General Hired Labor		1.28		1.44
29	Utilities & Miscellaneous		1.77		2.15
30	Power & Machinery		0.83		1.21
31	Livestock Equipment		1.49		1.11
32	Building & Fences		2.61		2.01
33	Total Allocated Costs		9.63		9.20
34	Total Actual Listed Costs		37.92		42.55
35	Return Over Actual Listed Costs		11.46		-0.49

**************SUPPLEMENTARY MANAGEMENT INFORMATION*****************

36	Total Costs Adj To 7% Min Int.	38.72	43.48
38	Return/Listed 7% Opportunity Interest	10.66	-1.42
40	Return/$100 Feed Fed	212.83	133.04
41	Average Wt./Mkt. Hog Sold	211	236
42	Price Rec'd/CWT. Mkt Hogs	46.25	44.17
43	Total No. Litters Farrowed	180	112
44	Litters/Sow/Year	1.98	1.78
45	No. Pigs Born/Litter	9.83	9.64
46	No. Pigs Wean/Litter	8.52	8.38
47	No. Pigs Produced/Sow/Year	16.29	13.08
48	Litters/Crate/Year	6.92	6.59
49	Pigs Weaned/Crate/Year	59.00	55.18
50	Mkt. Animal Death as % of Total Loss	6.64	23.62
51	Breeding Herd Death Loss	4.22	7.49
52	Price/CWT. Grain Mix Fed	6.71	8.07
53	Price/CWT. Prot., Salt, Min.	16.76	26.00
54	Total Death Loss Percent	11.04	14.27

TABLE 11B - HOGS, FINISHING - 1989

	ITEMS	17 FARMS HIGHEST IN RETURN OVER FEED COST		17 FARMS LOWEST IN RETURN OVER FEED COST	
			PER CWT		PER CWT
1	Production - Pounds	129014		127177	
2	Net Increase in Value: Hogs		42.53		34.18
3	Other Miscellaneous Income				
4	Total Value Produced		42.53		34.18
	Feed Fed: Quantity & Cost	LBS/CWT		LBS/CWT	
6	Corn	277.9	11.38	322.7	13.26
7	Other Grain	0.1	0.01	1.4	0.13
8	Complete Ration	1.0	0.14	24.1	1.77
9	Prot., Salt, Min.	61.1	9.20	78.1	13.41
10	Total Grain Mix	340.1	20.73	426.3	28.57
11	Forages				
12	Pasture				
13	Total Feed Cost		20.73		28.57
14	Return Over Feed Costs		21.80		5.61
	Other Direct Costs				
16	Veterinary		0.91		0.21
17	Miscellaneous		0.89		0.46
18	Custom Work & Lease Expense		0.95		0.10
19	Special Hired Labor				
20	Assigned Interest		0.12		0.07
21	Total Other Direct Costs		2.87		0.84
22	Total Direct Costs Incl Feed		23.60		29.41
23	Return Over All Direct Costs		18.93		4.77
	Allocated Costs				
26	Act Int Pd Less Int Assigned-L20		0.88		0.72
27	General Hired Labor		0.15		0.24
28	Utilities & Miscellaneous		0.83		0.84
29	Power & Machinery		0.68		0.41
30	Livestock Equipment		1.19		1.08
31	Buildings & Fences		1.33		2.68
32	Total Allocated Costs		5.06		5.97
33	Total Actual Listed Costs		28.66		35.38
34	Return Over Actual Listed Costs		13.87		-1.20

**************SUPPLEMENTARY MANAGEMENT INFORMATION********************

35	Total Costs Adj to 7% Min Int.	30.42	36.94
36	Return/Listed 7% Opportunity Interest	12.11	-2.76
39	Return/$100 Feed Fed	205.16	119.63
40	Ave Wt./Mkt. Hog Sold	225.90	234.86
41	Price Rec'd/CWT. Mkt Hogs	45.89	43.76
42	Ave. Weight/Pig Purchased	53.21	50.28
43	Ave. Price/Pig Purchased	39.79	40.70
44	No. Pigs Purchased	141	404
45	No. Pigs Transferred Out/In	431	343
46	Pounds of Pork Purchased	7502	20313
47	Ave Number of Pigs on Hand	325.6	274.5
48	Percent Death Loss	3.60	3.28
49	Effective Daily Gain	1.09	1.27
50	Price/CWT. Grain Mix Fed	6.10	6.70
51	Price/CWT. Prot., Salt, Min	15.06	17.16
52	Number of Pigs Produced	689	714

TABLE 11C - HOGS, WEANING PIG PRODUCTION - 1989

	ITEMS	16 FARMS HIGHEST IN RETURN OVER FEED COST		16 FARMS LOWEST IN RETURN OVER FEED COST	
			/LITTER		/LITTER
1	Production	110		113	
2	Net Increase in Value: Hogs		376.78		269.27
3	Other Miscellaneous Income				
4	Total Value Produced		376.78		269.27
5	Feed Fed: Qty & Cost	LBS/LITTER		LBS/LITTER	
6	Corn	1403.35	57.61	1784.48	72.93
7	Other Grain	15.21	0.99	90.17	5.38
8	Complete Ration	82.16	14.71	112.83	16.04
9	Prot., Salt, Min.	466.52	93.85	624.69	124.77
10	Total Grain Mix	1967.24	167.16	2612.17	219.12
11	Forages	0.15	0.04	1.37	0.26
12	Pasture				
13	Total Feed Cost		167.20		219.38
14	Return Over Feed Costs		209.58		49.89
	Other Direct Costs				
16	Veterinary		11.73		15.45
17	Breeding		0.15		0.04
18	Miscellaneous		14.25		12.30
19	Custom Work & Lease		1.26		2.98
20	Special Hired Labor		5.55		0.71
21	Assigned Interest				
22	Total Other Direct Costs		32.94		31.48
23	Total Direct Costs Incl Feed		200.14		250.86
24	Return Over All Direct Costs		176.64		18.41
	Allocated Costs				
27	Act Int Pd Less Int Assigned-L21		10.44		17.92
28	General Hired Labor		1.29		6.15
29	Utilities & Miscellaneous		14.99		17.83
30	Power & Machinery		11.57		13.03
31	Livestock Equipment		35.33		21.25
32	Buildings & Fences		34.25		28.41
33	Total Allocated Costs		107.87		104.59
34	Total Actual Listed Costs		308.01		355.45
35	Return Over Actual Listed Costs		68.77		-86.18
	**************SUPPLEMENTARY MANAGEMENT INFORMATION********************				
36	Total Costs Adj to 7% Min Int.		316.98		357.25
38	Return/Listed 7% Opportunity Interest		59.80		-87.98
40	Return/$100 Feed Fed		225.35		122.74
41	Ave Wt./Pig Sold or Transfer		54		54
42	Price Rec'd/Pig Sold		41.67		40.69
43	Litters/Sow/Year		1.9		1.6
44	No. Pigs Born/Litter		11		9
45	No. Pigs Wean/Litter		8.9		7.5
46	Pigs Produced/Sow/Year		16.4		11.1
47	Litters/Crate/Year		7.9		7.1
48	Pigs Weaned/Crate/Year		69.79		53.25
49	Fdr Pig Deaths: As % of Total Loss		99.1		98.2
50	Breeding Deaths: As % of Total Loss		0.9		1.8
51	Price/CWT. Grain Mix Fed		8.50		8.39
52	Price/CWT. Prot., Salt, Min.		20.12		19.97

TABLE 11D - HOGS, MIXED SYSTEMS - 1989

	ITEMS	7 FARMS HIGHEST IN RETURN OVER FEED COST		7 FARMS LOWEST IN RETURN OVER FEED COST	
			PER CWT		PER CWT
1	Production	201771		199446	
2	Net Increase in Value: Hogs		49.85		43.61
3	Other Miscellaneous Income				
4	Total Value Produced		49.85		43.61
	Feed Fed: Quantity & Cost	LBS/CWT		LBS/CWT	
6	Corn	311.88	12.82	273.01	11.21
7	Other Grain	7.43	0.45	4.22	0.26
8	Complete Ration	6.36	0.77	22.61	3.26
9	Prot., Salt, Min.	78.89	13.53	73.58	13.66
10	Total Grain Mix	404.56	27.57	373.42	28.39
11	Forages	0.79	0.09	0.43	0.02
12	Pasture				
13	Total Feed Cost		27.66		28.41
14	Return Over Feed Costs		22.19		15.20
	Other Direct Costs				
16	Veterinary		1.29		0.98
17	Breeding				
18	Miscellaneous		1.10		1.46
19	Custom Work & Lease		0.51		0.34
20	Special Hired Labor		0.35		0.70
21	Assigned Interest		0.11		
22	Total Other Direct Costs		3.36		3.48
23	Total Direct Costs Incl Feed		31.02		31.89
24	Return Over All Direct Costs		18.83		11.72
	Allocated Costs				
27	Act Int Pd Less Int Assigned-L21		1.61		0.80
28	General Hired Labor		0.62		0.26
29	Utilities & Miscellaneous		1.71		1.57
30	Power & Machinery		1.22		1.21
31	Livestock Equipment		2.00		1.70
32	Building & Fences		2.06		2.38
33	Total Allocated Costs		9.22		7.92
34	Total Actual Listed Costs		40.24		39.81
35	Return Over Actual Listed Costs		9.61		3.80

**************SUPPLEMENTARY MANAGEMENT INFORMATION*******************

36	Total Costs Adj To % Min Int.	41.78	41.51
38	Return/Listed 7% Opportunity Interest	8.07	2.10
40	Return/$100 Feed Fed	180.22	153.51
41	Ave Wt./Mkt. Hog Sold	99	200
42	Price Rec'd/CWT. Mkt Hogs	56.67	46.23
43	Total No. Litters Farrowed	178	105
44	Litters/Sow/Year	1.91	1.75
45	No. Pigs Born/Litter	9.94	10.01
46	No. Pigs Wean/Litter	8.53	8.68
47	No. Pigs Produced/Sow/Year	15.95	14.67
48	Litters/Crate/Year	7.42	6.56
49	Pigs Weaned/Crate/Year	63.25	56.94
50	Mkt. Animal Death as %.of Total Loss	3.52	9.47
51	Breeding Herd Death Loss	4.20	3.33
52	Price/CWT. Grain Mix Fed	6.81	7.60
53	Price/CWT. Prot., Salt, Min.	17.16	18.56
54	Total Death Loss Percent	11.96	9.78

TABLE 12 - DAIRY HERDS, COMMERCIAL HERDS - 1989

	ITEMS	27 FARMS HIGHEST IN RETURN OVER FEED COST		27 FARMS LOWEST IN RETURN OVER FEED COST	
			PER COW		PER COW
1	Average Number of Cows	56.6		33.6	
2	Pounds of Milk		18859		13923
3	Pounds of Butterfat		679		485
4	Percent of Butterfat in Milk		3.60		3.48
5	Value of Produce				
6	Dairy Products Sold		2406.29		1737.38
7	Dairy Products Used in Home		4.20		5.68
8	Milk Fed to Livestock		15.11		4.43
9	Net Increase in Value:		-95.27		-147.23
10	Other Miscellaneous Income		22.26		0.63
11	Total Value Produced		2352.59		1600.89
12	Feed Fed: Qty & Cost	LBS/COW		LBS/COW	
13	Corn	5489	220.23	5115	209.70
14	Small Grain	216	13.41	194	10.36
15	Complete Ration	263	23.78	616	40.24
16	Prot., Salt, Min.	1666	270.85	1027	171.99
17	Total Grain Mix	7634	528.27	6952	432.29
18	Legume Hay	3788	166.18	6323	280.57
19	Other Dry Hay & Roughage	581	15.64	1028	26.10
20	Haylage	4238	94.29	1438	32.50
21	Silage	9148	89.73	11086	110.71
22	Pasture		0.67		7.83
23	Total Feed Costs		894.78		890.00
24	Return Over Feed Cost		1457.81		710.89
	Other Direct Costs				
26	Veterinary		58.37		42.08
27	Breeding		31.27		17.23
28	Miscellaneous		126.52		103.90
29	Custom Work & Lease Expense		78.82		70.80
30	Special Hired Labor		45.80		1.46
31	Assigned Interest				
32	Total Other Direct Costs		340.78		235.47
33	Total Direct Costs Incl Feed		1235.56		1125.47
34	Return Over All Dir Costs		1117.03		475.42
	Allocated Costs				
37	Int Pd Less Int Assgnd-L31		77.72		77.02
38	General Hired Labor		48.25		18.60
39	Utilities & Miscellaneous		95.32		82.89
40	Power & Machinery		67.53		73.89
41	Livestock Equipment		102.56		71.58
42	Building & Fences		126.87		68.46
43	Total Allocated Costs		518.25		392.44
44	Tot Act Listed Costs		1753.81		1517.91
45	Return Over Actual Listed Costs		598.78		82.98
	*************SUPPLEMENTARY MANAGEMENT INFORMATION**************************				
46	Total Costs Adj To 7% Int		1792.16		1548.79
47	Return/Listed 7% Opportunity Interest		560.43		52.10
50	Return/$100 Feed Fed		262.92		179.88
51	LBS of Milk/LBS Grain Mix		2.47		2.00
52	Average Price/CWT. Sold		12.86		12.54
53	Dairy Cow Turnover %		44.17		38.69
54	Approx Dry Matter/Cow		42		46

TABLE 13 - OTHER DIARY CATTLE, COMMERCIAL REPLACEMENTS - 1989

	ITEMS	27 FARMS HIGHEST IN RETURN OVER FEED COST		27 FARMS LOWEST IN RETURN OVER FEED COST	
			PER HEAD		PER HEAD
1	Average Number of Head	55.1		67.5	
2	Net Increase in Value:		516.93		294.27
3	Other Miscellaneous Income				0.19
4	Total Value Produced		516.93		294.46
	Feed Fed: Quantity & Cost	LBS/HEAD		LBS/HEAD	
6	Corn	839	33.97	1143	46.74
7	Small Grain	75	4.25	99	5.66
8	Complete Ration	128	7.95	39	4.04
9	Prot., Salt, Min.	197	35.30	332	55.47
10	Total Grain Mix	1239	81.47	1613	111.91
11	Legume Hay	1132	35.79	2000	85.59
12	Other Dry Hay & Roughage	952	24.36	650	14.74
13	Haylage	537	13.61	481	10.21
14	Silage	5705	53.77	5372	51.21
15	Milk	14	3.87	61	11.47
16	Pasture		0.45		0.93
17	Total Feed Costs		213.32		286.06
18	Return Over Feed Cost		303.61		8.40
	Other Direct Costs				
20	Veterinary		7.19		9.87
21	Breeding		5.79		5.57
22	Miscellaneous		8.11		8.31
23	Custom Work & Lease Expense		7.39		6.58
24	Special Hired Labor		0.71		5.21
25	Assigned Interest				
26	Total Other Direct Costs		29.19		35.54
27	Total Direct Costs Incl Feed		242.51		321.60
28	Return Over All Direct Costs		274.42		-27.14
	Allocated Costs				
31	Int Pd Less Int Assigned-L25		11.62		14.37
32	General Hired Labor		7.68		8.76
33	Utilities & Miscellaneous		16.57		14.10
34	Power & Machinery		12.38		10.33
35	Livestock Equipment		16.46		16.09
36	Buildings & Fences		21.14		16.87
37	Total Allocated Costs		85.85		80.52
38	Total Actual Listed Costs		328.36		402.12
39	Return Over Actual Listed		188.57		-107.66
	**************SUPPLEMENTARY MANAGEMENT INFORMATION**************************				
40	Total Costs Adj 7% Int		376.81		439.43
42	Return/Listed 7% Opportunity Int		140.12		-144.97
44	Return/$100 Feed Fed		242.33		102.94
45	Percent Calf Death Loss		9.90		11.75

TABLE 14 - ALL DAIRY CATTLE - 1989

	ITEMS	27 FARMS HIGHEST IN RETURN OVER FEED COST		27 FARMS LOWEST IN RETURN OVER FEED COST	
			PER COW		PER COW
1	Average Number of Cows	56.6		33.6	
2	Pounds of Milk		18859		13923
3	Pounds of Butterfat		679		485
4	Percent of Butterfat in Milk		3.60		3.48
5	Value of Produce				
6	Dairy Products Sold		2406.29		1737.38
7	Dairy Products Used in Home		4.20		5.68
8	Milk Fed to Livestock		15.11		4.43
9	Net Increase in Value:		598.50		443.94
10	Other Miscellaneous Income		22.26		1.01
11	Total Value Produced		3046.36		2192.44
12	Feed Fed: Quantity & Cost	LBS/COW		LBS/COW	
13	Corn	6306	253.30	7411	303.60
14	Small Grain	289	17.55	393	21.73
15	Complete Ration	388	31.52	694	48.36
16	Protein, Salt, Mineral	1871	308.98	1817	306.47
17	Total Grain Mix	8854	611.35	10315	680.15
18	Legume Hay	4890	201.02	10341	452.51
19	Other Dry Hay & Roughage	1508	39.35	2334	55.71
20	Haylage	4761	107.54	2404	53.01
21	Silage	14702	142.08	21878	213.59
22	Pasture		1.11		9.70
23	Total Feed Costs		1102.45		1464.67
24	Return Over Feed Costs		1943.91		727.77
	Other Direct Costs				
26	Veterinary		65.37		61.91
27	Breeding		36.91		28.42
28	Miscellaneous		134.42		120.59
29	Custom Work & Lease Expense		86.01		84.02
30	Special Hired Labor		46.49		11.93
31	Assigned Interest				
32	Total Other Direct Costs		369.20		306.87
33	Total Direct Costs Incl Feed		1471.64		1771.54
34	Return Over All Direct Costs		1574.72		420.90
	Allocated Costs				
37	Int Paid Less Int Assigned-L-31		89.03		105.89
38	General Hired Labor		55.73		36.20
39	Utilities & Miscellaneous		111.45		111.22
40	Power & Machinery		79.58		94.64
41	Livestock Equipment		118.58		103.90
42	Buildings & Fences		147.45		102.35
43	Total Allocated Costs		601.82		554.20
44	Total Actual Listed Costs		2073.47		2325.74
45	Return/Actual Listed Costs		972.89		-133.30
	*************SUPPLEMENTARY MANAGEMENT INFORMATION**************************				
46	Total Costs Adj to 7% Interest		2158.98		2431.55
47	Return/Listed 7% Opportunity Int		887.39		-239.11
50	Return/$100 Feed Fed		276.33		149.69
51	LBS of Milk/LBS Grain Mix		2.13		0.00
52	Average Price/CWT Milk Sold		12.86		12.54
53	Dairy Cow Turnover %		44.17		38.69
54	Approx Dry Matter/Cow		42		46.00
55	Percent Calf Death Loss		9.90		11.75
56	Total Investment/Cow		8525.34		7850.61
57	Total Debt/Cow		3071.06		3979.36

TABLE 15B - FEEDLOT - 1989

	ITEMS	15 FARMS HIGHEST IN RETURN OVER FEED COST		15 FARMS LOWEST IN RETURN OVER FEED COST	
			PER CWT		PER CWT
1	Average Number of Animals	50.7		56.1	
2	Pounds of Animal Produced	41669		37084	
3	Net Increase in Value: Animals		69.10		57.50
4	Other Miscellaneous Income				
5	Total Value Produced		69.10		57.50
6	Feed Fed: Qty & Cost	LBS/CWT		LBS/CWT	
7	Corn	503.0	20.50	585.7	22.94
8	Small Grains	1.0	0.06	5.8	0.34
9	Complete Rations	14.3	0.95	0.4	0.29
10	Prot., Salt, Min.	50.9	6.29	41.6	7.88
11	Legume Hay	13.8	0.43	193.3	7.76
12	Other Dry Hay & Roughage	3.1	0.06	46.8	0.92
13	Silage	306.2	3.06	396.8	3.92
14	Haylage	13.8	0.31	212.8	4.79
15	Pasture				0.05
16	Total Feed Cost		31.66		48.89
17	Return Over Feed Costs		37.44		8.61
	Other Direct Costs				
19	Veterinary		0.92		2.20
20	Miscellaneous		1.26		0.96
21	Custom Work & Lease Expense		1.80		1.18
22	Special Hired Labor		0.11		0.03
23	Assigned Interest				0.94
24	Total Other Direct Costs		4.09		5.31
25	Total Direct Costs Incl Feed		35.75		54.20
26	Return Over All Direct Costs		33.35		3.30
27	Allocated Costs				
29	Act Int Pd Less Int Assigned-L23		3.82		2.22
30	General Hired Labor		1.61		2.44
31	Utilities & Miscellaneous		2.04		1.62
32	Power & Machinery		1.16		1.10
33	Livestock Equipment		2.28		2.71
34	Buildings & Fences		1.73		1.48
35	Total Allocated Costs		12.64		11.57
36	Total Actual Listed Costs		48.39		65.77
37	Return Over Actual Listed Costs		20.71		-8.27
	**************SUPPLEMENTARY MANAGEMENT INFORMATION********************				
38	Total Costs Adj to 7% Min Int		51.68		70.66
39	Return/Listed 7% Opportunity Int.		17.42		-13.16
42	Return/$100 Feed Fed		218.26		117.64
43	Price/CWT Sold		68.12		71.39
44	Average Weight All Cattle Sold		1203		1104
45	Price/CWT Bought		72.93		90.53
46	Average Weight Cattle Bought		502		426
47	Number of Head Bought		39		46
48	Percent Death Loss		3.39		1.28
49	Effective Daily Gain-Pound/Head/Day		2.25		1.81
50	Price to Cover Purch Price & Listed		82.64		113.58
51	Hay Equivalent/CWT		0.06		0.24
52	Corn Equivalent/CWT		9.00		10.56

YEAR END 1989 AVERAGE OF 12 FARMS

TABLE 16A 6670A SHEEP, FARM, COMMERCIAL

					FLOCK TOTAL	PER EWE
1	Average Number of Ewes				30.3	
2	Pounds of Lamb, Mutton Produced				2914	
3	Pounds of Wool Produced				214	
4	Value of Produce					
5	Wool					5.87
6	Net Increase in Value					47.95
7	Other Miscellaneous Income					0.07
8	Total Value Produced			*	1633	53.89*
9	Feed Fed: Quantity & Cost		LBS/EWE			
10	Grain		381.4			18.05
11	Prot., Salt, Min.		109.3			17.89
12	Legume Hay		755.8			31.29
13	Other Dry Hay and Roughage		203.0			3.83
14	Silage		11.0			0.10
15	Haylage					
16	Pasture					1.22
17	Total Feed Cost				2193	72.38
18	Return Over Feed Costs			*	-560	-18.49*
	Other Direct Costs:					
20	Veterinary					4.79
21	Breeding					
22	Miscellaneous					4.03
23	Custom Work					3.37
24	Lease Expense					
25	Special Hired Labor					
26	Assigned Interest					
27	Total Other Direct Costs				369	12.19
28	Total Direct Costs Including Feed				2562	84.57
29	Return Over All Direct Costs			*	-929	-30.68*
30	Allocated Costs					
32	Act Int Pd Less Int Assigned-L26				238	7.85
33	General Hired Labor					12.61
34	Utilities & Miscellaneous					18.48
35	Power & Machinery	-PCAF	1.00			8.41
36	Livestock Equipment	-ECAF	0.90			18.67
37	Buildings & Fences	-BCAF	0.87			26.43
38	Total Allocated Costs				2802	92.45
39	Total Actual Listed Costs				5364	177.02
40	Return Over Actual Listed Costs			*	-3731	-123.13*
	************* SUPPLEMENTARY MANAGEMENT INFORMATION ********************					
41	Total Listed Costs Adj to 7% Min Int.				5383	177.66
42	Return/Listed 7% Opportunity Interest				-3750	-123.77
45	Return/$100 Feed Fed				74.46	
46	Price/CWT Lamb Sold or Transferred				56.50	
47	Ave Wt. Lamb Sold or Transferred				114	
48	LBS. Wool/Sheep Sheared				8.2	
49	Number of Ewes Exposed				29	
50	Number of Ewes Lambing				24	
51	Conception Rate				82.8	
52	Number of Lambs Born				37	
53	Percent Born/Ewe Exposed				127.6	
54	Percent Born/Ewe Lambing				154.2	
55	Percent Weaned/Ewe Lambing				141.7	
56	Percent Ewe Death Loss: % Total Death Loss				4.4	
57	Percent Lamb Death Loss: % Total Death Loss				4.4	

TABLE 500 - SUMMARY MANAGEMENT INFORMATION - 1989

	ITEMS	AVERAGE OF--367 FARMS	73 MOST PROFITABLE FARMS	72 LEAST PROFITABLE FARMS
	Farm Size			
2	Total Acres Operated	445.7	625.4	423.1
2A	Total Acres Owned	179.9	163.2	179.4
3	Tillable Acres Operated	418.0	592.3	398.4
3A	Tillable Acres Owned	160.0	142.2	164.0
4	Total Work Units	481.9	745.0	389.4
5	Total Full Time Equivalent Workers	1.43	1.91	1.39
	PROFIT & LOSS ANALYSIS			
11	Return to Labor & Management-Whole Farm	33086	83619	-3268
12	Full Time Operator Equivalent	1.11	1.31	1.17
13	Return to Capital, Farm Labor, & Mgmt.			
14	Operator's Share	39618	79318	11627
15	Ratio: Total Expense to Total Receipts	0.86	0.79	1.01
16	Ratio: Cash Operating Exp. to Total Farm Operating Inc.	0.77	0.75	0.81
17	Ratio: Cash Operating Expense to Total Expenses	0.79	0.82	0.78
18	Ratio: Capital Turnover:Ave. Capital to Receipts:W.F.	2.66	2.34	3.56
19	Ratio: Capital Turnover:Ave. Capital to Receipts:O.S.	1.62	1.45	2.24
20	Net Cash Operating Income	42936	72277	29915
21	Interest Payable Per Work Unit	33.61	34.12	33.93
22	Interest Payable Per Dollar of Farm Operating Income	0.09	0.09	0.09
	BALANCE SHEET ANALYSIS			
31	Change in Total Assets	28581	46219	6997
32	Change in Total Liabilities	8344	922	6323
33	Change in Equity	20237	45297	674
34	Current Ratio: End of Year	3.17	3.45	3.19
35	Working Ratio: End of Year	2.86	2.86	3.08
36	Fixed Ratio: End of Year	1.85	1.67	2.47
37	Net Capital Ratio: End of Year	2.25	2.13	2.72
38	Total Farm Assets / Work Unit	743.84	666.91	916.38
39	Total Farm Liabilities / Work Unit	388.51	357.27	396.17
	FAMILY INFORMATION			
41	Total Non-Farm Income	10257	8552	16290
42	Total Cash & Non-Cash Family Living Expense	35059	41870	33366
43	Total Dollars Available to Save or Reduce Debt	17433	48209	-1976

TABLE 600 - TREND ANALYSIS (Continued)

* * * CROP DATA (Selected) * * *		1986	1987	1988	1989
	OATS, FEED				
	Number of Records	106	172	179	219
1	Total Acres	17.6	18.7	17.9	18.1
2	Crop Yield/Acre	58.0	49.3	41.0	68.3
3	Value/Unit	0.85	1.50	2.75	1.41
4	Total Variable Costs/Acre	22.21	25.35	29.06	31.10
5	Total Listed Costs/Acre	127.64	125.35	148.83	137.96
6	Return Over Listed Costs/Acre	-27.47	-23.37	-13.22	1.99
7	Total Listed Cost/Unit of Production	2.20	2.55	3.63	2.02
	SPRING WHEAT				
	Number of Records	79	118	97	88
1	Total Acres	25.5	22.3	17.5	22.7
2	Crop Yield/Acre	37.8	30.3	26.4	41.8
3	Value/Unit	2.35	2.45	3.95	3.92
4	Total Variable Costs/Acre	42.67	38.52	44.07	46.39
5	Total Listed Costs/Acre	155.09	142.29	159.45	159.38
6	Return Over Listed Costs/Acre	2.37	-24.80	-30.33	35.51
7	Total Listed Costs/Unit of Production	4.10	4.69	6.03	3.81
	CORN, GRAIN				
	Number of Records	354	483	638	770
1	Total Acres	117.8	106.4	86.3	95.0
2	Crop Yield/Acre	135.0	143.0	80.8	139.7
3	Value/Unit	1.30	1.62	2.49	2.01
4	Total Variable Costs/Acre	99.26	91.71	99.60	105.23
5	Total Listed Costs/Acre	236.12	231.80	266.29	260.97
6	Return Over Listed Costs/Acre	-3.96	87.12	-41.83	59.05
7	Total Listed Costs/Unit of Production	1.75	1.62	3.30	1.87
	SOYBEANS				
	Number of Records	337	447	575	649
1	Total Acres	102.7	110.4	86.8	90.7
2	Crop Yield/Acre	39.8	44.0	29.8	43.6
3	Value/Unit	4.50	4.80	7.70	5.46
4	Total Variable Costs/Acre	41.37	44.49	50.85	52.12
5	Total Listed Costs/Acre	166.60	172.16	198.04	191.06
6	Return Over Listed Costs/Acre	16.52	42.12	42.06	47.59
7	Total Listed Costs/Unit of Production	4.18	3.91	6.65	4.38
	ALFALFA HAY				
	Number of Records	159	240	291	296
1	Total Acres	37.4	39.1	35.5	35.8
2	Crop Yield/Acre	4.3	4.2	2.1	3.5
3	Value/Unit	65.00	62.76	97.07	80.10
4	Total Variable Costs/Acre	35.21	35.55	34.01	40.89
5	Total Listed Costs/Acre	175.92	172.35	198.61	203.04
6	Return Over Listed Costs/Acre	103.58	92.89	21.63	79.76
7	Total Listed Costs/Unit of Production	40.62	40.84	93.24	58.01

TABLE 600 - TREND ANALYSIS (Continued)

		1986	1987	1988	1989
	PRODUCING WEANING PIGS - TABLE 11C				
	Number of Records	30	42	41	48
1	Number of Litters Produced	149	116	127	132
2	Price Rec'd/Pig Sold	66.16	64.21	44.07	40.77
3	Total Listed Cost/Litter	260.97	235.83	332.08	328.35
4	Return Over Listed Cost/Litter	125.00	133.31	-4.05	-12.56
5	Return/$100 Feed Fed	256.40	261.48	170.86	170.11
6	Pounds of Feed/Litter	2179.5	2202.5	2313.5	2180.7
7	Number of Pigs Weaned/Litter	7.8	7.6	8.3	8.1
	DAIRY COWS - TABLE 12				
	Number of Records	92	136	144	137
1	Pounds of Milk Produced/Cow	15063	15430	16092	16410
2	Price Received/Cwt Milk Sold	11.72	11.89	11.54	12.78
3	Total Listed Cost/Cow	1233.55	1179.60	1599.60	1634.99
4	Return Over Listed Cost/Cow	427.15	584.55	179.29	384.36
5	Return/$100 Feed Fed	240.20	264.57	223.83	228.10
6	Total Feed Cost/Cow	691.38	666.79	794.74	885.28
7	Total Listed Cost/Cwt Milk	8.19	7.64	9.94	9.97
	OTHER DAIRY - TABLE 13				
	Number of Records	91	136	141	137
1	Average Number of Head	61.4	60.5	61.8	60.5
2	Total Value Produced/Head	307.44	347.88	383.90	397.25
3	Total Listed Cost/Head	270.85	263.88	353.68	360.08
4	Return Over Listed Cost/Head	36.59	83.98	30.22	37.17
5	Return/$100 Feed Fed	151.59	175.57	165.45	159.65
6	Total Feed Cost/Head	202.82	198.15	232.03	248.83
7	% Calf Death Loss	15.1	15.1	8.1	11.6
	ALL DAIRY - TABLE 14				
	Number of Records	93	140	148	137
1	Average Number of Cows	50.3	50.7	53.4	50.2
2	Feed Cost/Cow	936.37	912.29	1075.51	1185.16
3	Return Over All Listed Costs/Cow	473.32	695.68	120.95	429.14
4	Dairy Cow Turnover (%)	--	--	37.45	37.85
5	Total Dry Matter/Cow	--	--	58	42
6	Total Investment/Cow	--	--	7907.88	8739.71
7	Total Debt/Cow	--	--	3614.31	3714.99
	BEEF FEEDERS - TABLE 15B				
	Number of Records	44	78	87	75
1	Pounds of Beef Produced	31729	44651	43675	52749
2	Price/Cwt Sold	54.31	61.10	65.74	69.00
3	Total Listed Cost/Cwt	49.22	38.27	53.82	55.05
4	Return Over Listed Costs/Cwt	6.19	21.86	9.64	6.53
5	Return/$100 Feed Fed	154.27	212.57	160.59	158.94
6	Feed Cost/Cwt Produced	35.92	28.29	39.52	38.74
7	Average Weight All Cattle Sold	1135.3	1185.6	1190.0	1197.0

EXPLANATION OF WORK UNITS AND ANIMAL UNITS

The total "work units" for any one farm is a measure of the size of that farm business. A work unit as used in this report is the average accomplishment of a farm worker, in a ten hour day, working on crops and productive livestock at an average efficiency. The number of work units for each class of livestock and each acre of crop are presented below.

NUMBER OF WORK UNITS FOR EACH CLASS OF LIVESTOCK & EACH ACRE OF CROP

Item	No. of Work Units	Item	No. of Work Units/Acre
Dairy Cow Purebred	7.2/cow	Barley, Wheat, Oats, Rye	.30/acre
Dairy Cow	7.0/cow	Canning Peas	.40/acre
Other Dairy Cattle		Oat Silage	.40/acre
Commercial Replacements	1.2/head	Canning Corn	.50/acre
Other Dairy Cattle		Corn for Grain, Sunflowers	.55/acre
Purebred Replacements	1.3/head	Soybeans	.45/acre
Beef Breeding	1.5/cow	Corn and Cane Silage	.60/acre
Beef Feeders	12/cwt.	Alfalfa Hay	.60/acre
Hogs - Complete	.12/cwt.	Other Legume and Mixed Hay	.40/acre
Hogs - Finishing	.06/cwt.	Tame Grass Hay	.30/acre
Hogs - Weaning Pigs	1.4/litter	Annual Hay	.40/acre
Sheep - Farm Flock	.60/ewe	Legume and Grass Silage	
Lambs - Feeder	.30/cwt.	or Haylage	.40/acre
Chickens - Laying Flock, Farm	5.0/100	Legume and Grass Seed	.50/acre
Chickens - Laying Flock, Commercial	4.0/100	Summer Fallow Tilled	.20/acre
Broilers	.20/cwt.	Wild Hay	.20/acre
Labor off the Farm	1.0/$40	Set Aside Acres Idle	.05/acre

"Animal units" indicate density of livestock on a farm. Feed requirement is the basis for assigning unit value to the various classes of livestock as follows:

Dairy Cow	1.0 unit per cow
Other Dairy Cattle	.5 unit per head
Beef Breeding Cows and Bulls	.8 unit per head
Other Beef Breeding	.3 unit per head
Feeder Steers and Heifers	1.0 unit per head
Hogs (swine over 6 months old)	.4 unit per hog
Pigs (swine less than 6 months old)	.2 unit per pig
Sheep (6 months or older)	.143 unit per head
Lambs (under 6 months)	.071 unit per head
Laying Hens	.005 unit per head
Broilers	.003 unit per head