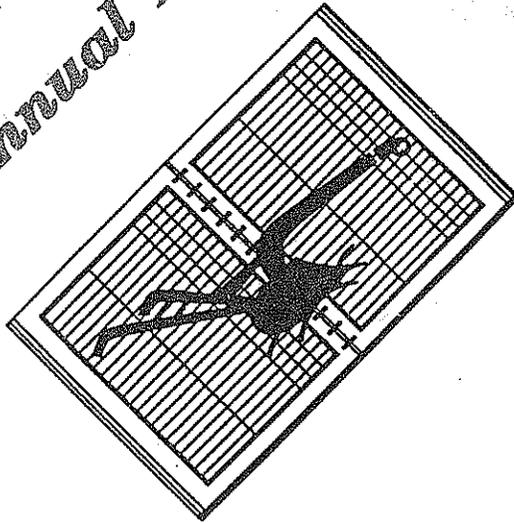


# FARM BUSINESS MANAGEMENT

1989 Annual Report



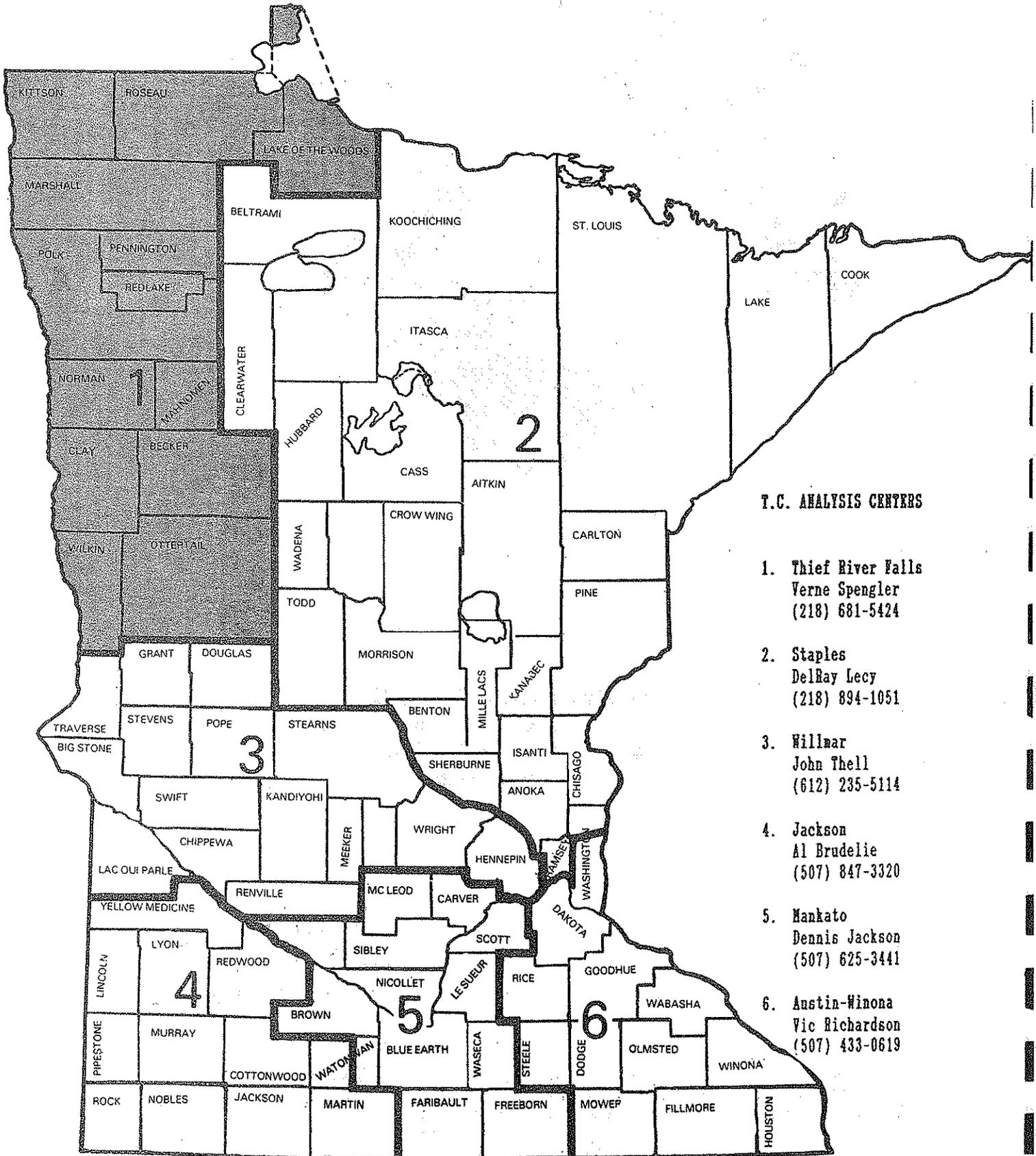
NORTHWESTERN MINNESOTA  
REPORT NO. 35  
THIEF RIVER FALLS TECHNICAL COLLEGE  
APRIL, 1990

**AN ADULT  
EDUCATION  
PROGRAM**

In cooperation with: Minnesota State Board of Vocational Technical Education;  
Agricultural Education Department, University of Minnesota; Thief River Falls  
Technical College, Thief River Falls, Minnesota.

Price: \$5.00

# FARM MANAGEMENT AREA



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\* Whole farm includes all landlords, operators and partners.

## INTRODUCTION

Farm Business Management programs are a part of the agricultural education system in Minnesota. The programs, located in both Technical Colleges and local high schools, serve over 6,000 farm families each year in six farm management areas. Initially these programs were a cooperative effort of the University of Minnesota and the State Department of Education. They are presently administered and managed by the State Board of Vocational Technical Education.

The purpose of farm management education is to help farm families achieve their farm business and family goals. This is done through improved management organization and efficiency of their farm operations.

To accomplish the purpose, programs have been organized to conform to the following guidelines:

1. Farm families enroll in a specific farm management course.
2. Each course has a specific objective and units of instruction to meet the objective.
3. Courses are offered in sequence, and farmers are expected to enroll in the first of the sequences of courses.
4. There is continuity to each course. Each leads to the next course in the sequence.
5. Instruction occurs both in the classroom and on the farm with the farm family.

Programs organize their course around the same central theme. They are:

- Year 1 - Farm business records and accounts.
- Year 2 - Farm business analysis and evaluation.
- Year 3 - Farm business organization.
- Year 4 - Farm reorganization and enterprise efficiency.
- Year 5 - Current issues in farm management.
- Year 6 - Managing the business for family goal attainment.

Like most education programs, members benefit from the instruction in relation to how much effort they put into study. Some farmers have benefitted more, and some less, depending upon how seriously they studied the results of their business analysis and the kind of decisions they made as a result of their analysis.

This analysis allocates all specific and general farm expenses to each enterprise by formula. Some of the overhead costs allocated are machinery expense, building expenses, interest, utilities, insurance, general farm expense, and hired labor.

The new analysis will more completely identify the expenses that each enterprise incurs. The return over listed costs for each of the enterprises may be used for family living, debt repayment, capital purchases or savings. We believe this makes the farm business analysis a more valuable tool to be used for long range planning and cash flow projections.

A special thank you is due the clerical staff: Wilma Bornholdt, Myrna Giauque, Carol Dahl, Rita Wald, Thief River Falls; Linda Strum, Ada; Norma Akerson, Barnesville; Louise Menk, Baudette; Linda Jirava, Detroit Lakes; Jane Salber, Fertile; Patty Maruska and Jodi Thompson, Fosston; Linda Nigg, Moorhead; Carl Anderson, Roseau; and Carol Lockhart, Ulen and Hawley.

Esther Mattson and Judy Lokstad, our secretaries, oversee the general operation of the office, including correspondence, billing and organization.

### SCHOOLS PARTICIPATING

This report deals with farmers enrolled in 21 schools in Northwestern Minnesota. A list of cooperating schools and instructors follows:

#### Schools

Ada  
Agassiz Valley Voc. (Fertile)  
Barnesville  
Baudette  
Detroit Lakes  
Fergus Falls  
Fosston  
Frazee  
Goodridge  
Hawley  
Henning  
Karlstad-Greenbush  
Kittson County (Lancaster)  
Mahnomen, Ulen  
Moorhead  
Norman County West (Halstad)  
Red Lake Falls  
Roseau  
Thief River Falls

#### Instructors

Peter Revier  
Ron Salber  
Tom Risdal  
Gerald Ausmus  
Duane Lemmon  
Allen Schoenbauer  
Doug Fjerstad  
Ron Monson  
Wayne Ditmer  
Dennis Olsen  
Lynn Carlson  
Carol Kleppe  
Mark Prosser  
Mike Lockhart  
Rick Morgan  
Ray Bisek  
Mark Berg  
Duane Jaenicke  
Al Dalen  
Don Johnsen  
Danie Packard

### WHY KEEP RECORDS?

Systematic use of records seems to raise the managerial level of the farmers. Once a farmer starts using records to check up on his performance, it is likely that he will continue for some years to improve his position above that of his less systematic neighbor.\*

\*Britannica Research Service

326 Records were included in the average.

630 Records were processed.

SUMMARY MANAGEMENT INFORMATION - TABLE 500

	Average of 326 Farms	65 High Farms	64 Low Farms	
<b>FARM SIZE</b>				
2	Total Acres Operated	969.5	1643.2	853.5
2A	Total Acres Owned	513.0	422.6	528.2
3	Tillable Acres Operated	881.4	1568.3	748.5
3A	Tillable Acres Owned	436.7	345.7	437.6
4	Total Work Units	507.0	807.4	378.4
5	Total Full Time Equivalent Workers	1.62	2.28	1.33
<b>PROFIT &amp; LOSS ANALYSIS</b>				
11	Return to Labor & Management-Whole Farm	39890	122100	-10314
12	Full Time Operator Equivalent	1.18	1.31	1.09
13	Return to Capital, Farm Labor, & Management			
14	Operator's Share	34788	91392	-3001
15	Ratio: Total Expense to Total Receipts (O.S.)	0.88	0.82	1.10
16	Ratio: Cash Oper. Exp. to Total Farm Oper. Inc.	0.81	0.85	0.86
17	Ratio: Cash Oper. Exp. to Total Exp.	0.83	0.85	0.77
18	Ratio: Capital Turnover: Ave. Cap. to Receipts: W.F.	2.06	1.57	2.89
19	Ratio: Capital Turnover: Ave. Cap. to Receipts: O.S.	1.85	1.45	2.49
20	Net Cash Operating Income	36527	54918	21042
21	Interest Payable Per Work Unit	33.82	35.42	35.85
22	Interest Payable Per Dollar of Farm Oper. Inc.	0.09	0.08	0.09
<b>BALANCE SHEET ANALYSIS</b>				
31	Change in Total Assets	20477	72816	-5091
32	Change in Total Liabilities	4568	18211	5254
33	Change in Equity	15908	54606	-10346
34	Current Ratio: End of Year	2.22	2.38	1.59
35	Working Ratio: End of Year	2.47	2.54	2.11
36	Fixed Ratio: End of Year	2.14	2.02	2.98
37	Net Capital Ratio: End of Year	2.27	2.27	2.52
38	Total Farm Assets/Work Unit	833.26	882.75	998.23
39	Total Farm Liabilities/Work Unit	412.95	428.16	446.68
<b>FAMILY INFORMATION</b>				
41	Total Non-Farm Income	11915	14347	17836
42	Total Cash & Non-Cash Family Living Exp.	34181	51249	27028
43	Total Dollars avail. to Save/Reduce Debt	16345	62831	-9419

TABLE 1 RESOURCES USED IN THE BUSINESS, 1989

Average of 326 Farms

## MEASURES OF FARM SIZE

2	Acres - Total	969.5
3	- Tillable	881.4
4	Work Units - Crops	357.8
5	- Livestock	146.8
6	- Other	2.4
7	- Total	507.0
8	Workers-Operator(s) Year Equivalents	1.18
9	-Hired	0.41
10	-Custom	0.03
11	-Unpaid Family	
12	-Total	1.62
13	Capital Invested-Per Worker	276936
14	-Per Work Unit	885

## WHOLE FARM INVENTORIES\*

	January 1	December 31	
22	Feeder Cattle	\$ 12421	\$ 13661
23	Market Hogs	787	685
24	Feeder Lambs	6	6
25	Poultry-All Types		
26	Other Lvstck-Incl. Other Dairy	4057	4422
27	Crops Held For Sale & Lvstck Feed	59507	69375
28	Supplies/Prepays, Fuel & Lub.	9728	10951
29	Accts. Rec.& Hedging Acct. Equity	3193	3060
30	Dairy Cows	10817	11409
31	Other Dairy	2528	2676
32	Beef Breeding	8253	6699
33	Swine Breeding	297	353
34	Sheep Breeding	62	79
35	Other Breeding Livestock		
36	Auto & Truck (Farm Share)	9026	9971
37	Power & Machinery	53741	56459
38	Livestock Equipment	3174	3268
39	Custom Equipment	419	390
40	Irrigation Equipment	168	134
50	Bare Land	232251	235748
51	Land Improvements & Tile	77	83
52	Buildings-Fences-Etc.	29346	27986
60	Total Farm Capital	439858	457415
70	Increase or Decrease in Total Farm Capital		17557

\* Inventories include both operators and landlords share of investments. Livestock, crop and feed inventories reflect a conservative market value. Machinery equipment and building values are determined by deducting depreciation from cost. Land values are based on original cost or conservative market value.

TABLE 1 RESOURCES USED IN THE BUSINESS, 1989

	Average of 65 High Farms	Average of 65 Low Farms
<b>MEASURES OF FARM SIZE</b>		
2 Acres - Total	1643.2	853.5
3 - Tillable	1568.3	748.5
4 Work Units -Crops	724.6	268.8
5 - Livestock	78.9	107.6
6 - Other	3.8	2.0
7 - Total	807.4	378.4
8 Workers-Operator(s) Year Equiv.	1.31	1.09
9 -Hired	0.92	0.22
10 -Custom	0.05	0.02
11 -Unpaid Family		
12 -Total	2.28	1.33
13 Capital Invested-Per Worker	307309	327590
14 Per Work Unit	868	1151

**WHOLE FARM INVENTORIES\***

	Jan. 1	Dec. 31	Jan. 1	Dec. 31
22 Feeder Cattle	\$ 20731	\$ 26190	\$ 19207	\$ 17404
23 Market Hogs	16		1091	891
24 Feeder Lambs			14	22
25 Poultry-All Types				
26 Other Lvstk-Incl.Other Dairy	1459	1687	1477	1582
27 Crops Held For Sale&Lvstk Fd	114076	158637	52463	45571
28 Supplies/Prepays,Fuel & Lub.	22140	27090	5797	5159
29 Accts Rec.& Hedg.Acct.Equity	<u>8662</u>	<u>9703</u>	<u>754</u>	<u>715</u>
30 Dairy Cows	5930	6027	4098	4865
31 Other Dairy	2100	2115	502	602
32 Beef Breeding	3413	3429	15446	13762
33 Swine Breeding	19		727	833
34 Sheep Breeding			274	274
35 Other Breeding Livestock				
36 Auto & Truck (Farm Share)	14472	16557	10146	9853
37 Power & Machinery	85150	93039	53045	51374
38 Livestock Equipment	1745	1568	1699	1945
39 Custom Equipment	1330	886		
40 Irrigation Equipment	<u>156</u>	<u>136</u>	<u>164</u>	<u>146</u>
50 Bare Land	351837	357906	243780	247814
51 Land Improvements & Tile				30
52 Buildings-Fences-Etc.	<u>32222</u>	<u>30903</u>	<u>29848</u>	<u>28015</u>
60 Total Farm Capital	665458	735873	440532	430857
70 Inc./Dec. in Total Fm.Cap.		70415		-9675

\* Inventories include both operators and landlords share of investments. Livestock, crop and feed inventories reflect a conservative market value. Machinery equipment and building values are determined by deducting depreciation from cost. Land values are based on original cost or conservative market value.

TABLE 2A &amp; 6A - CASH RECEIPTS, WHOLE FARM AND OPERATOR'S SHARE

	Average of 326 Farms	
	Whole Farm	Operator's Share
<b>SALES OF LIVESTOCK AND LIVESTOCK PRODUCTS</b>		
2 Dairy Cows	2710	2667
3 Dairy Products	26526	26162
4 Other Dairy Cattle	2025	1992
5 Beef Breeding Cattle	8641	8478
6 Beef Feeder Cattle	7561	7561
7 Hogs Complete & Mixed	752	751
8 Hogs Finishing	1668	1588
9 Hogs Producing Feeder Pigs	414	409
10 Sheep, Goats, Wool Breeding	104	104
13 Eggs	240	240
14 Custom, Contract Livestock Feeding	6997	6997
16 Other Misc. Lvstk Income	26	26
17 Total Sales of Prod. Lvstk.	57664	56977
<b>SALES OF CROPS</b>		
21 Wheat	47813	46738
22 Durum	441	441
23 Other Small Grain	17029	16498
24 Corn	6637	6617
25 Soybeans	7691	7562
26 Sunflowers	3381	3150
27 Sugar Beets, Potatoes	25353	24743
28 Legumes & Other Roughage	1615	1615
29 Grass Seed	514	463
32 Nursery, Timber & Other	37	37
33 Sale of Crops&Supp.Purch.for Resale	6461	6461
34 Total Sales From Crops & Supp.	116973	114323
40 Government Payments & Set Aside	14346	14168
41 Gas Tax Refund	116	116
42 Income From Work Off The Farm	1330	1257
43 Custom Work Enterprise Income	587	587
44A Patron Refunds - Cash	751	740
44B Patron Refunds - Equity	814	804
45 Miscellaneous Farm Income	4983	4805
46 Total Other Farm Income	22926	22477
47 Total Farm Oper. Inc.	197563	193777
50 Auto, Truck, & Machinery Sold	1132	1131
51 Irrigation Equipment Sold		
52 Custom Work Equipment Sold		
53 Livestock Equipment Sold		
54 Buildings & Fence Sold	49	49
55 Land & Land Improvements Sold	1285	1285
56 Farm Capital Lease Income	154	154
57 Total Farm Capital Sales	2620	2619
58 Total Farm Sales	200183	196395
60 Increase in Farm Capital	17557	16723
61 Family Living From The Farm	396	396
62 Total Farm Receipts(58)+(60)+(61)	218136	213514
70 Total Farm Operating Income (L.47)		193777
71 Total Cash Farm Oper.Exp.(T.2B,L.43)		157250
72 Net Cash Operating Income (L.70-71)		36527

TABLE 2B & 6B CASH EXPENSES - WHOLE FARM AND OPERATOR'S SHARE

	Average of 326 Farms	
	Whole Farm	Operator's Share
<b>PURCHASE OF LIVESTOCK</b>		
5 Dairy Cows	569	562
6 Other Dairy Cattle	391	383
7 Beef Breeding Cattle	2023	1928
8 Beef Feeder Cattle	3465	3465
9 Hogs Complete and Mixed	18	18
10 Hogs Finishing	361	361
11 Hogs Producing Feeder Pigs	42	33
12 Sheep and Goats	9	9
16 Other Productive Livestock	6	5932
17 Total Livestock Purchases	12811	12691
20 Vet, Breeding & Misc. Lvstk.Exp.	3022	3003
21 Purch.of Crops/Supplies for Resale	16753	16527
22 Feed Bought	11505	11441
23 Fertilizer	14145	13824
24 Chemicals	10363	10164
25 Other Crop Expense	11773	11580
26 Irrigation Operating Expense	89	89
27 Custom Work Oper.Costs Incl.Labor	250	250
28 Custom Work Hired	4512	4423
29 Gas, Diesel, Lub. (Farm Share)	7492	7374
30 Repair & Upkeep of Lvstk. Equip.	647	643
31 Repair & Upkeep of Farm Real Estate	1375	1364
32 Rep.& Oper.Of Mach,Trac,Truck,Auto	12071	11881
33 Rep.& Upkeep of Irrigation Equip.	5	5
34 Rep.& Upkeep of Cust.Work Ent.	148	148
35 Total All Repairs	14246	14041
36 Wages of Hired Labor	6271	6198
37 Pers.Property & Real Estate Taxes	2805	2698
38 General Farm Expenses	4809	4738
39 Utilities	2396	2353
40 Cash Lease Expense	1640	18710
41 Total Interest Payable This Year		17145
42 Operator Interest Actually Paid		( 16947)
43 Total Cash Operating Expense	124882	157250
50 Auto, Truck & Machinery Bought	15133	14831
52 Custom Work Equipment Bought	94	94
53 Livestock Equipment Bought	616	616
54 New Real Estate-Bldgs. & Improv.	1336	1336
55 New Real Estate-Land & Improv.	4746	4740
57 Total Capital Purchases	21924	21616*
58 Total Farm Purchases	146806	178866*
60 Decrease in Farm Capital		
61 Interest on Farm Capital (7% Chg)	31405	9958
62 Unpaid Family Labor	23	23
63 Board Furnished Hired Labor	12	12
64 Total Farm Expense	178246	188859
70 Ret To W.F.Oper Labor & Mgmt (T2A, L62-L64)	39890	24655*
71 Number of Operators	1	
72 Full Time Operator Equivalent	1.18	
73 Ret/Oper Lab.& Mgmt/Full Time Op. Equiv.(70/72)	33805	
74 *Ret: Cap & Family Labor& Mgmt		34788*

TABLE 2A & 6A - CASH RECEIPTS - WHOLE FARM AND OPERATOR'S SHARE

	65 High Farms		65 Low Farms	
	Whole Farm	Operator's Share	Whole Farm	Operator's Share
<b>SALE OF LIVESTOCK &amp; LIVESTOCK PRODUCTS</b>				
2 Dairy Cows	1459	1337	1320	1320
3 Dairy Products	16485	15607	9811	9811
4 Other Dairy Cattle	1086	1086	577	577
5 Beef Breeding Cattle	3724	3724	11792	11631
6 Beef Feeder Cattle	9410	9410	21313	21313
7 Hogs Complete & Mixed	111	111	1647	1647
8 Hogs Finishing			1027	1027
9 Hogs Producing Feeder Pigs			1240	1240
10 Sheep, Goats, Wool:Breeding			449	449
13 Eggs				
14 Custom, Contract Livestock Feeding	27514	27514		
16 Other Misc. Livestock Income			16	16
17 Total Sales of Prod. Lvstk	59789	58788	49190	49029
<b>SALE OF CROPS</b>				
21 Wheat	104783	102290	34010	33781
22 Durum	550	550	1389	1389
23 Other Small Grain	36815	36240	11020	10614
24 Corn	6750	6730	6958	6943
25 Soybeans	15252	14712	5930	5925
26 Sunflowers	10827	10069	965	965
27 Sugar Beets and Potatoes	80622	78353	4122	4122
28 Legumes & Other Roughage	1120	1120	2063	2063
29 Grass Seed	1167	1167	1091	833
32 Nursery, Timber, & Other	187	187		
33 Sale of Crops Sup.Purch for Resale	7618	7618	16049	16049
34 Total Sales From Crops & Sup.	265691	259037	83596	82684
40 Government Pmts.& Set Aside Acres	25975	25607	10531	10467
41 Gas Tax Refund	83	83	235	235
42 Income From Work Off Farm	2246	2185	1507	1507
43 Custom Work Enterprise Income	2026	2026		
44A Patron. Refunds - Cash	1620	1582	391	391
44B Patron. Refunds - Equity	1433	1382	513	513
45 Miscellaneous Farm Income	10329	10328	3041	2603
46 Total Other Farm Income	43711	43193	16217	15714
47 Total Farm Operating Income	369191	361018	149003	147427
50 Auto, Truck & Machinery Sold	1138	1138	1209	1209
53 Livestock Equipment Sold				
54 Buildings & Improvements Sold				
55 Land & Land Improvements Sold	4432	4432	228	228
56 Farm Capital Lease Income	250	250	9	9
57 Total Farm Capital Sales	5821	5821	1446	1446
58 Total Farm Sales	375012	366839	150449	148873
60 Increase in Farm Capital	70415	68904		
61 Family Living From The Farm	198	198	352	352
62 Total Farm Rec.+(58)+(60)+(61)	445625	435941	150801	149225
70 Tot.Farm Operating Income (Line 47)		361018		147427
71 Total Cash Farm Oper.Exp.(Exp.Line 43)		306100		126385
72 Net Cash Operating Income (70)-(71)		54918		21042

TABLE 2B &amp; 6B WHOLE FARM AND OPERATOR'S SHARE OF CASH EXPENSES, 1989

	65 High Farms		65 Low Farms	
	Whole Farm	Operator's Share	Whole Farm	Operator's Share
PURCHASE OF LIVESTOCK				
5 Dairy Cows	\$ 61	\$ 61	\$ 1071	\$ 1071
6 Other Dairy Cattle			316	316
7 Beef Breeding Cattle	984	984	1046	1046
8 Beef Feeder Cattle	4860	4860	11218	11218
9 Hogs Complete & Mixed			74	74
10 Hogs Finishing			174	174
11 Hogs Producing Feeder Pigs			62	62
12 Sheep, Goats, Wool: Breeding			4	4
15 Custom, Contract Livestock Feeding	23865	23865		
17 Total Livestock Purchases	29771	29771	13966	13966
20 Vet, Breeding & Misc.Lvstk.Exp.	2022	1968	2125	2118
21 Purch.of Crops & Sup.For Resale	38238	38238	17195	16725
22 Feed Bought	12439	12335	8671	8671
23 Fertilizer	28593	27787	10123	10034
24 Chemicals	23459	23097	7464	7274
25 Other Crop Expense	25702	25147	8198	8053
26 Irrigation Operation Cost			111	111
27 Custom Work Oper Excl.Lab.& Rep.	1227	1227		
28 Custom Work Hired	7302	7056	3806	3745
29 Gas, Diesel & Lubricants	12203	12034	6892	6819
30 Rep.& Upkeep of Lvstk.Equip.	284	279	404	404
31 Repair & Upkeep of Farm Real Estate	1862	1828	1219	1219
32 Rep.& Oper.of Mach,Trac,Truck,Auto	20144	19642	10782	10734
33 Rep.& Upkeep of Irrigation Equip.	2	2		
34 Rep.& Upkeep of Custom Work Equip.	281	281		
35 Total All Repairs	22574	22032	12405	12357
36 Wages of Hired Labor	13812	13694	3839	3752
37 Personal Prop. & Real Estate Taxes	4146	3998	2849	2721
38 General Farm Expense	8067	7972	4527	4499
39 Utilities	2559	2496	2124	2082
40 Farm Capital Lease Expense	3577	48651	750	9891
41 Total Interest Payable This Year	XXX	28596	XXX	13566
42 Interest Actually Paid	XXX	(28596)	XXX	(12773)
43 Total Cash Operating Expense	235691	306100	105045	126385
50 Auto,Truck & Machinery Bought	27029	26691	10325	9944
51 Irrigation Equipment Bought				
52 Custom Work Equipment Bought	47	47		
53 Livestock Equipment Bought	126	126	504	504
54 New R.E.: Buildings & Fences	1006	1006	746	746
55 New R.E.: Land & Land Improve.	10559	10559	4271	4241
57 Total Capital Purchases	38766	38428	15846	15435
58 Total Farm Purchases	274457	344528	120891	141821
60 Decrease in Farm Capital			9675	10386
61 Interest on Farm Capital: 7% Chg	49047	15011	30499	11946
62 Unpaid Family Labor			31	31
63 Board Furnished Hired Labor	21	21	19	19
64 Total Farm Expense	323525	359560	161115	164203
70 Return to Oper.Labor & Mgmt. (6A, L62 -6B, L64)	122100	76381	-10314	-14978
74 Return to Cap.& Fam.Labor (Incl.Spouse-L41)	XXX	91392	XXX	-3001

TABLE 3 - ENTERPRISE STATEMENT WHOLE FARM, 1989

	Average of 326 Farms	High 65 Farms	Low 65 Farms
<b>RETURNS &amp; NET INCREASES</b>			
3 Productive Livestock	\$	\$	\$
5 Net Livestock Lease Income	-7		
6 Dairy Cows Cattle	25798	16164	9500
7 Other Dairy Cattle	6201	3513	2012
8 Beef Breeding Cattle	6525	3419	10529
9 Beef Feeder Cattle	2517	3135	7031
10 Hogs Complete and Mixed	820	76	1856
11 Hogs Finishing Enterprise	999		537
12 Producing Feeder Pigs	564		1154
13 Sheep & Goats and Wool	111		453
14 Sheep & Goats Feeders			
15 Poultry, All Fowl	240		
16 Contract Livestock	2474	9782	
18 Total All Productive Lvstck	46242	36088	33073
19 Value Of Feed Fed To Livestock	21201	17735	17595
20 Return Over Feed From Lvstck	25042	18353	15478
21 Crop, Seed, & Feed	129790	307710	69607
22 Fert. Chemicals, Seed & Other	35045	72553	26594
23 Ret.Over Direct Costs:Crops	94746	235157	43013
24 Crops&Supp.Purch For Resale(Net)	-10292	-30620	-1146
25 Cooperative Patronage Refunds	1565	3052	903
26 Misc. Farm Income/Accts Rec.	4899	11498	2876
27 Custom Work Enterprise	65	28	
28 Government Payment & Set Aside	14346	25975	10531
29 Total Returns & Net Increases	130370	263443	71655
<b>EXPENSES &amp; NET DECREASES</b>			
31 Truck & Auto (Farm Share)	Decrease 6032	Decrease 7593	Decrease 5897
32 Tractors & Crop Machinery	27921	47876	25210
33 Irrigation Equipment	39	22	18
34 Utilities	2396	2559	2124
35 Livestock Equipment	1286	944	733
36 Buildings & Fences	3912	4345	3706
37 Land Improvements & Tile	234	320	182
38 Land	-164	-222	-63
39 Vet & Misc. Lvstk. Expense	3022	2022	2125
40 All Labor Costs-Paid & Unpaid	6782	14624	4160
41 Property Tax	2805	4146	2849
42 General Farm Expense	4809	8067	4527
43 Int. on Fm.Cap.(7% Opport.Chg)	31405	49047	30499
44 Total Exp.& Net Decreases	90479	141343	81967
45 Ret. to W. F. Oper.Lab.& Mgmt.	39891	122100	-10312
46 Number of Farm Operators	1	1	1
47 Full Time Operator Equivalent	1.18	1.31	1.09
48 Ret.to Oper.Lab.Mgmt/Full-Time Op.	33806	93206	-9461

Table 3 summarizes returns and net increases by enterprise. Expenses and net decreases are also summarized by major category. Data from this table forms the basis for the analysis of each individual enterprise.

TABLE 4 - NON FARM INCOME &amp; HOUSEHOLD PERSONAL EXPENSE, 1989

	Average of 167 Farms	High 33 Farms	Low 33 Farms
4 Number of Persons-Family	4	4	4
5 Number of Adult Equiv.-Family	3.1	3.1	3.0
6 Non Farm Income			
7 Outside Investment Income	\$ 996	\$ 1077	\$ 474
8 Other Pers.Inc.& Inc.Tax Ref.	9046	10558	13171
9 Sale of Dwell.,Auto & Truck (Personal Share)	1262	2570	2873
10 Net Cash From Non Farm Business	<u>610</u>	<u>142</u>	<u>1318</u>
11 Total Non-Farm Income	<u>11915</u>	<u>14347</u>	<u>17836</u>
HOUSEHOLD EXPENSE			
14 Church & Charity	1061	1575	751
15 Medical Care & Health Ins.	3169	3887	2781
16 Food & Meals Bought	4792	5365	4332
17 Operating Expense & Supplies	2223	2496	1655
18 Furnishings & Equipment	1271	1937	969
19 Clothing & Clothing Materials	1529	2360	1194
20 Personal Care, Pers.Spending	3356	4999	2727
21 Education	946	1553	785
22 Recreation	846	1653	630
23 Gifts & Special Events	747	858	793
24 Personal Interest	<u>476</u>	<u>1208</u>	<u>349</u>
25 Tot.Cash HH Exp.(L.14,L.24)	<u>20417</u>	<u>27890</u>	<u>16966</u>
26 Truck & Auto Expense:Personal	801	767	904
27 Upkeep on Dwelling:Personal	9	25	
29 Tele.& Elect.Expense: Personal	912	1001	702
30 General Farm Expense: Personal	<u>16</u>	<u>24</u>	<u>20</u>
31 Total Cash Liv.& Oper. Exp.	22156	29708	18592
32 New Truck & Auto Personal	1094	1578	1321
33 New Dwelling, Buildings, Land:Pers.	1802	2693	1542
34 Taxes & Other Deductions	4091	7631	1674
35 Life Insurance	882	1220	756
36 Paid on Personal Debt (Principal)	926	2291	410
37 Savings & Invest.(Exc. Life Ins.)	2897	6050	2364
38 Total Non Farm Cash Expense	33848	51171	26658
39 Net Non Farm Exp.(L38 minus L11)	21933	36824	8822
40 Total Family Living From Farm	333	78	370
41 Tot.Cash & Non-Cash Expenses	<u>34181</u>	<u>51249</u>	<u>27028</u>
SUPPLEMENTARY INFORMATION			
43 Family Living From The Farm			
44 Milk & Cream (Quarts)	74	10	15
45 Beef & Buffalo (Pounds)	238	59	311
46 Pork (Pounds)	<u>20</u>	<u>9</u>	<u>44</u>
51 Total Family Living From Farm	333	78	370
52 Calculated Living Expense			
53 Total Family Income	46703	105739	14835
54 Minus Change in Net Worth	15908	54606	-10346
55 Apparent Family Living	30795	51133	25181
56 Tot Fam. Liv. Per Work Unit: Calculated	66.76	63.38	70.45
57 Net Family Living Per Work Unit	43.26	45.61	23.31

**TABLE 5.1 OPERATORS FINANCIAL POSITION, 1989**

	Average of 326 Farms	
	January 1	December 31
<b>CURRENT ASSETS:</b>		
4 Cash, Check. & Saving Acct. Bal: Pers.	\$ 2800	\$ 3029
5 Cash, Check. & Saving Acct. Bal: Farm	8933	6880
6 Hedging Account Equity	186	138
7 Notes & Accts. Receivables: Personal	188	519
8 Notes & Accts. Receivables: Farm	3007	2922
9 Crops Held For Sale	48319	57498
10 Livestock Feed	9877	10028
11 Supplies/Prepays	9540	10788
12 Feeder Cattle & Mkt. Other Dairy	16364	17942
13 Market Hogs	771	659
14 Feeder Lambs & Goats	6	6
16 Other Livestock	15	21
17 Total Current Assets	<u>100006</u>	<u>110430</u>
<b>INTERMEDIATE ASSETS:</b>		
19 Dairy Cows	10622	11132
20 Other Dairy	2447	2645
21 Beef Breeding Cattle	7789	6150
22 Breeding Hogs	293	326
23 Breeding Sheep/Goats	62	79
25 Auto & Truck: Personal Share	2545	3220
26 Auto & Truck: Farm Share	8881	9785
27 Power, Machinery & Equipment	53112	55708
28 Livestock Equipment	3171	3267
29 Custom Work Equipment	419	390
30 Irrigation Equipment	168	134
31 Stocks & Bonds & Co-op Equity-Farm	19701	20039
32 Stocks & Bonds & Co-op Equity-Pers.	2191	2793
35 Other Household Personal	7729	8036
36 Retirement Accts. & Life Ins.	8959	11074
37 Total Intermediate Assets	<u>128090</u>	<u>134777</u>
<b>LONG TERM ASSETS;</b>		
39 Buildings & Fences	28882	27540
40 Land & Land Improvements	174889	178386
41 Dwelling	30797	31727
42 Real Estate Personal	4279	4559
43 Total Long Term Assets	<u>238847</u>	<u>242212</u>
44 Total Assets	<u>466942</u>	<u>487419</u>
45 Total Personal Assets (Incl. Cash)	79189	84996
46 Total Farm Assets (Incl. Cash)	387753	402423

TABLE 5.2 OPERATORS FINANCIAL POSITION, 1989, (CON'T.)

Average of 326 Farms

	January 1	December 31			
<b>CURRENT LIABILITIES</b>					
4 Accounts Payable:Personal	110	202			
5 Accounts Payable:Farm	1047	1927			
6 Cur.Port. of Intermed. & L-Term Debt	20059	18801			
6A Cur.Port.,Notes & Line of Credit	23438	28226			
7 Delinquent Interest	359	557			
8 Rents & Lease Pmts.Due From Past Yr.	99	83			
9 Total Current Liabilities	<u>45113</u>	<u>49796</u>			
<b>INTERMEDIATE LIABILITIES:</b>					
11 Notes Payable:Personal	9	49			
12 Notes Payable:Farm	3136	3059			
13 Chattel Mortgages:Personal	221	376			
14 Chattel Mortgages:Farm	<u>47517</u>	<u>48190</u>			
16 Total Intermediate Liabilities	<u>50882</u>	<u>51674</u>			
<b>LONG TERM LIABILITIES:*</b>					
18 R.E.Mortgages & Contracts:Pers.	3996	4575			
19 R.E.Mortgages & Contracts:Farm	<u>110010</u>	<u>108523</u>			
21 Total Long-Term Liabilities	<u>114005</u>	<u>113099</u>			
22 Total Liabilities	<u>210000</u>	<u>214568</u>			
23 Equity	256942	272851			
24 Change in Equity		15908			
*****RATIOS*****					
	Formula	Descr.	Beg.Yr.	End Yr.	Percentage
32	Current T5.1 L17 / T5.2 L9 Current Assets / Current Liabilities	Debt	2.22	2.22	45.09
33	Intermediate T5.1 L37/T5.2 L16 Intermed. Assets/Intermed. Liab.	Debt	2.52	2.61	38.34
34	Working(T5.1L17+L37)/(T5.2L9+L16) (C.Assets+I.Assets)/(C.Liab.+I.Liab)	Debt	2.38	2.42	41.38
35	Fixed T.51 L43/T5.2 L21 Long Term Assts/Long Term Liab.	Debt	2.10	2.14	46.69
36	Net Capital T5.1 L44/T5.2 L22 Total Assets/Total Liabilities	Debt	2.22	2.27	44.02
37	Equity/Asset T5.2 L23/T5.1 L44 Total Equity/Total Assets	Eqty	0.55	0.56	55.98
38	Debt/Equity T5.2 L22/T5.2L23 Total Liabilities/Total Equity	Debt	0.82	0.79	78.64
39	Current Debt T5.2 L9/T5.2 L22 Current Liabilities/Total Liab.	Curr	0.21	0.23	23.21
51	Return to Capital,Family Labor & Mgmt.			34788	
52	Total Income From Non-Farm Source			11915	
53	Total Family Income			46703	
54	Total Family Cash & Non-Cash Exp.			34181	
55	Total Money Borrowed			84386	
56	Total Paid on Debt			80591	

\* Does Not Include Current Portion of Principal Due in Next 12 Months.

TABLE 5.1 OPERATORS FINANCIAL POSITION, 1989

	High 65 Farms		Low 65 Farms		
	Jan. 1	Dec. 31	Jan. 1	Dec. 31	
<b>CURRENT ASSETS:</b>					
4	Cash, Check. & Sav. Acct. Bal: Pers.	\$ 4134	\$ 3859	\$ 825	\$ 1095
5	Cash, Check. & Sav. Acct. Bal: Farm	12251	7220	6636	6415
6	Hedging Account Equity	376	247		126
7	Notes & Accts. Rec.: Personal	303	281	10	729
8	Notes & Accts. Rec.: Farm	8286	9456	754	589
9	Crops Held For Sale	103258	148276	41176	34639
10	Livestock Feed	8537	6687	9212	8134
11	Supplies/Prepays	21833	26737	5618	5090
12	Feeder Cattle & Mkt. Other Dairy	21964	27677	20581	18958
13	Market Hogs	16		1091	891
14	Feeder Lambs & Goats				
17	<b>Total Current Assets</b>	<b>180959</b>	<b>230439</b>	<b>85916</b>	<b>76688</b>
<b>INTERMEDIATE ASSETS:</b>					
19	Dairy Cows	5376	5488	4098	4865
20	Other Dairy	2100	2115	498	602
21	Beef Breeding Cattle	3413	3429	14904	13323
22	Breeding Hogs	19		727	833
23	Breeding Sheep/Goats			274	274
25	Auto & Truck: Personal Share	4083	4510	1592	2523
26	Auto & Truck: Farm Share	14457	16547	10016	9541
27	Power, Machinery & Equipment	84183	91955	52661	50908
28	Livestock Equipment	1745	1568	1699	1945
29	Custom Work Equipment	1330	886		
30	Irrigation Equipment	156	136	164	146
31	Stocks, Bonds & Co-op Equity-Farm	47665	48106	11904	12049
32	Stocks, Bonds & Co-op Equity-Pers.	5174	6673	242	244
35	Other Household Personal	9829	10218	8255	8524
36	Retirement Accts. & Life Ins.	14298	18866	7291	8850
37	<b>Total Intermediate Assets</b>	<b>193828</b>	<b>210498</b>	<b>114325</b>	<b>114626</b>
<b>LONG TERM ASSETS:</b>					
39	Buildings & Fences	32220	30902	29213	27393
40	Land & Land Improvements	279234	285302	176954	180989
41	Dwelling	46451	47240	32162	33744
42	Real Estate Personal	6448	7576	3648	3688
43	<b>Total Long Term Assets</b>	<b>364354</b>	<b>371021</b>	<b>241978</b>	<b>2458147</b>
44	<b>Total Assets</b>	<b>739141</b>	<b>811957</b>	<b>442219</b>	<b>437128</b>
45	<b>Total Pers. Assets (Incl. Cash)</b>	<b>138387</b>	<b>147331</b>	<b>65930</b>	<b>71446</b>
46	<b>Total Farm Assets (Incl. Cash)</b>	<b>600754</b>	<b>664627</b>	<b>376289</b>	<b>365682</b>

TABLE 5.2 OPERATORS FINANCIAL POSITION, 1989, (CON'T.)

	High 65 Farms		Low 65 Farms			
	Jan. 1	Dec. 31	Jan. 1	Dec. 31		
<b>CURRENT LIABILITIES</b>						
4 Accounts Payable:Personal	\$ 237	\$ 265	\$ 168	\$ 581		
5 Accounts Payable:Farm	1669	5145	1209	1303		
6 Cur.Port.-Intermed.& L-Term Debt	25507	26909	18893	16999		
6A Current Portion: Notes & Line of Credit	49065	64391	21559	27550		
7 Delinquent Interest			1154	1947		
8 Rent & Lease Pmts. Due From Past Year	75	34	92			
9 Total Current Liabilities	76552	96744	43074	48379		
<b>INTERMEDIATE LIABILITIES:</b>						
11 Notes Payable:Personal		227	16			
12 Notes Payable:Farm	7379	6714	3763	1660		
13 Chattel Mortgages:Personal	323	347	466	862		
14 Chattel Mortgages:Farm	69345	69726	38532	39802		
16 Total Intermediate Liabilities	77046	77014	42777	42323		
<b>LONG TERM LIABILITIES:</b>						
18 R.E.Mortgages & Contracts:Pers.	10445	11328	1655	2765		
19 R.E.Mortgages & Contracts:Farm	175607	172775	80470	79763		
21 Total Long Term Liabilities	186052	184104	82125	82529		
22 Total Liabilities	339651	357862	167977	173231		
23 Equity	399490	454095	274242	263897		
24 Change in Equity		54606		-10346		
*****RATIOS*****						
	<u>Formula</u>	<u>Descr.</u>	<u>Beg. Yr.</u>		<u>End Yr.</u>	
			<u>Jan. 1</u>	<u>Dec. 31</u>	<u>Jan. 1</u>	<u>Dec. 31</u>
32	Current T5.1 L17 / T5.2 L9 Current Assets/Current Liab.	Debt	2.36	2.38	1.99	1.59
33	Intermediate T5.1 L37/T5.2 L16 Intermed. Assets/Intermed. Liab.	Debt	2.52	2.73	2.67	2.71
34	Working(T5.1L17+L37)/(T5.2L9+L16) (C.Assets+I.Assets)/(C.Liab.+I.Liab)	Debt	2.44	2.54	2.33	2.11
35	Fixed T5.1 L43/T5.2 L21 Long Term Assts/Long Term Liab.	Debt	1.96	2.02	2.95	2.98
36	Net Capital T5.1 L44/T5.2 L22 Total Assets/Total Liabilities	Debt	2.18	2.27	2.63	2.52
37	Equity/Asset T5.2 L23/T5.1 L44 Total Equity/Total Assets	Eqty	0.54	0.56	0.62	0.60
38	Debt/Equity T5.2 L22/T5.2L23 Total Liabilities/Total Equity	Debt	0.85	0.79	0.61	0.66
39	Current Debt T5.2 L9/T5.2 L22 Current Liabilities/Total Liab.	Curr	0.23	0.27	0.26	0.28
51	Return to Capital, Family Labor & Mgmt.			91392		-3001
52	Total Income From Non-Farm Source			14347		17836
53	Total Family Income			105739		14835
54	Total Family Cash & Non-Cash Exp.			51249		27028
55	Total Money Borrowed			174828		74138
56	Total Paid on Debt			159065		69702

## EXPLANATION OF TABLE 5.2 RATIO'S

- LINE 32** THE CURRENT RATIO This is a measure of liquidity. It indicates the shortrun ability of the business to service debt. It demonstrates the adequacy of current assets, if liquidated, to pay off annual debts as they come due. Usually current assets have a life of 1 year or less. It is calculated by dividing current assets by current liabilities.
- LINE 33** INTERMEDIATE RATIO Intermediate assets and liabilities are those where the finances used are converted into product in a period usually from one to ten years. Examples may be breeding livestock, machinery and equipment. The increase in the ratio over a period of time is a favorable sign. It is calculated by dividing intermediate assets by intermediate liabilities.
- LINE 34** WORKING RATIO The desired trend is for this ratio to increase over time. It is also desirable for this ratio to be larger than the fixed ratio and net capital ratio. The farm business needs to have sufficient liquid assets and retain management flexibility to absorb price decreases and other factors negatively affecting current and intermediate asset values. This ratio is calculated by dividing current assets and intermediate assets by current liabilities and intermediate liabilities.
- LINE 35** FIXED RATIO This ratio should be in excess of one but it is also important for this ratio to be increasing over time. This ratio should not be increased at the expense of a safe working ratio. It is calculated by dividing long term assets by long term liabilities.
- LINE 36** NET CAPITAL RATIO Net capital ratio is one of three measures of solvency; how much value remains if all assets are converted to cash at inventoried value and the total debt is paid. This ratio reflects the risk-bearing capacity of the farm business by showing the percentage that assets could decline and still cover liabilities. The higher the ratio number, the better the risk. A ratio of less than 1.0 = insolvent, a ratio of 1.0 = a net worth of zero. A ratio of 2.0 is considered a safe ratio. This would allow a 50% reduction in asset value or 100% increase in liabilities before becoming insolvent. This ratio is calculated by dividing total assets by total liabilities.
- LINE 37** EQUITY/ASSET This ratio shows the portion of total assets paid for the owned by the operator clear of financial claims. A ratio of .80 shows that the operator owns 80% of all total assets and a ratio of .44 shows he owns only 44% of all total assets. Therefore, this ratio should be increasing over time. It is calculated by dividing total equity by total assets.
- LINE 38** DEBT/EQUITY This is another overall measure of solvency. It shows the relationship between debt and equity. A ratio of 1.00 indicates that equity and debt are equal. That would be equivalent to a net capital ratio of 2.00 to 1.00 and an asset equity/asset ratio of .50 to 1.00. All measures of solvency use the same three measures of financial position. They all express relationships between assets, liabilities and net worth (or equity). Lenders prefer a debt-equity ratio of less than 1.0. It is calculated by dividing total liabilities by total equity.
- LINE 39** CURRENT DEBT The lower the current debt structure ratio is, the more liquid the business. A ratio of .10 means only one dollar (\$1.00) out of every \$10. debt must be paid within the next year. A ratio of .50 means one-half of the total debt must be paid in the next year. This ratio is calculated by dividing current liabilities by total liabilities.

## MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

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

1. Ret. to Lab. & Mgmt. - A measure of the relative financial return for the operator's labor, taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. This is based on the whole farm business and is found also in Table 2 and Table 3.
2. Crop Yield Index - A measure of the crop yield level for all crops produced expressed as a percentage of the average; the average being 100%.
3. Return Over All Listed Cost Per Tillable Acre (Excl. Pasture) - This is the net return per tillable crop acre after all variable and allocated costs have been paid.
4. Gross Return per Acre - An additional measure of crop selection based on total production times an average price for the crops, plus other crop income.
5. Return per \$100 Feed Fed to Productive Livestock - Measures the general level of efficiency for all livestock. It is expressed as a percentage of the average and combines the individual livestock indexes into one figure.
6. Livestock Units per 100 Acres - A measure of livestock density or population. Unit values are assigned to the various classes of livestock. Unit values are found in Table 7.
7. Size of Business - Work Units - A measure of the total work load. A Work Unit represents the average accomplishment of a worker in one 10 hour day. Work Unit values are assigned to each class of livestock, each crop, and to other tasks utilizing farm labor.
8. Work Units per Worker - Measures labor efficiency. It is the total work units divided by the number of workers on the farm, including the operator, hired labor and family labor.
9. Power, Machinery, Equipment and Building Expense per Work Unit - A measure of expense control. It is the total of items 31 through 36 in Table 3, divided by the number of Work Units.

Other items listed on Table 8 are related to the above measures and serve to further define and describe the efficiency level of the farm business. Note should be taken that items listed in Table 8 are to be considered in the light of the individual farm and farm operator. Although in general, an above average level for each factor listed would indicate an above average earnings, this may not be true when individual farms are considered. The inter-relationship of factors varies from farm to farm.

TABLE 8 - MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY, 1989

Items	Average of 326 Farms	65 High Farms	65 Low Farms
3 Return to Oper. Labor & Management, Whole Farm T2	39890	122100	-10314
4 Crop Yield Index	100.0	125.9	92.1
5 Return Over All Listed Cost Per Tillable Acre (Excl. Pasture)	35.95	60.59	2.61
6 Gross Return Per Tillable Acre (Excl. Pasture)	187.37	207.82	123.42
7 Index Return/\$100 Feed Fed	100.0	99.7	92.1
8 Livestock Units/100 Acres*	5.66	1.67	7.38
9 Size of Business in Tot. Work Units	507.0	807.4	378.4
10 Work Units/Worker	312.96	354.12	284.51
11 Power, Mach., Equip, Bldg. Exp/Work Unit	82.02	78.45	99.60
30 Number of Animal Units	49.72	26.18	55.20
31 Work Units:			
32 Crops	357.8	724.6	268.8
33 Productive Livestock	146.8	78.9	107.6
34 Other Productive Units	2.4	3.8	2.0
35 Expenses/Work Unit:			
36 Tractor & Crop Machinery	55.15	59.32	66.67
37 Auto & Truck: Farm Share	11.90	9.40	15.58
38 Electricity: Farm Share	3.73	2.49	4.28
39 Livestock Equipment	2.54	1.17	1.94
40 Building, Fence & Tiling	7.72	5.38	9.79
41 Other Expense Per Total Work Units			
42 General Farm, Tele. & Other Util.	10.48	10.67	13.30
43 Wages For Hired Labor	12.37	17.11	10.15
44 Tractor, Crop Mach, Exp./Crop Acre**	32.46	31.07	35.34
45 Fm. Pow. & Mach. Cost Alloc. to Lvstk.	2433.72	809.51	2363.58
46 Fm. Pow. & Mach. Cost Alloc. to Crops	27501.28	50751.49	26780.42
47 Bldg, Fence, Tile Cost Alloc. To Lvstk.	998.94	300.30	1190.69
48 Bldg, Fence, Tile Cost Alloc. to Crops	2790.67	4481.50	2819.73

49 \* Acres Include All Tillable Land, Non-Tillable Hay & Pasture.  
 50 \*\*Acres Include All Tillable Land Plus Acres In Non-Tillable Hay.

\*\*\*\*\*SUPPLEMENTARY OPERATOR'S MANAGEMENT INFORMATION\*\*\*\*\*

52 Oper. Return to Capital & Fam. Labor	34788	91392	-3001
53 Oper. Depreciation: Farm Power & Crop Mach.	10200	15691	10963
54 Oper. Depreciation: Irrigation Equipment	34	20	18
55 Oper. Depreciation: Custom Work Equip.	123	491	
56 Oper. Depreciation: Livestock Equipment	520	303	258
57 Oper. Depreciation: Buildings, Fences	2629	2324	2566
58 Oper. Depreciation: Land Improv. & Tile	234	320	182
59 Total Operator's Depreciation	13740	19149	13987

TABLES 9 & 10 - INDIVIDUAL CROP ENTERPRISE ANALYSIS

The individual crop analysis tables show acres, yield, value per unit, (usually the value per unit at harvest time) and gross return per acre for each crop raised in the area the last crop year.

All crop enterprises produced on a farm are listed separately. This allows the operator to compare the return over listed costs for each crop produced. The total crop return, minus the variable and allocated costs, equals the return over listed costs, which is line 44.

Costs such as fertilizer, chemicals, seed, crop drying expense, special hired labor, and custom work are costs that are assigned to each individual crop in the account book or computer record system. These costs are shown in table 10 under variable costs.

Other costs, called allocated costs, are calculated from the actual costs incurred. They are allocated by formula to each enterprise. The power and crop machinery expense is divided into ownership and operation costs for each crop. All interest expense, wages paid, utilities and general farm expense have been allocated to each crop.

Land cost on owned land is based on actual real estate interest and taxes paid divided between land and buildings.

Land cost for rented land is based on the actual cash or crop share rent paid for use of the land.

TABLE 9 - SUPPLEMENTARY CROP MANAGEMENT INFORMATION

	Average 326 Farms	High 65 Farms	Low 65 Farms
PERCENT LAND TILLABLE	88.6	93.6	83.4
FERTILIZER COST PER ACRE	16.58	17.56	16.17
CROP CHEMICALS PER ACRE	13.17	16.18	10.86
SEED & OTHER COST PER ACRE	18.92	23.68	14.23
FUEL & LUBR. USED PER ACRE	10.25	8.99	11.10
REP. & MAINT. COST PER ACRE	16.76	14.80	18.09
*TOTAL ACRES CROPPED	738.21	1376.54	614.96

\*TILLABLE ACRES + RECROPPED ACRES, MINUS TILLABLE PASTURE, FALLOW AND IDLE ACRES.

TABLE 10 - CROP DATA FOR BARLEY 1989

Items	Average of 398 Farms Per Acre	79 High Farms Per Acre	79 Low Farms Per Acre
3 Acres	97.7	99.5	75.1
4 Yield	58.5	79.3	32.5
5 Value per Unit	2.71	2.92	2.59
6 Crop Product Return	158.43	231.39	84.19
7 Other Crop Income	4.81	1.52	18.00
8 Total Crop Return	163.24	232.91	102.19
<b>VARIABLE COSTS</b>			
10 Fertilizer	17.27	18.11	15.67
11 Chemicals	11.43	13.30	9.25
12 Seed	8.72	9.38	8.66
13 Crop Drying	0.03	0.09	0.04
14 Crop Insurance	2.04	1.90	1.88
15 Other Expenses	1.77	3.27	1.74
16 Special Hired Labor	0.25	0.45	0.23
17 Custom Work Hired	1.94	3.64	2.48
18 Irrigation Operation			
19 Assigned Interest	0.01		
20 Total Variable Costs	43.46	50.13	39.95
21 Return Over Variable Costs	119.78	182.78	62.24
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>			
31 Farm Power & Machinery-Ownership	9.13	11.30	8.31
32 Farm Power & Machinery-Operation	17.45	17.85	17.23
33 Building & Fence Cost	2.24	2.28	1.81
34 Irrigation Ownership Cost			
37 Land Cost	34.08	32.86	28.59
38 Utilities & Gen. Farm Expense	4.52	5.79	3.78
39 Hired Labor	2.91	2.50	2.40
41 Actual Non-R.E.Int. Allocated	5.17	3.96	5.13
42 Total Allocated Costs	75.50	76.54	67.25
43 Total Listed Costs	118.96	126.67	107.19
44 Return Over Listed Costs	44.28	106.24	-5.00
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>			
50 Land Opportunity Own.Cost	35.87	35.34	35.75
51 Total Cost Adj.to a Min 7% Int.	120.76	131.71	113.50
52 Work Units Assigned/Acre	0.30	0.30	0.30
53 Power Cost Allocation Factor	1.00	1.00	1.00
54 Total Listed Cost/Unit of Prod.	2.03	1.60	3.30
55 Total Adjusted Cost/Unit of Prod.	2.07	1.66	3.50
56 Cash Variable Cost/Unit of Prod.	1.26	1.01	2.11
57 Return Over Listed Costs Per Unit	0.76	1.34	-0.15
58 Breakeven Yield/Unit of Prod.	43.9	43.4	41.4

TABLE 10 - CROP DATA FOR DURUM, 1989

Items	Average of 9 Farms Per Acre
3 Acres	183.0
4 Yield	41.9
5 Value per Unit	3.67
6 Crop Product Return	153.94
7 Other Crop Income	<u>7.99</u>
8 Total Crop Return	161.93
<b>VARIABLE COSTS</b>	
10 Fertilizer	22.69
11 Chemicals	12.43
12 Seed	12.99
13 Crop Drying	0.15
14 Crop Insurance	4.84
15 Other Expenses	0.48
16 Special Hired Labor	0.32
17 Custom Work Hired	2.88
18 Irrigation Operation	
19 Assigned Interest	
20 Total Variable Costs	<u>56.77</u>
21 Return Over Variable Costs	105.16
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	10.61
32 Farm Power & Machinery-Operation	16.46
33 Building & Fence Cost	0.87
34 Irrigation Ownership Cost	
37 Land Cost	49.03
38 Utilities & Gen. Farm Expense	5.67
39 Hired Labor	1.80
41 Actual Non-R.E.Int. Allocated	<u>3.55</u>
42 Total Allocated Costs	87.99
43 Total Listed Costs	<u>144.77</u>
44 Return Over Listed Costs	17.16
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own. Cost	62.26
51 Total Cost Adj. to a Min 7% Int.	159.14
52 Work Units Assigned/Acre	0.30
53 Power Cost Allocation Factor	1.00
54 Total Listed Cost/Unit of Prod.	3.46
55 Total Adjusted Cost/Unit of Prod.	3.79
56 Cash Variable Cost/Unit of Prod.	2.01
57 Return Over Listed Costs Per Unit	0.41
58 Breakeven Yield/Unit of Prod.	39.4

TABLE 10 - CROP DATA FOR FLAX 1989

Items	Average of 15 FARMS Per Acre
3 Acres	40.3
4 Yield	11.6
5 Value per Unit	7.08
6 Crop Product Return	82.21
7 Other Crop Income	<u>6.08</u>
8 Total Crop Return	88.29
<b>VARIABLE COSTS</b>	
10 Fertilizer	8.29
11 Chemicals	4.84
12 Seed	8.16
13 Crop Drying	
14 Crop Insurance	
15 Other Expenses	1.41
16 Special Hired Labor	0.12
17 Custom Work Hired	0.74
18 Irrigation Operation	
19 Assigned Interest	
20 Total Variable Costs	<u>23.57</u>
21 Return Over Variable Costs	64.72
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	8.34
32 Farm Power & Machinery-Operation	17.52
33 Building & Fence Cost	2.23
34 Irrigation Ownership Cost	
37 Land Cost	9.46
38 Utilities & Gen. Farm Expense	2.83
39 Hired Labor	1.56
41 Actual Non-R.E.Int. Allocated	<u>2.51</u>
42 Total Allocated Costs	44.45
43 Total Listed Costs	<u>68.01</u>
44 Return Over Listed Costs	20.28
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own. Cost	23.05
51 Total Cost Adj. to a Min 7% Int.	83.55
52 Work Units Assigned/Acre	0.30
53 Power Cost Allocation Factor	1.00
54 Total Listed Cost/Unit of Prod.	5.86
55 Total Adjusted Cost/Unit of Prod.	7.19
56 Cash Variable Cost/Unit of Prod.	4.14
57 Return Over Listed Costs Per Unit	1.75
58 Breakeven Yield/Unit of Prod.	9.6

TABLE 10 - CROP DATA FOR OATS 1989

Items	Average of 167 Farms Per Acre	33 High Farms Per Acre	33 Low Farms Per Acre
3 Acres	55.1	65.0	47.1
4 Yield	58.1	86.6	21.4
5 Value per Unit	1.41	1.41	1.40
6 Crop Product Return	81.71	122.51	29.89
7 Other Crop Income	5.59	4.77	15.65
8 Total Crop Return	87.30	127.28	45.54
<b>VARIABLE COSTS</b>			
10 Fertilizer	13.96	15.58	10.81
11 Chemicals	3.27	3.09	1.97
12 Seed	9.75	9.95	10.57
13 Crop Drying	0.02		
14 Crop Insurance	0.91	0.57	0.96
15 Other Expenses	1.52	1.20	1.08
16 Special Hired Labor	0.31	0.48	0.30
17 Custom Work Hired	1.07	1.98	0.74
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	30.80	32.86	26.43
21 Return Over Variable Costs	56.50	94.42	19.11
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>			
31 Farm Power & Machinery-Ownership	8.86	8.66	9.60
32 Farm Power & Machinery-Operation	20.62	20.51	20.72
33 Building & Fence Cost	2.40	2.43	1.89
34 Irrigation Ownership Cost			
37 Land Cost	19.49	20.88	12.71
38 Utilities & Gen. Farm Expense	4.19	4.42	4.39
39 Hired Labor	2.14	1.54	2.23
41 Actual Non-R.E.Int. Allocated	5.70	6.55	3.50
42 Total Allocated Costs	63.40	64.99	55.04
43 Total Listed Costs	94.19	97.85	81.49
44 Return Over Listed Costs	-6.89	29.43	-35.95
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>			
50 Land Opportunity Own. Cost	23.02	27.01	17.35
51 Total Cost Adj. to a Min 7% Int.	96.90	102.26	86.94
52 Work Units Assigned/Acre	0.30	0.30	0.30
53 Power Cost Allocation Factor	0.99	0.97	1.00
54 Total Listed Cost/Unit of Prod.	1.62	1.13	3.81
55 Total Adjusted Cost/Unit of Prod.	1.67	1.18	4.07
56 Cash Variable Cost/Unit of Prod.	1.09	0.76	2.68
57 Return Over Listed Costs Per Unit	-0.12	0.34	-1.68
58 Breakeven Yield/Unit of Prod.	66.8	69.4	58.2

TABLE 10 - CROP DATA FOR RYE 1989

Items	Average of 10 Farms Per Acre
3 Acres	58.8
4 Yield	35.5
5 Value per Unit	1.81
6 Crop Product Return	64.42
7 Other Crop Income	64.42
8 Total Crop Return	<u>64.42</u>
<b>VARIABLE COSTS</b>	
10 Fertilizer	7.40
11 Chemicals	0.17
12 Seed	3.13
13 Crop Drying	
14 Crop Insurance	
15 Other Expenses	0.75
16 Special Hired Labor	
17 Custom Work Hired	0.20
18 Irrigation Operation	
19 Assigned Interest	
20 Total Variable Costs	<u>11.65</u>
21 Return Over Variable Costs	52.77
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	10.77
32 Farm Power & Machinery-Operation	13.79
33 Building & Fence Cost	1.82
34 Irrigation Ownership Cost	
37 Land Cost	22.55
38 Utilities & Gen. Farm Expense	3.74
39 Hired Labor	0.12
41 Actual Non-R.E.Int. Allocated	<u>5.00</u>
42 Total Allocated Costs	57.79
43 Total Listed Costs	<u>69.44</u>
44 Return Over Listed Costs	-5.02
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own.Cost	31.74
51 Total Cost Adj.to a Min 7% Int.	79.80
52 Work Units Assigned/Acre	0.30
53 Power Cost Allocation Factor	1.00
54 Total Listed Cost/Unit of Prod.	1.96
55 Total Adjusted Cost/Unit of Prod.	2.25
56 Cash Variable Cost/Unit of Prod.	0.97
57 Return Over Listed Costs Per Unit	-0.14
58 Breakeven Yield/Unit of Prod.	38.4

TABLE 10 - CROP DATA FOR SPRING WHEAT 1989

Items	Average of 410 Farms Per Acre	82 High Farms Per Acre	82 Low Farms Per Acre
3 Acres	140.7	103.9	107.2
4 Yield	41.5	57.3	25.6
5 Value per Unit	3.67	3.67	3.66
6 Crop Product Return	152.54	210.09	93.76
7 Other Crop Income	12.85	12.33	16.42
8 Total Crop Return	165.39	222.42	110.18
VARIABLE COSTS			
10 Fertilizer	10.03	19.15	17.96
11 Chemicals	12.99	16.35	9.94
12 Seed	8.93	8.68	8.94
13 Crop Drying	0.08	0.10	0.02
14 Crop Insurance	2.64	1.40	2.59
15 Other Expenses	2.06	3.54	1.54
16 Special Hired Labor	0.23	0.24	0.39
17 Custom Work Hired	2.17	3.96	1.72
18 Irrigation Operation			
19 Assigned Interest	0.01		
20 Total Variable Costs	48.14	53.42	43.10
21 Return Over Variable Costs	117.25	169.00	67.08
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery-Ownership	9.04	10.46	8.47
32 Farm Power & Machinery-Operation	16.94	17.86	16.55
33 Building & Fence Cost	2.21	2.46	2.12
34 Irrigation Ownership Cost			
37 Land Cost	33.92	34.95	27.15
38 Utilities & Gen. Farm Expense	4.56	5.57	4.35
39 Hired Labor	2.86	2.44	2.10
41 Actual Non-R.E.Int. Allocated	5.67	6.20	7.34
42 Total Allocated Costs	75.20	79.94	68.08
43 Total Listed Costs	123.35	133.38	111.18
44 Return Over Listed Costs	42.04	89.04	-1.00
SUPPLEMENTARY MANAGEMENT INFORMATION			
50 Land Opportunity Own.Cost	35.13	29.86	37.49
51 Total Cost Adj.to a Min 7% Int.	123.99	133.23	119.09
52 Work Units Assigned/Acre	0.30	0.30	0.30
53 Power Cost Allocation Factor	1.00	1.00	1.00
54 Total Listed Cost/Unit of Prod.	2.97	2.33	4.34
55 Total Adjusted Cost/Unit of Prod.	2.99	2.33	4.65
56 Cash Variable Cost/Unit of Prod.	1.88	1.49	2.87
57 Return Over Listed Costs Per Unit	1.01	1.55	-0.04
58 Breakeven Yield/Unit of Prod.	33.6	36.3	30.4

TABLE 10 - CROP DATA FOR WINTER WHEAT 1989

Items	Average of 81 Farms Per Acre	16 High Farms Per Acre	16 Low Farms Per Acre
3 Acres	61.7	88.9	60.5
4 Yield	38.8	50.1	22.5
5 Value per Unit	3.60	3.62	3.56
6 Crop Product Return	139.66	181.57	80.13
7 Other Crop Income	9.72	8.75	9.65
8 Total Crop Return	149.38	190.32	89.78
<b>VARIABLE COSTS</b>			
10 Fertilizer	12.14	11.92	9.59
11 Chemicals	2.69	2.28	1.49
12 Seed	7.20	6.46	7.09
13 Crop Drying			
14 Crop Insurance	2.04	2.54	3.83
15 Other Expenses	1.94	2.20	0.17
16 Special Hired Labor			
17 Custom Work Hired	1.90	1.47	1.27
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	27.91	26.88	23.44
21 Return Over Variable Costs	121.47	163.44	66.34
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>			
31 Farm Power & Machinery-Ownership	9.90	11.75	7.92
32 Farm Power & Machinery-Operation	20.00	22.67	18.15
33 Building & Fence Cost	2.35	2.88	0.33
34 Irrigation Ownership Cost			
37 Land Cost	24.38	27.15	25.43
38 Utilities & Gen. Farm Expense	4.54	5.70	4.45
39 Hired Labor	2.25	2.15	1.97
41 Actual Non-R.E.Int. Allocated	4.93	6.70	4.98
42 Total Allocated Costs	68.35	79.00	63.23
43 Total Listed Costs	96.26	105.89	86.66
44 Return Over Listed Costs	53.12	84.43	3.12
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>			
50 Land Opportunity Own. Cost	28.85	30.44	37.45
51 Total Cost Adj. to a Min 7% Int.	101.75	109.84	99.92
52 Work Units Assigned/Acre	0.30	0.30	0.30
53 Power Cost Allocation Factor	1.00	1.00	1.00
54 Total Listed Cost/Unit of Prod.	2.48	2.11	3.85
55 Total Adjusted Cost/Unit of Prod.	2.63	2.19	4.44
56 Cash Variable Cost/Unit of Prod.	1.54	1.28	2.36
57 Return Over Listed Costs Per Unit	1.37	1.69	0.14
58 Breakeven Yield/Unit of Prod.	26.7	29.3	24.3

TABLE 10 - CROP DATA FOR CORN GRAIN 1989

Items	Average of 215 Farms Per Acre	43 High Farms Per Acre	43 Low Farms Per Acre
3 Acres	64.0	61.4	65.2
4 Yield	57.7	94.7	23.5
5 Value per Unit	2.18	2.18	2.19
6 Crop Product Return	125.63	206.37	51.58
7 Other Crop Income	36.08	28.45	50.71
8 Total Crop Return	161.71	234.82	102.29
VARIABLE COSTS			
10 Fertilizer	23.95	29.28	19.10
11 Chemicals	14.28	13.52	12.01
12 Seed	18.75	18.22	18.87
13 Crop Drying	2.55	4.79	0.49
14 Crop Insurance	2.09	2.67	2.81
15 Other Expenses	1.27	1.37	2.96
16 Special Hired Labor	0.20	0.41	0.18
17 Custom Work Hired	2.25	1.71	2.64
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	65.34	71.97	59.05
21 Return Over Variable Costs	96.37	162.85	43.24
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery-Ownership	19.33	15.41	15.55
32 Farm Power & Machinery-Operation	32.20	34.01	26.95
33 Building & Fence Cost	5.27	4.77	3.31
34 Irrigation Ownership Cost			
37 Land Cost	36.57	45.89	32.49
38 Utilities & Gen. Farm Expense	8.45	10.34	7.19
39 Hired Labor	4.06	7.12	3.76
41 Actual Non-R.E.Int. Allocated	14.58	16.11	12.52
42 Total Allocated Costs	120.46	133.65	101.77
43 Total Listed Costs	185.80	205.62	160.81
44 Return Over Listed Costs	-24.09	29.20	-58.52
SUPPLEMENTARY MANAGEMENT INFORMATION			
50 Land Opportunity Own. Cost	38.79	48.43	35.90
51 Total Cost Adj. to a Min 7% Int.	182.77	198.53	160.17
52 Work Units Assigned/Acre	0.55	0.55	0.55
53 Power Cost Allocation Factor	0.99	1.00	1.00
54 Total Listed Cost/Unit of Prod.	3.22	2.17	6.84
55 Total Adjusted Cost/Unit of Prod.	3.17	2.10	6.81
56 Cash Variable Cost/Unit of Prod.	2.16	1.47	4.66
57 Return Over Listed Costs Per Unit	-0.42	0.31	-2.49
58 Breakeven Yield/Unit of Prod.	85.2	94.3	73.4

TABLE 10 - CROP DATA FOR CORN GRAIN, IRRIGATED, 1989

ITEM	Average of 14 Farms Per Acre
3 TOTAL ACRES	106.0
4 Yield Per Acre	109.0
5 Value per Unit	2.18
6 Crop Product Return	237.46
7 Other Crop Income	47.95
8 Total Crop Return	285.41
<b>VARIABLE COSTS</b>	
10 Fertilizer	34.84
11 Chemicals	10.87
12 Seed	20.66
13 Crop Drying	4.20
14 Crop Insurance	2.65
15 Other Expenses	0.04
16 Special Hired Labor	0.36
17 Custom Work Hired	0.08
18 Irrigation Operation	8.07
19 Assigned Interest	
20 Total Variable Costs	81.75
21 Return Over Variable Costs	203.66
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	22.41
32 Farm Power & Machinery-Operation	39.66
33 Building & Fence Cost	6.59
34 Irrigation Ownership Cost	13.35
37 Land Cost	28.89
38 Utilities & Gen. Farm Expense	14.78
39 Hired Labor	7.28
41 Actual Non-R.E.Int. Allocated	19.13
42 Total Allocated Costs	152.09
43 Total Listed Costs	233.85
44 Return Over Listed Costs	51.56
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own. Cost	41.92
51 Total Cost Adj. to a Min 7% Int.	239.35
52 Work Units Assigned/Acre	0.65
53 Power Cost Allocation Factor	1.00
54 Total Listed Cost/Unit of Prod.	2.15
55 Total Adjusted Cost/Unit of Prod.	2.20
56 Cash Variable Cost/Unit of Prod.	1.49
57 Return Over Listed Costs Per Unit	0.47
58 Breakeven Yield/Unit of Prod.	107.3
59 Total Acre Inches Water Applied	8.86
60 Cost of Irrg Excluding Interest	21.42

TABLE 10 - CROP DATA FOR POTATOES, TABLE 1989

Items	Average of 5 Farms Per Acre
3 Acres	147.8
4 Yield Cwt	127.1
5 Value per Unit	4.70
6 Crop Product Return	597.90
7 Other Crop Income	24.10
8 Total Crop Return	622.00
<b>VARIABLE COSTS</b>	
10 Fertilizer	61.29
11 Chemicals	40.81
12 Seed	164.59
13 Crop Drying	
14 Crop Insurance	15.60
15 Other Expenses	9.25
16 Special Hired Labor	13.64
17 Custom Work Hired	7.04
18 Irrigation Operation	
19 Assigned Interest	
20 Total Variable Costs	312.22
21 Return Over Variable Costs	309.78
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	98.09
32 Farm Power & Machinery-Operation	103.81
33 Building & Fence Cost	10.70
34 Irrigation Ownership Cost	
37 Land Cost	57.26
38 Utilities & Gen. Farm Expense	16.14
39 Hired Labor	12.54
41 Actual Non-R.E.Int. Allocated	18.64
42 Total Allocated Costs	317.18
43 Total Listed Costs	629.40
44 Return Over Listed Costs	-7.40
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own.Cost	
51 Total Cost Adj.to a Min 7% Int.	660.36
52 Work Units Assigned/Acre	3.0
53 Power Cost Allocation Factor	.9
54 Total Listed Cost/Unit of Prod.	4.95
55 Total Adjusted Cost/Unit of Prod.	5.20
56 Cash Variable Cost/Unit of Prod.	3.65
57 Return Over Listed Costs Per Unit	-.25
58 Breakeven Yield/Unit of Prod.	133.9

TABLE 10 - CROP DATA FOR POTATOES, SEED 1989

Items	Average of 19 Farms Per Acre
3 Acres	21.5
4 Yield Cwt	107.7
5 Value per Unit	10.99
6 Crop Product Return	1184.25
7 Other Crop Income	2.84
8 Total Crop Return	<u>1187.09</u>
<b>VARIABLE COSTS</b>	
10 Fertilizer	27.78
11 Chemicals	32.35
12 Seed	168.01
13 Crop Drying	7.78
14 Crop Insurance	8.06
15 Other Expenses	28.41
16 Special Hired Labor	1.38
17 Custom Work Hired	266.77
18 Irrigation Operation	920.32
19 Assigned Interest	
20 Total Variable Costs	<u>266.77</u>
21 Return Over Variable Costs	920.32
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	25.20
32 Farm Power & Machinery-Operation	122.56
33 Building & Fence Cost	33.21
34 Irrigation Ownership Cost	
37 Land Cost	24.53
38 Utilities & Gen. Farm Expense	31.35
39 Hired Labor	7.45
41 Actual Non-R.E.Int. Allocated	37.75
42 Total Allocated Costs	<u>282.05</u>
43 Total Listed Costs	548.82
44 Return Over Listed Costs	638.27
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own.Cost	
51 Total Cost Adj.to a Min 7% Int.	527.56
52 Work Units Assigned/Acre	2.50
53 Power Cost Allocation Factor	1.00
54 Total Listed Cost/Unit of Prod.	5.10
55 Total Adjusted Cost/Unit of Prod.	4.90
56 Cash Variable Cost/Unit of Prod.	4.33
57 Return Over Listed Costs Per Unit	5.89
58 Breakeven Yield/Unit of Prod.	49.9

TABLE 10 - CROP DATA FOR SOYBEANS 1989

Items	Average of 263 Farms Per Acre	52 High Farms Per Acre	52 Low Farms Per Acre
3 Acres	82.1	69.3	63.9
4 Yield	23.4	35.2	11.2
5 Value per Unit	5.48	5.39	5.40
6 Crop Product Return	128.31	189.38	60.49
7 Other Crop Income	<u>7.28</u>	<u>1.02</u>	<u>28.34</u>
8 Total Crop Return	<b>135.59</b>	<b>190.40</b>	<b>88.83</b>
VARIABLE COSTS			
10 Fertilizer	5.92	3.56	6.95
11 Chemicals	17.17	15.30	15.41
12 Seed	12.79	12.21	12.32
13 Crop Drying	0.04	0.06	
14 Crop Insurance	3.64	1.41	5.01
15 Other Expenses	2.35	2.16	2.46
16 Special Hired Labor	0.33	0.25	
17 Custom Work Hired	2.08	1.01	1.27
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	<u>44.32</u>	<u>35.96</u>	<u>43.41</u>
21 Return Over Variable Costs	91.27	154.44	45.42
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery-Ownership	11.74	11.86	13.04
32 Farm Power & Machinery-Operation	22.98	24.59	22.39
33 Building & Fence Cost	3.12	3.17	3.41
34 Irrigation Ownership Cost			
37 Land Cost	41.74	49.33	31.56
38 Utilities & Gen. Farm Expense	8.16	8.47	8.39
39 Hired Labor	4.17	5.44	4.23
41 Actual Non-R.E.Int. Allocated	<u>10.01</u>	<u>9.83</u>	<u>9.55</u>
42 Total Allocated Costs	<u>101.92</u>	<u>112.69</u>	<u>92.57</u>
43 Total Listed Costs	<b>146.25</b>	<b>148.66</b>	<b>135.98</b>
44 Return Over Listed Costs	<b>-10.66</b>	<b>41.74</b>	<b>-47.15</b>
SUPPLEMENTARY MANAGEMENT INFORMATION			
50 Land Opportunity Own.Cost	40.72	51.14	40.85
51 Total Cost Adj.to a Min 7% Int.	142.47	145.64	142.77
52 Work Units Assigned/Acre	0.45	0.45	0.45
53 Power Cost Allocation Factor	0.96	0.97	0.95
54 Total Listed Cost/Unit of Prod.	6.25	4.22	12.14
55 Total Adjusted Cost/Unit of Prod.	6.08	4.14	12.74
56 Cash Variable Cost/Unit of Prod.	3.83	2.39	7.85
57 Return Over Listed Costs Per Unit	-0.46	1.19	-4.21
58 Breakeven Yield/Unit of Prod.	26.7	27.6	25.2

TABLE 10 - CROP DATA FOR SUGAR BEETS, 1989

Items	Average of 109 Farms Per Acre	21 High Farms Per Acre	21 Low Farms Per Acre
3 Acres	138.5	84.4	126.6
4 Yield, Per Acre, Tons	15.8	19.8	11.6
5 Value per Unit	34.89	35.27	34.92
6 Crop Product Return	552.43	697.01	406.07
7 Other Crop Income	10.76	13.06	4.94
8 Total Crop Return	563.19	710.07	411.01
<b>VARIABLE COSTS</b>			
10 Fertilizer	16.20	12.68	16.45
11 Chemicals	45.85	50.23	50.72
12 Seed	30.99	29.85	32.88
13 Contract Interest	52.20	40.82	46.38
14 Crop Insurance	8.83	5.78	5.31
15 Other Expenses	3.92	6.71	3.97
16 Special Hired Labor	30.92	32.59	22.16
17 Custom Work Hired	12.37	9.93	4.45
18 Irrigation Operation			
19 Assigned Interest	1.88		0.69
20 Total Variable Costs	203.16	188.58	183.01
21 Return Over Variable Costs	360.03	521.49	228.00
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>			
31 Farm Power & Machinery-Ownership	39.81	57.12	38.15
32 Farm Power & Machinery-Operation	80.11	88.93	57.01
33 Building & Fence Cost	9.38	13.70	10.17
34 Irrigation Ownership Cost			
37 Land Cost	57.05	44.94	54.90
38 Utilities & Gen. Farm Expense	25.19	29.22	30.92
39 Hired Labor	28.12	33.07	54.01
41 Actual Non-R.E.Int. Allocated	26.18	27.71	32.46
42 Total Allocated Costs	265.84	294.69	277.62
43 Total Listed Costs	<u>469.00</u>	<u>483.27</u>	<u>460.65</u>
44 Return Over Listed Costs	94.19	226.80	-49.64
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>			
50 Land Opportunity Own. Cost	59.42	60.75	69.38
51 Total Cost Adj. to a Min 7% Int.	465.23	499.48	463.83
52 Work Units Assigned/Acre	2.00	2.00	2.00
53 Power Cost Allocation Factor	0.85	0.83	0.91
54 Total Listed Cost/Unit of Prod.	29.68	24.41	39.71
55 Total Adjusted Cost/Unit of Prod.	29.38	25.27	39.89
56 Cash Variable Cost/Unit of Prod.	22.96	18.56	30.81
57 Return Over Listed Costs Per Unit	5.96	11.45	-4.28
58 Breakeven Yield/Unit of Prod.	13.4	13.7	13.2

Line 13 - Represents an opportunity interest charge on the present market value of sugar beet stock.

TABLE 10 - CROP DATA SUNFLOWERS - OIL, 1989

Items	Average of 52 Farms Per Acre	10 High Farms Per Acre	10 Low Farms Per Acre
3 Acres	62.3	57.3	59.6
4 Yield Per Acre CWT	13.0	18.0	6.8
5 Value per Unit	10.50	9.84	9.79
6 Crop Product Return	137.00	177.45	66.66
7 Other Crop Income	2.04		
8 Total Crop Return	139.04	177.45	66.66
<b>VARIABLE COSTS</b>			
10 Fertilizer	15.94	18.53	11.71
11 Chemicals	8.84	7.91	5.40
12 Seed	11.56	11.87	11.31
13 Crop Drying	0.42		0.27
14 Crop Insurance	2.33	0.05	2.32
15 Other Expenses	0.82	2.51	0.03
16 Special Hired Labor			
17 Custom Work Hired	1.43	3.21	0.45
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	41.33	44.08	31.49
21 Return Over Variable Costs	97.71	133.37	35.17
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>			
31 Farm Power & Machinery-Ownership	10.53	10.00	13.56
32 Farm Power & Machinery-Operation	22.89	21.17	24.48
33 Building & Fence Cost	2.04	1.73	-0.20
34 Irrigation Ownership Cost			
37 Land Cost	27.04	29.38	20.15
38 Utilities & Gen. Farm Expense	4.69	4.35	5.57
39 Hired Labor	1.86	1.10	0.49
41 Actual Non-R.E.Int. Allocated	7.69	8.88	9.21
42 Total Allocated Costs	76.74	76.61	73.26
43 Total Listed Costs	118.07	120.68	104.75
44 Return Over Listed Costs	20.97	56.77	-38.09
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>			
50 Land Opportunity Own.Cost	29.65	40.05	26.76
51 Total Cost Adj.to a Min 7% Int.	120.22	129.76	111.49
52 Work Units Assigned/Acre	0.40	0.40	0.40
53 Power Cost Allocation Factor	1.00	1.00	1.00
54 Total Listed Cost/Unit of Prod.	9.08	6.70	15.40
55 Total Adjusted Cost/Unit of Prod.	9.21	7.20	16.37
56 Cash Variable Cost/Unit of Prod.	6.04	4.42	10.48
57 Return Over Listed Costs Per Unit	1.61	3.15	-5.60
58 Breakeven Yield/Unit of Prod.	11.2	12.3	10.7

TABLE 10 - CROP DATA FOR SUNFLOWERS, CONFECTIONERY 1989

Items	Average of 12 Farms Per Acre
3 Acres	110.9
4 Yield cwt	15.3
5 Value per Unit	15.25
6 Crop Product Return	233.32
7 Other Crop Income	<u>.45</u>
8 Total Crop Return	<u>233.77</u>
<b>VARIABLE COSTS</b>	
10 Fertilizer	15.07
11 Chemicals	13.72
12 Seed	17.16
13 Crop Drying	.76
14 Crop Insurance	5.08
15 Other Expenses	.35
16 Special Hired Labor	1.76
17 Custom Work Hired	3.01
18 Irrigation Operation	
19 Assigned Interest	
20 Total Variable Costs	<u>56.91</u>
21 Return Over Variable Costs	176.86
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	19.14
32 Farm Power & Machinery-Operation	28.84
33 Building & Fence Cost	3.99
34 Irrigation Ownership Cost	
37 Land Cost	22.63
38 Utilities & Gen. Farm Expense	7.15
39 Hired Labor	7.80
41 Actual Non-R.E.Int. Allocated	<u>8.93</u>
42 Total Allocated Costs	98.48
43 Total Listed Costs	<u>155.39</u>
44 Return Over Listed Costs	78.38
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own.Cost	
51 Total Cost Adj.to a Min 7% Int.	
52 Work Units Assigned/Acre	0.50
53 Power Cost Allocation Factor	1.00
54 Total Listed Cost/Unit of Prod.	10.16
55 Total Adjusted Cost/Unit of Prod.	
56 Cash Variable Cost/Unit of Prod.	7.17
57 Return Over Listed Costs Per Unit	8.08
58 Breakeven Yield/Unit of Prod.	10.19

TABLE 10 - CROP DATA FOR NAVY BEANS 1989

Items	Average of 10 Farms Per Acre
3 Acres	50.5
4 Yield Per Acre, Cwt	9.24
5 Value per Unit	21.69
6 Crop Product Return	200.42
7 Other Crop Income	<u>18.17</u>
8 Total Crop Return	<b>218.59</b>
<b>VARIABLE COSTS</b>	
10 Fertilizer	9.20
11 Chemicals	13.12
12 Seed	25.05
13 Crop Drying	
14 Crop Insurance	1.55
15 Other Expenses	7.08
16 Special Hired Labor	.60
17 Custom Work Hired	5.48
18 Irrigation Operation	
19 Assigned Interest	
20 Total Variable Costs	<u>62.08</u>
21 Return Over Variable Costs	156.51
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	19.09
32 Farm Power & Machinery-Operation	28.18
33 Building & Fence Cost	2.35
34 Irrigation Ownership Cost	
37 Land Cost	46.05
38 Utilities & Gen. Farm Expense	5.89
39 Hired Labor	3.94
41 Actual Non-R.E.Int. Allocated	<u>6.08</u>
42 Total Allocated Costs	<u>111.58</u>
43 Total Listed Costs	<b><u>173.66</u></b>
44 Return Over Listed Costs	44.93
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own. Cost	
51 Total Cost Adj. to a Min 7% Int.	182.73
52 Work Units Assigned/Acre	0.50
53 Power Cost Allocation Factor	1.00
54 Total Listed Cost/Unit of Prod.	18.79
55 Total Adjusted Cost/Unit of Prod.	19.78
56 Cash Variable Cost/Unit of Prod.	11.49
57 Return Over Listed Costs Per Unit	4.86
58 Breakeven Yield/Unit of Prod.	8.0

TABLE 10 - CROP DATA FOR PINTO BEANS 1989

Items	Average of 19 Farms Per Acre
3 Acres	74.7
4 Yield Per Acre,Cwt	5.28
5 Value per Unit	25.17
6 Crop Product Return	132.90
7 Other Crop Income	<u>32.02</u>
8 Total Crop Return	<b>164.92</b>
<b>VARIABLE COSTS</b>	
10 Fertilizer	9.80
11 Chemicals	12.04
12 Seed	22.55
13 Crop Drying	
14 Crop Insurance	4.82
15 Other Expenses	3.53
16 Special Hired Labor	
17 Custom Work Hired	4.62
18 Irrigation Operation	
19 Assigned Interest	
20 Total Variable Costs	<u>57.36</u>
21 Return Over Variable Costs	107.56
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	13.92
32 Farm Power & Machinery-Operation	27.04
33 Building & Fence Cost	1.83
34 Irrigation Ownership Cost	
37 Land Cost	45.48
38 Utilities & Gen. Farm Expense	5.63
39 Hired Labor	3.54
41 Actual Non-R.E.Int. Allocated	<u>8.68</u>
42 Total Allocated Costs	106.12
43 Total Listed Costs	<b><u>163.48</u></b>
44 Return Over Listed Costs	1.44
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own.Cost	
51 Total Cost Adj.to a Min 7% Int.	162.61
52 Work Units Assigned/Acre	0.50
53 Power Cost Allocation Factor	1.00
54 Total Listed Cost/Unit of Prod.	30.96
55 Total Adjusted Cost/Unit of Prod.	30.79
56 Cash Variable Cost/Unit of Prod.	19.37
57 Return Over Listed Costs Per Unit	.27
58 Breakeven Yield/Unit of Prod.	6.50

TABLE 10 - CROP DATA FOR ALFALFA HAY 1989

Items	Average of 267 Farms Per Acre	High Farms 53 Per Acre	Low Farms 53 Per Acre
3 Acres	65.6	60.1	54.7
4 Yield	2.0	3.4	0.8
5 Value per Unit	57.36	55.54	57.75
6 Crop Product Return	115.41	186.69	46.45
7 Other Crop Income	<u>3.55</u>	<u>0.15</u>	<u>5.48</u>
8 Total Crop Return	<u>118.96</u>	<u>186.84</u>	<u>51.93</u>
VARIABLE COSTS			
10 Fertilizer	10.91	12.93	3.84
11 Chemicals	0.70	0.75	0.77
12 Seed	2.18	0.37	5.06
13 Crop Drying			
14 Crop Insurance	.02	0.02	
15 Other Expenses	1.34	1.63	0.79
16 Special Hired Labor	0.27	0.20	0.22
17 Custom Work Hired	1.20	0.62	0.20
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	<u>16.63</u>	<u>16.51</u>	<u>10.88</u>
21 Return Over Variable Costs	102.33	170.33	41.05
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery-Ownership	14.22	15.86	13.35
32 Farm Power & Machinery-Operation	28.61	29.98	26.18
33 Building & Fence Cost	5.05	6.31	4.97
34 Irrigation Ownership Cost			
37 Land Cost	21.31	20.73	21.17
38 Utilities & Gen. Farm Expense	8.25	8.29	7.93
39 Hired Labor	5.12	5.17	4.77
41 Actual Non-R.E.Int. Allocated	<u>10.76</u>	<u>9.87</u>	<u>13.62</u>
42 Total Allocated Costs	93.32	96.21	91.99
43 Total Listed Costs	109.95	112.71	102.87
44 Return Over Listed Costs	9.01	74.13	-50.94
SUPPLEMENTARY MANAGEMENT INFORMATION			
50 Land Opportunity Own.Cost	27.56	24.24	27.32
51 Total Cost Adj.to a Min 7% Int.	116.49	118.50	104.48
52 Work Units Assigned/Acre	0.60	0.60	0.60
53 Power Cost Allocation Factor	0.69	0.69	0.70
54 Total Listed Cost/Unit of Prod.	54.98	33.15	128.59
55 Total Adjusted Cost/Unit of Prod.	57.89	35.26	129.89
56 Cash Variable Cost/Unit of Prod.	34.69	20.54	79.23
57 Return Over Listed Costs Per Unit	4.51	21.80	-63.68
58 Breakeven Yield/Unit of Prod.	1.9	2.0	1.8

TABLE 10 - CROP DATA FOR ALFALFA ESTABLISHMENT 1989

Items	Average of 13 Farms Per Acre
3 Acres	63.2
4 Yield	1.8
5 Value per Unit	58.73
6 Crop Product Return	105.00
7 Other Crop Income	
8 Total Crop Return	<u>105.00</u>
VARIABLE COSTS	
10 Fertilizer	16.58
11 Chemicals	0.35
12 Seed	12.45
13 Crop Drying	
14 Crop Insurance	
15 Other Expenses	2.18
16 Special Hired Labor	
17 Custom Work Hired	0.52
18 Irrigation Operation	
19 Assigned Interest	
20 Total Variable Costs	<u>32.09</u>
21 Return Over Variable Costs	72.91
ALLOCATED COSTS (VARIABLE & FIXED)	
31 Farm Power & Machinery-Ownership	7.58
32 Farm Power & Machinery-Operation	12.39
33 Building & Fence Cost	2.10
34 Irrigation Ownership Cost	
37 Land Cost	14.55
38 Utilities & Gen. Farm Expense	2.52
39 Hired Labor	1.33
41 Actual Non-R.E.Int. Allocated	<u>6.58</u>
42 Total Allocated Costs	47.05
43 Total Listed Costs	79.15
44 Return Over Listed Costs	25.85
SUPPLEMENTARY MANAGEMENT INFORMATION	
50 Land Opportunity Own.Cost	27.32
51 Total Cost Adj.to a Min 7% Int.	90.08
52 Work Units Assigned/Acre	0.20
53 Power Cost Allocation Factor	0.72
54 Total Listed Cost/Unit of Prod.	43.97
55 Total Adjusted Cost/Unit of Prod.	50.38
56 Cash Variable Cost/Unit of Prod.	30.51
57 Return Over Listed Costs Per Unit	14.36
58 Breakeven Yield/Unit of Prod.	7 1.3

TABLE 10 - CROP DATA FOR OTHER GRASS LEGUME HAY, 1989

Items	Average of 35 Farms Per Acre	High 11 Farms Per Acre	Low 11 Farms Per Farm
3 Acres	90.9	44.9	71.0
4 Yield	1.6	2.7	1.0
5 Value per Unit	35.30	37.42	33.41
6 Crop Product Return	55.15	100.00	32.46
7 Other Crop Income			
8 Total Crop Return	<u>55.15</u>	<u>100.00</u>	<u>32.46</u>

VARIABLE COSTS

10 Fertilizer	3.27	11.27	0.28
11 Chemicals	0.06	0.22	
12 Seed	0.72	2.14	
13 Crop Drying			
14 Crop Insurance			
15 Other Expenses	0.78	1.63	0.56
16 Special Hired Labor	1.01		
17 Custom Work Hired	0.15	0.96	
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	<u>4.98</u>	<u>16.21</u>	<u>0.85</u>
21 Return Over Variable Costs	50.17	83.79	31.61

ALLOCATED COSTS (VARIABLE & FIXED)

31 Farm Power & Machinery-Ownership	7.34	9.44	7.49
32 Farm Power & Machinery-Operation	20.40	19.91	24.66
33 Building & Fence Cost	1.96	2.74	1.55
34 Irrigation Ownership Cost			
37 Land Cost	12.56	13.08	18.55
38 Utilities & Gen. Farm Expense	4.95	6.26	3.45
39 Hired Labor	1.62	1.76	2.00
41 Actual Non-R.E.Int. Allocated	<u>3.44</u>	<u>4.28</u>	<u>2.59</u>
42 Total Allocated Costs	52.27	57.47	60.29
43 Total Listed Costs	<u>57.25</u>	<u>73.70</u>	<u>61.14</u>
44 Return Over Listed Costs	-2.10	26.30	-28.68

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

50 Land Opportunity Own. Cost	24.41	23.32	27.69
51 Total Cost Adj. to a Min 7% Int.	69.94	85.41	73.73
52 Work Units Assigned/Acre	0.40	0.40	0.40
53 Power Cost Allocation Factor	0.99	0.92	1.05
54 Total Listed Cost/Unit of Prod.	35.78	27.30	61.14
55 Total Adjusted Cost/Unit of Prod.	44.77	31.96	75.87
56 Cash Variable Cost/Unit of Prod.	22.12	17.93	33.55
57 Return Over Listed Costs Per Unit	-1.31	9.74	-28.68
58 Breakeven Yield/Unit of Prod.	1.6	2.0	1.8

TABLE 10 - CROP DATA FOR CORN SILAGE, 1989

Items	Average of 132 Farms Per Acre	26 High Farms Per Acre	26 Low Farms Per Acre
3 Acres	42.3	34.3	37.7
4 Yield	7.4	13.3	2.5
5 Value per Unit	16.29	15.99	18.37
6 Crop Product Return	120.12	212.13	45.31
7 Other Crop Income	16.93	12.80	22.89
8 Total Crop Return	137.05	224.93	68.20
<b>VARIABLE COSTS</b>			
10 Fertilizer	17.49	19.45	13.66
11 Chemicals	9.88	5.77	9.97
12 Seed	14.30	16.30	12.76
13 Crop Drying		0.03	
14 Crop Insurance	0.87	0.87	1.09
15 Other Expenses	0.73	0.35	0.50
16 Special Hired Labor	0.66	0.50	0.56
17 Custom Work Hired	1.25	2.71	1.11
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	45.20	45.98	39.66
21 Return Over Variable Costs	91.85	178.95	28.54
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>			
31 Farm Power & Machinery-Ownership	21.75	21.87	19.71
32 Farm Power & Machinery-Operation	47.42	52.39	44.19
33 Building & Fence Cost	5.46	7.96	5.23
34 Irrigation Ownership Cost	0.22		
37 Land Cost	23.23	27.16	23.77
38 Utilities & Gen. Farm Expense	8.25	8.69	8.38
39 Hired Labor	4.96	6.44	3.74
41 Actual Non-R.E.Int. Allocated	11.99	8.95	15.65
42 Total Allocated Costs	123.28	133.46	120.67
43 Total Listed Costs	168.49	179.45	160.32
44 Return Over Listed Costs	-31.44	45.48	-92.12
<b>*****SUPPLEMENTARY MANAGEMENT INFORMATION*****</b>			
70 Land Opportunity Own.Cost	29.85	35.20	30.10
51 Total Cost Adj.to a Min 7% Int.	174.56	191.22	162.04
52 Work Units Assigned/Acre	0.60	0.60	0.60
53 Power Cost Allocation Factor	1.00	1.00	1.00
54 Total Listed Cost/Unit of Prod.	22.77	13.49	64.13
55 Total Adjusted Cost/Unit of Prod.	23.67	14.42	65.69
56 Cash Variable Cost/Unit of Prod.	15.92	9.21	44.65
57 Return Over Listed Costs Per Unit	-4.25	3.42	-36.85
58 Breakeven Yield/Unit of Prod.	10.3	11.2	8.7

TABLE 10 - CROP DATA FOR BLUEGRASS SEED, 1989

Items	Average of 5 Farms Per Acre
3 Acres	123.5
4 Yield Per Acre lbs.	315.4
5 Value per Unit	0.47
6 Crop Product Return	148.71
7 Other Crop Income	
8 <b>Total Crop Return</b>	<b>148.71</b>
<b>VARIABLE COSTS</b>	
10 Fertilizer	28.49
11 Chemicals	6.23
12 Seed	0.55
13 Crop Drying	
14 Crop Insurance	
15 Other Expenses	0.92
16 Special Hired Labor	
17 Custom Work Hired	2.06
18 Irrigation Operation	
19 Assigned Interest	
20 <b>Total Variable Costs</b>	<b>38.24</b>
21 <b>Return Over Variable Costs</b>	<b>110.47</b>
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>	
31 Farm Power & Machinery-Ownership	3.87
32 Farm Power & Machinery-Operation	15.24
33 Building & Fence Cost	2.20
34 Irrigation Ownership Cost	
37 Land Cost	12.24
38 Utilities & Gen. Farm Expense	5.72
39 Hired Labor	4.17
41 Actual Non-R.E.Int. Allocated	2.65
42 <b>Total Allocated Costs</b>	<b>46.09</b>
43 <b>Total Listed Costs</b>	<b>84.33</b>
44 <b>Return Over Listed Costs</b>	<b>64.38</b>
<b>SUPPLEMENTARY MANAGEMENT INFORMATION</b>	
50 Land Opportunity Own. Cost	12.85
51 Total Cost Adj. to a Min 7% Int.	87.99
52 Work Units Assigned/Acre	0.40
53 Power Cost Allocation Factor	0.60
54 Total Listed Cost/Unit of Prod.	0.27
55 Total Adjusted Cost/Unit of Prod.	0.28
56 Cash Variable Cost/Unit of Prod.	0.21
57 Return Over Listed Costs Per Unit	0.20
58 Breakeven Yield/Unit of Prod.	179.4

TABLE 10 - CROP DATA FOR TIMOTHY SEED 1989

Items	Average of 21 Farms Per Acre	High Farms 10 Per Acre	Low Farms 10 Per Acre
3 Acres	62.1	64.8	65.1
4 Yield	353.2	499.2	207.4
5 Value per Unit	0.22	0.22	0.20
6 Crop Product Return	76.39	110.52	42.47
7 Other Crop Income	5.19	2.48	7.90
8 Total Crop Return	81.58	113.00	50.37
VARIABLE COSTS			
10 Fertilizer	21.47	18.84	24.25
11 Chemicals	5.64	4.40	6.90
12 Seed	0.35	0.43	0.26
13 Crop Drying			
14 Crop Insurance			
15 Other Expenses	0.61	1.23	
16 Special Hired Labor			
17 Custom Work Hired	1.21	1.28	1.14
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	29.28	26.19	32.55
21 Return Over Variable Costs	52.30	86.81	17.82
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery-Ownership	5.60	3.83	7.40
32 Farm Power & Machinery-Operation	11.72	13.01	10.51
33 Building & Fence Cost	2.50	3.12	1.90
34 Irrigation Ownership Cost			
37 Land Cost	15.06	12.31	17.49
38 Utilities & Gen. Farm Expense	4.32	3.92	4.72
39 Hired Labor	1.26	1.65	0.88
41 Actual Non-R.E.Int. Allocated	4.51	4.51	4.39
42 Total Allocated Costs	44.97	42.35	47.29
43 Total Listed Costs	74.25	68.53	79.83
44 Return Over Listed Costs	7.33	44.47	-29.46
SUPPLEMENTARY MANAGEMENT INFORMATION			
50 Land Opportunity Own. Cost	24.89	22.34	27.76
51 Total Cost Adj. to a Min 7% Int.	84.81	78.53	91.72
52 Work Units Assigned/Acre	0.30	0.30	0.30
53 Power Cost Allocation Factor	0.64	0.65	0.65
54 Total Listed Cost/Unit of Prod.	0.21	0.14	0.38
55 Total Adjusted Cost/Unit of Prod.	0.24	0.16	0.44
56 Cash Variable Cost/Unit of Prod.	0.14	0.10	0.26
57 Return Over Listed Costs Per Unit	0.02	0.09	-0.14
58 Breakeven Yield/Unit of Prod.	337.5	311.5	399.2

TABLE 10 - CROP DATA FOR CONSERVATION RESERVE, 1989

Items	Average of 50 Farms Per Acre	10 High Farms Per Acre	10 Low Farms Per Acre
3 Acres	194.8	286.3	126.8
4 Yield			
5 Value per Unit			
6 Crop Product Return	36.48	49.77	49.95
7 Other Crop Income	<u>8.71</u>		
8 Total Crop Return	45.19	<u>49.77</u>	<u>49.95</u>
VARIABLE COSTS			
10 Fertilizer	0.06		
11 Chemicals	1.11	0.26	2.80
12 Seed	0.34		1.49
13 Crop Drying			
14 Crop Insurance			
15 Other Expenses	0.27	0.19	
16 Special Hired Labor	0.03		0.20
17 Custom Work Hired	0.79	0.39	
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	<u>2.60</u>	<u>0.84</u>	<u>4.49</u>
21 Return Over Variable Costs	42.59	48.93	45.46
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery-Ownership	2.05	2.02	1.01
32 Farm Power & Machinery-Operation	3.86	4.31	2.88
33 Building & Fence Cost	0.46	0.20	0.47
34 Irrigation Ownership Cost			
37 Land Cost	16.65	19.60	24.34
38 Utilities & Gen. Farm Expense	0.98	0.71	0.80
39 Hired Labor	0.35	0.27	0.36
41 Actual Non-R.E.Int. Allocated	<u>1.33</u>	<u>1.23</u>	<u>2.15</u>
42 Total Allocated Costs	25.68	28.34	32.01
43 Total Listed Costs	28.27	29.19	36.49
44 Return Over Listed Costs	16.92	20.58	13.46
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
50 Land Opportunity Own. Cost	24.03	25.96	53.19
51 Total Cost Adj. to a Min 7% Int.	35.55	35.32	63.79
52 Work Units Assigned/Acre	0.05	0.05	0.05
53 Power Cost Allocation Factor	0.98	1.00	1.00
54 Total Listed Cost/Unit of Prod.			
55 Total Adjusted Cost/Unit of Prod.			
56 Cash Variable Cost/Unit of Prod.			
57 Return Over Listed Costs Per Unit			
58 Breakeven Yield/Unit of Prod.			

TABLE 10 - CROP DATA FOR SET ASIDE, 1989

Items	Average of 333 Farms Per Acre	High Farms 66 Per Acre	Low Farms 66 Per Acre
3 Acres	43.9	38.4	45.1
4 Yield	0.1	0.4	
5 Value per Unit	9.67	6.80	
6 Crop Product Return	0.66	2.66	
7 Other Crop Income	2.44	0.70	0.24
8 Total Crop Return	3.10	3.36	0.24
<b>VARIABLE COSTS</b>			
10 Fertilizer	0.14	0.18	0.16
11 Chemicals	0.73	1.09	0.40
12 Seed	1.46	1.93	0.82
13 Crop Drying			
14 Crop Insurance			
15 Other Expenses	0.16	0.10	0.40
16 Special Hired Labor	0.02		
17 Custom Work Hired	0.27	0.96	0.11
18 Irrigation Operation			
19 Assigned Interest		0.03	
20 Total Variable Costs	2.78	4.30	1.88
21 Return Over Variable Costs	0.32	-0.94	-1.64
<b>ALLOCATED COSTS (VARIABLE &amp; FIXED)</b>			
31 Farm Power & Machinery-Ownership	6.22	4.95	6.74
32 Farm Power & Machinery-Operation	11.18	11.64	10.86
33 Building & Fence Cost	1.48	1.20	1.44
34 Irrigation Ownership Cost			
37 Land Cost	33.94	32.17	38.83
38 Utilities & Gen. Farm Expense	3.10	2.42	3.75
39 Hired Labor	1.94	2.06	2.11
41 Actual Non-R.E.Int. Allocated	3.76	3.33	3.48
42 Total Allocated Costs	61.62	57.77	67.21
43 Total Listed Costs	64.40	62.06	69.09
44 Return Over Listed Costs	-61.30	-58.70	-68.85
<b>*****SUPPLEMENTARY MANAGEMENT INFORMATION*****</b>			
50 Land Opportunity Own.Cost	33.17	35.19	41.92
51 Total Cost Adj.to a Min 7% Int.	64.15	64.48	72.44
52 Work Units Assigned/Acre	0.20	0.20	0.20
53 Power Cost Allocation Factor	0.98	0.95	1.00
54 Total Listed Cost/Unit of Prod.			
55 Total Adjusted Cost/Unit of Prod.			
56 Cash Variable Cost/Unit of Prod.			
57 Return Over Listed Costs Per Unit			
58 Breakeven Yield/Unit of Prod.			

## 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.

In determining the total return for livestock enterprises, inventory change, purchase and sale of livestock, value of animals butchered, products sold, and products used in the home are considered in order to arrive at the total income.

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, proportional costs of hired labor, utilities, power, machinery, livestock equipment, building and fence costs. These costs are divided out to each livestock enterprise by the computer, using a carefully devised formula to make the proper allocations.

All livestock costs and returns are computed on an annual basis.

Accurate inventory weights and values thus become very important in the calculation of net increase in value. This is especially true for feeder livestock enterprises.

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

TABLE 11B - HOGS, FINISHING, 1989

Items	Average of 11 Farms Per CWT.
1 PRODUCTION - Pounds 95840 lbs.	
2 Net Increase In Value: Hogs	32.14
3 Other Miscellaneous Income	
4 Total Value Produced	32.14
FEED FED: QUANTITY & COST LBS/CWT	
6 Corn	216.8 8.33
7 Other Grain	24.0 1.01
8 Complete Ration	16.8 2.88
9 Prot., Salt, Min.	84.4 9.68
10 Total Grain Mix	342.0 21.90
13 Total Feed Cost	21.90
14 Return Over Feed Costs	10.24
OTHER DIRECT COSTS	
16 Veterinary	0.35
17 Miscellaneous	0.35
18 Custom Work & Lease Expense	0.30
21 Total Other Direct Costs	1.00
22 Total Direct Costs Incl Feed	22.90
23 Return Over All Direct Costs	9.24
ALLOCATED COSTS	
26 Act.Int.Pd.Less Int.Assigned-L20	2.81
27 General Hired Labor	0.20
28 Utilities & Miscellaneous	1.19
29 Power & Machinery	0.52
30 Livestock Equipment	1.19
31 Buildings & Fences	0.71
32 Total Allocated Costs	6.62
33 Total Actual Listed Costs	29.52
34 Return Over Actual Listed Costs	2.62
***** SUPPLEMENTARY MANAGEMENT INFORMATION*****	
35 Total Costs Adj.to 7% Min.Int.	30.88
36 Return Over Listed & 7% Opportunity	1.26
37 Interest Cost	
39 Return/\$100. Feed Fed	146.75
40 Ave Wt./Mkt. Hog Sold	246.37
41 Price Rec'd/CWT. Mkt. Hogs	42.20
42 Ave. Weight/Pig Purchased	40.71
43 Ave. Price/Pig Purchased	40.19
44 No. Pigs Purchased	285
45 No. Pigs Transferred Out/In	165
46 Pounds of Pork Purchased	11602
47 Ave. No. of Pigs on Hand	195.3
48 Percent Death Loss	1.30
49 Effective Daily Gain	1.34
50 Price/CWT. Grain Mix Fed	6.40
51 Price/CWT. Prot., Salt,Min.	11.47
52 Number of Pigs Produced	437

TABLE 11C - HOGS, WEANING PIG PRODUCTION, 1989

Item	Average of 8 Farms	
	Per Pig	Per Litter
1 PRODUCTION 65 litters, 30557 lbs.		
2 Net Increase In Value: Hogs	42.65	320.89
Other Miscellaneous Income		
4 Total Value Produced	42.65	320.89
FEED FED: QUANTITY & COST LBS/LITTER		
6 Corn	958.89	4.49
7 Other Grain	920.49	4.91
8 Complete Ration	489.23	7.58
9 Prot., Salt, Min.	397.25	8.87
10 Total Grain Mix	2765.86	25.85
11 Forages	3.27	0.03
13 Total Feed Cost	25.88	194.73
14 Return Over Feed Costs	16.77	126.16
OTHER DIRECT COSTS		
16 Veterinary	1.64	12.32
17 Breeding		
18 Miscellaneous	2.57	19.35
19 Custom Work & Lease	0.35	2.66
22 Total Other Direct Costs	4.56	34.33
23 Total Direct Costs Incl. Feed	30.44	229.06
24 Return Over All Direct Costs	12.21	91.83
ALLOCATED COSTS		
27 Act. Int. P. Less Int. Assigned-L21	2.18	16.37
28 General Hired Labor	0.81	6.06
29 Utilities & Miscellaneous	4.24	31.89
30 Power & Machinery	1.97	14.82
31 Livestock Equipment	1.43	10.77
32 Buildings & Fences	2.29	17.26
33 Total Allocated Costs	12.92	97.17
34 Total Actual Listed Costs	43.36	326.23
35 Return Over Actual Listed Costs	-0.71	-5.34
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****		
36 Total Costs Adj. to 7% Min. Int.	43.25	325.38
37 Return Over Listed & 7% Opportunity	-0.60	-4.49
38 Interest Cost		
40 Return /\$100 Feed Fed		164.79
41 Ave Wt./Pig Sold or Transfer		56
42 Price Rec'd/Pig Sold		40.78
43 Litters/Sow/Year		1.8
44 No. Pigs Born/Litter		10
45 No. Pigs Wean/Litter		7.7
46 Pigs Produced/Sow/Year		13.6
47 Litters/Crate/Year		4.6
48 Pigs Weaned/Crate/Year		35.71
49 FDR Pig Deaths: AS % of Total Loss		98.8
50 Breeding Deaths: As % of Total Loss		1.2
51 Price/CWT. Grain Mix Fed		7.03
52 Price/CWT. Prot., Salt, Min.		16.79

TABLE 12 - DAIRY COWS, COMMERCIAL, 1989

Items	Average of 100 Farms Per Cow	20 High Farms Per Cow	20 Low Farms Per Cow
1 Average Number of Cows	47.4	53.6	38.5
2 Pounds of Milk	15480	18304	11899
3 Pounds of Butterfat	566	669	436
4 Percent of Butterfat in Milk	3.66	3.66	3.66
5 Value of Produce			
6 Dairy Products Sold	\$1962.45	\$2356.46	\$1411.38
7 Dairy Products Used in Home	6.33	7.07	6.03
8 Milk Fed to Livestock	19.14	22.46	23.79
9 Net Increase in Value	-83.00	-64.87	-56.65
10 Other Miscellaneous Income			
11 Total Value Produced	1904.92	2321.12	1384.55
12 Feed Fed: Qty. & Cost	Lbs/Cow		
13 Corn	4045 118.76	147.54	74.70
14 Small Grain	881 40.25	37.93	59.35
15 Complete Ration	1769 104.87	46.19	155.48
16 Prot., Salt, Min.	1243 159.41	188.88	109.17
17 Total Grain Mix	7938 423.29	420.54	398.70
18 Legume Hay	8193 209.45	217.37	215.71
19 Other Dry Hay & Roughage	987 11.54	8.47	17.58
20 Haylage	1365 23.40	28.38	6.39
21 Silage	5941 47.66	29.85	41.77
22 Pasture	1.71	1.18	5.35
23 Total Feed Costs	717.05	705.79	685.50
24 Return Over Feed Cost	1187.87	1615.33	699.05
OTHER DIRECT COSTS			
26 Veterinary	41.75	53.38	30.36
27 Breeding	22.70	32.50	12.34
28 Miscellaneous	102.93	144.29	77.25
29 Custom Work	75.72	79.46	67.06
30 Special Hired Labor	0.06		
31 Assigned Interest			
32 Total Other Direct Costs	243.16	309.63	187.01
33 Total Direct Costs Incl Feed	960.21	1015.42	872.51
34 Return Over All Direct Costs	944.71	1305.70	512.04
ALLOCATED COSTS			
37 Act Int Pd Less Int Assigned-L31	85.19	54.10	52.16
38 General Hired Labor	59.30	69.35	59.87
39 Utilities & Miscellaneous	83.27	88.68	79.79
40 Power & Machinery PCAF 1.00	78.81	82.71	70.50
41 Livestock Equipment ECAF 1.00	61.81	70.20	27.56
42 Buildings & Fences BCAF 1.00	69.20	80.09	63.12
43 Total Allocated Costs	437.58	445.13	353.00
44 Total Actual Listed Costs	1397.79	1460.55	1225.51
45 Return/Actual Listed Costs	507.13	860.57	159.04
***** SUPPLEMENTARY MANAGEMENT INFORMATION*****			
46 Total Costs Adj.to 7% Min.Int.	1413.45	1512.93	1265.44
47 Return Over Listed & 7% Opp.Int.	491.47	808.19	119.11
50 Return/\$100 Feed Fed	265.66	328.87	201.97
51 Pounds of Milk/Pound Grain Mix	1.95	1.67	1.84
52 Average Price/CWT. Sold	12.85	13.06	12.12
53 Dairy Cow Turnover Percentage	40.08	39.18	36.36
54 Approximate Dry Matter Consumed/Cow/	47	49	43

TABLE 13 - OTHER DAIRY CATTLE, 1989

Items		Average of Farms 99 Per Head	High Farms 20 Per Head	Low Farms 20 Per Head
1	Average Number of Head	59.6	51.9	59.6
2	Net Increase in Value	\$372.00	\$494.24	\$277.75
3	Other Miscellaneous Income			
4	Total Value Produced	372.00	494.24	277.75
FEED FED: QTY & COST                      LBS/HEAD				
6	Corn	453	15.79	11.62
7	Small Grain	234	10.47	14.72
8	Complete Ration	361	17.53	13.04
9	Prot., Salt, Min.	190	26.41	20.87
10	Total Grain Mix	1238	70.20	60.25
11	Legume Hay	2367	70.32	38.67
12	Other Dry Hay & Rough.	415	6.24	8.02
13	Haylage	183	3.09	6.30
14	Silage	3577	29.68	18.02
15	Milk	114	13.84	10.40
16	Pasture		1.11	0.46
17	Total Feed Cost	194.48	142.12	253.81
18	Return Over Feed Cost	177.52	352.12	23.94
OTHER DIRECT COSTS				
20	Veterinary	1.88	4.43	0.03
21	Breeding	0.12		0.02
22	Miscellaneous	2.82	4.68	0.67
23	Custom Work & Lease Expense	1.69	2.62	0.34
24	Special Hired Labor			
25	Assigned Interest			
26	Total Other Direct Costs	6.51	11.73	1.06
27	Total Direct Costs Incl Feed	200.99	153.85	254.87
28	Return Over All Direct Costs	171.01	340.39	22.88
ALLOCATED COSTS				
30	Actual Interest Paid Less Interest Assigned-L25	14.33	15.26	11.95
32	General Hired Labor	9.70	15.76	6.59
33	Utilities & Miscellaneous	14.24	14.55	15.00
34	Power & Machinery	13.39	14.99	14.76
35	Livestock Equipment	10.74	10.47	13.24
36	Buildings & Fences	11.73	15.55	12.86
37	Total Allocated Costs	74.13	86.58	74.40
38	Total Actual Listed Costs	275.12	240.43	329.27
39	Return Over Act. Listed Costs	96.88	253.81	-51.52
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****				
40	Total Costs Adj to 7% Int.	305.90	273.84	361.33
41	Return Over Listed & 7% Opportunity Interest Cost	66.10	220.40	-83.58
44	Return/\$100 Feed Fed	191.28	347.76	109.43
45	Percent Calf Death Loss	14.47	12.75	19.13

TABLE 14 - ALL DAIRY CATTLE, 1989

Items	Average of 100 Farms Per Cow	20 High Farms Per Cow	20 Low Farms Per Cow	
1 Average Number of Cows	47.4	55.3	41.0	
2 Pounds of Milk	15509.36	18143.20	12348.27	
3 Pounds of Butterfat	572.16	678.70	476.88	
4 Percent of Butterfat in Milk	3.69	3.74	3.86	
5 Value of Produce				
6 Dairy Products Sold	\$ 1966.19	\$ 2340.87	\$ 1478.37	
7 Dairy Products Used in Home	6.31	6.62	6.59	
8 Milk Fed to Livestock	18.94	20.47	19.10	
9 Net Increase in Value	378.96	488.86	231.88	
11 Total Value Produced	2370.40	2856.82	1735.94	
12 Feed Fed: Qty. & Cost	Lbs/Cow			
13 Corn	5436	138.77	171.95	82.39
14 Small Grain	1150	52.29	50.99	53.00
15 Complete Ration	2196	127.37	78.64	166.85
16 Prot., Salt, Min.	1490	209.49	251.74	164.73
17 Total Grain Mix	10272	527.92	553.32	466.97
18 Legume Hay	10946	294.53	272.33	301.98
19 Other Dry Hay & Roughage	1509	19.47	20.14	21.63
20 Haylage	1991	32.03	56.35	5.37
21 Silage	10347	85.17	75.12	73.37
22 Pasture		3.31	1.45	8.73
23 Total Feed Costs	962.43	978.71	878.05	
24 Return Over Feed Cost	1407.97	1878.11	857.89	
OTHER DIRECT COSTS				
26 Veterinary	44.30	55.10	33.85	
27 Breeding	23.39	32.41	13.85	
28 Miscellaneous	106.82	142.44	89.46	
29 Custom Work & Lease Expense	77.14	80.61	68.32	
30 Special Hired Labor	0.06			
31 Assigned Interest				
32 Total Other Direct Costs	251.71	310.56	205.48	
33 Total Direct Costs Incl Feed	1214.14	1289.27	1083.53	
34 Return Over All Direct Costs	1156.26	1567.55	652.41	
ALLOCATED COSTS				
37 Act Int Pd Less Int Assigned-L31	103.71	77.92	68.15	
38 General Hired Labor	72.52	90.38	67.29	
39 Utilities & Miscellaneous	102.88	112.26	97.00	
40 Power & Machinery	95.57	112.15	84.03	
41 Livestock Equipment	74.53	84.82	35.31	
42 Buildings & Fences	89.04	132.79	85.55	
43 Total Allocated Costs	538.25	610.32	437.33	
44 Total Actual Listed Costs	1752.39	1899.59	1520.86	
45 Return Over Act.Listed Costs	618.01	957.23	215.08	
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****				
46 Tot.Costs Adj.to 7% Int.	1805.70	1723.42	1713.54	
47 Return Over Listed & 7% Opport Interest Cost	564.70	1133.40	22.40	
50 Return/\$100 Feed Fed	246	292	198	
51 Pounds of Milk/Pound Grain Mix	1.51	1.13	1.69	
52 Average Price/CWT. Sold	12.85	13.08	12.19	
53 Dairy Cow Turnover Percentage	40.25	39.78	36.59	
54 Approximate Dry Matter Consumed/Cow/	65	74	60	
56 Total Investment/Cow	7901.59	8521.12	6385.76	
57 Total Debt/Cow	3924.66	2739.44	3118.07	

TABLE 15A - BEEF COWS, COMMERCIAL, 1989

Items		Average of 57 Farms Per Cow	High 11 Farms Per Cow	Low 11 Farms Per Cow
1	Average Number of Beef Cows	71.8	81.2	49.6
2	Average Number of Other Beef/Bulls	62.5	84.9	38.9
3	Pounds of Beef Produced	43715	57877	27076
4	Net Increase in Value	\$ 483.72	\$ 615.31	\$ 359.56
5	Other Miscellaneous Income	2.05	1.16	
6	<b>Total Value Produced</b>	<b>485.77</b>	<b>616.47</b>	<b>359.56</b>
	FEED FED:QUANTITY & COST	LBS/COW		
8	Grain	555.2	18.94	20.31
9	Prot., Salt, Min.	336.2	18.93	9.27
10	Legume Hay	11729.7	106.21	88.41
11	Other Dry Hay & Roug	2422.3	32.19	6.16
12	Silage	3631.2	29.42	43.42
13	Haylage	4.9	0.03	
14	Pasture		16.16	12.96
15	<b>Total Feed Costs</b>	<b>221.88</b>	<b>180.53</b>	<b>279.93</b>
16	<b>Return Over Feed Costs</b>	<b>263.89</b>	<b>435.94</b>	<b>79.63</b>
	OTHER DIRECT COSTS			
18	Veterinary	10.85	14.36	10.81
19	Breeding	1.30		0.10
20	Miscellaneous	9.79	10.22	6.23
21	Custom Work & Lease Expense	9.50	8.69	13.47
	Hired Labor			
23	Assigned Interest	1.25	5.75	
24	<b>Total Other Direct Costs</b>	<b>32.69</b>	<b>39.02</b>	<b>30.61</b>
25	<b>Total Direct Costs Incl,Feed</b>	<b>254.57</b>	<b>219.55</b>	<b>310.54</b>
26	<b>Return Over All Direct Costs</b>	<b>231.20</b>	<b>396.92</b>	<b>49.02</b>
	ALLOCATED COSTS			
28	Actual Interest Paid Less			
	Interest Assigned-L23	31.49	28.56	51.65
30	General Hired Labor	6.50	3.68	5.20
31	Utilities & Miscellaneous	20.79	23.21	21.53
32	Power & Machinery	14.70	16.38	13.01
33	Livestock Equipment	4.67	3.77	2.50
34	Buildings & Fences	10.48	11.48	13.25
35	<b>Total Allocated Costs</b>	<b>88.63</b>	<b>87.08</b>	<b>107.14</b>
36	<b>Total Actual Listed Costs</b>	<b>343.20</b>	<b>306.63</b>	<b>417.68</b>
37	<b>Return Over Actual Listed Costs</b>	<b>142.57</b>	<b>309.84</b>	<b>-58.12</b>
	*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
38	Total Costs Adj.To 7% Min.Int.	381.61	352.17	437.05
39	Return Over Listed & 7% Opportunity			
	Interest Cost	104.16	264.30	-77.49
42	Return/\$100 Feed Fed	218.95	341.48	128.44
43	\$/CWT Breeding Animals Sold	49.43	49.38	47.97
44	Ave Weight of Animals Sold	710.02	754.39	652.30
45	Number of Head Bought	11	25	8
46	Percent Death Loss	3.03	2.89	3.05
47	Price/CWT Calf Sold/Transfer	83.17	80.37	85.59
48	Ave Weight Calf Sold/Transfer	597	712	493
49	Percent Calf Crop Born	97.26	98.80	97.96
50	Percent Calf Crop Weaned	91.78	91.57	97.84
51	Percent Calf Death Loss	5.63	7.32	6.25
52	Cull Income/Breeding Cow	86.73	65.76	92.08
53	Hay Equivalent/Cow	7.68	18.54	6.51
54	Corn Equivalent/Cow	9.91	9.11	9.59

TABLE 15B - BEEF FEEDERS A 1989

			Average of 22 Farms	
			PER CWT	PER HEAD
1	Average Number of Animals		82.9	
2	Pounds of Animal Produced		58229	
3	Net Increase in Value:Animals		\$ 58.76	\$ 412.73
4	Other Miscellaneous Income			
5	<b>Total Value Produced</b>		<b>58.76</b>	<b>412.73</b>
FEEED	FED:QTY & COST	LBS/CWT		
7	Corn	205.2	8.12	57.07
8	Small Grains	72.0	2.79	19.60
9	Complete Rations	284.7	15.35	107.85
10	Prot., Salt, Min.	21.3	3.68	25.81
11	Legume Hay	174.5	4.53	31.82
12	Other Dry Hay & Roug	145.7	0.95	6.75
13	Silage	816.7	6.16	43.23
14	Haylage	34.0	0.47	3.33
15	Pasture			
16	Total Feed Cost		42.05	295.42
17	Return Over Feed Costs		16.71	117.31
OTHER DIRECT COSTS				
19	Veterinary		1.87	13.15
20	Miscellaneous		0.46	3.20
21	Custom Work & Lease Expense		2.15	15.13
22	Special Hired Labor			
23	Assigned Interest			
24	Total Other Direct Costs		4.48	31.48
25	Total Direct costs Incl Feed		46.53	326.90
26	Return Over All Direct Costs		12.23	85.83
ALLOCATED COSTS				
28	Actual Interest Paid Less			
	Interest Assigned-L23		6.16	43.29
30	General Hired Labor		1.46	10.25
31	Utilities & Miscellaneous		2.07	14.54
32	Power & Machinery		1.10	7.70
33	Livestock Equipment		0.90	6.30
34	Buildings & Fences		1.03	7.26
35	Total Allocated Costs		12.72	89.34
36	<b>Total Actual Listed Costs</b>		<b>59.25</b>	<b>416.24</b>
37	<b>Return Over Actual Listed Costs</b>		<b>-0.49</b>	<b>-3.51</b>
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****				
38	Total Cost Adj to 7% Min Int.		61.48	431.85
39	Return Over Listed & 7% Opportunity			
	Interest Cost		-2.72	-19.12
42	Return/\$100 Feed Fed			139.70
43	Price/CWT Sold			72.22
44	Ave weight all cattle sold			961
45	Price/CWT Bought			86.43
46	Average Weight Cattle Bought			496
47	Number of Head Bought			107
48	Percent Death Loss			0.90
49	Effective Daily Gain-Pound/Head/Day			1.92
50	Price to cover Purch Price & Listed			138.10
51	Hay Equivalent/CWT			0.30
52	Corn Equivalent/CWT			4.95

Table 16A - 6670 Sheep, Flock, Commercial, 1989

Items		Average of 4 Farms
1	Average Number of Ewes	69.8
2	Pounds of Lamb & Mutton Produced	12065
3	Pounds of Wool Produced	750
4	Value of Produce	
5	Wool	12.72
6	Net Value in Value	116.76
7	Other Miscellaneous Income	
8	<b>Total Value Produced</b>	<b>129.48</b>
9	Feed Fed: Quantity & Cost	LBS/EWE
10	Grain	552.9
11	Protein, Salt & Mineral	840.8
12	Legume Hay	1543.7
13	Other Dry Hay & Roughage	
14	Silage	
15	Haylage	
16	Pasture	
17	<b>Total Feed Cost</b>	<b>99.16</b>
18	Return Over Feed Costs	<b>30.32</b>
	Other Direct Costs:	
20	Veterinary	1.30
21	Breeding	
22	Miscellaneous	1.49
23	Custom Work	6.59
24	Lease Expense	
25	Special Hired Labor	
26	Assigned Interest	
27	<b>Total Other Direct Costs</b>	<b>9.38</b>
28	<b>Total Direct Costs Including Feed</b>	<b>108.54</b>
29	Return Over All Direct Costs	<b>20.94</b>
30	Allocated Costs	
32	Act Int Pd Less Int Assigned-L26	9.20
33	General Hired Labor	0.17
34	Utilities & Miscellaneous	7.39
35	Power & Machinery	-PCAF 1.00 6.60
36	Livestock Equipment	-ECAF 1.00 5.53
37	Buildings & Fences	-BCAF 1.00 3.09
38	<b>Total Allocated Costs</b>	<b>31.98</b>
39	<b>Total Actual Listed Costs</b>	<b>140.52</b>
40	Return Over Actual Listed Costs	<b>-11.04</b>
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****		
41	Total Listed Costs Adj to 7% Min Int.	144.24
42	Return/Listed 7% Opportunity Interest	-14.76
45	Return/\$100 Feed Fed	130.57
46	Price/CWT Lamb Sold or Transferred	66.71
47	Ave Wt. Lamb Sold or Transferred	110
48	LBS. Wool/Sheep Sheared	9.9
49	Number of Ewes Exposed	78
50	Number of Ewes Lambing	78
51	Conception Rate	100.0
52	Number of Lambs Born	126
53	Percent Born/Ewe Exposed	161.5
54	Percent Born/Ewe Lambing	161.5
55	Percent Weaned/Ewe Lambing	143.6
56	Percent Ewe Death Loss: % Total Death Loss	2.5
57	Percent Lamb Death Loss: % Total Death Loss	7.5

AVERAGES PRICES OF FEED AND PRODUCE USED IN HOME, 1989

Farm Grown Grains

Oats	\$1.59 Bu.
Barley, Feed	1.79 Bu.
Wheat	2.86 Bu.
Oats Mixture	1.85 Bu.
Corn	2.12 Bu.

Forages

Alfalfa	57.19 Ton
Wild Hay	28.67 Ton
Mixed Legume	32.94 Ton
Haylage(55% Moisture)	27.83 Ton
Corn Silage	15.80 Ton
Straw	.74 Bale

Milk for Feed

Whole Milk-Gr. A \$11.58 Cwt.

Home Produce

Milk	.27 Qt.	Board for Hired Labor - \$5.00 per day (unless otherwise specified)
Beef (live)	.70 lb.	
Hogs (live)	.42 lb.	

EXPLANATION OF "WORK UNITS"

The total "Work Units" for any one farm is a measure of the size of that farm's 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. Days of work off the farm for pay are not included in work units computations in this report.

Number of Units for Each Class of Livestock and Acre of Crop

<u>Item</u>	<u>No. of Work Units</u>	<u>Item</u>	<u>No. of Work Units</u>
Dairy Cows	7.00 per Head	Small Grain	.30 per Acre
Other Dairy	1.20 per Head	Corn for Grain	.55 per Acre
Beef Breeding Cows	1.50 per Head	Corn Silage	.60 per Acre
Feeder Cattle	.12 per CWT	Alfalfa	.60 per Acre
Sheep, Farm Flock	.60 per Head	Other Hay	.40 per Acre
Lambs, Feeders	.30 per CWT	Legume Seed	.50 per Acre
Hogs, Complete	.12 per CWT	Grass Seed	.40 per Acre
Hogs, Finishing	.06 per CWT	Potatoes	3.00 per Acre
Hogs, Weaning Pigs	1.40 per Litter	Sugar Beets	2.00 per Acre
Chickens, Lay., Flock	5.00 per 100	Summer Fallow	.20 per Acre
Chickens, Broilers	.20 per CWT	Sunflowers	.40 per Acre
Turkeys, Poults	.12 per CWT	Soybeans	.45 per Acre
Turkeys	.20 per Hen	Edible Beans	.50 per Acre
Bees	.30 per Hive	Conservation Reserve	.05 per acre

SUMMARY OF MISCELLANEOUS ITEMS BY YEAR, 1989

<u>Items</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>Miscellaneous</u>					
Average Tillable Acres	839.4	775.9	857.4	897.6	881.4
Total Farm Capital	501762	439821	507656	486144	457415
Expenses/Dollar Income	.94	.93	.84	.86	.88
Percent Inc. from Farm Crops	72	74	69	68	54
Percent Inc. from Farm Lvstk.	23	20	23	20	26
HH & Personal Expenses	23439	22800	28772	28566	34181
Trac. & Mach. Exp./Crop Acre	35.26	32.04	30.38	29.15	32.46

Efficiencies

Yield per Acre

Oats	59.7	50.3	55.1	34.4	58.1
Alfalfa	2.7	3.6	2.9	1.6	2.0
Barley	62.6	53.4	54.6	36.1	58.5
Wheat, Spring	53.1	34.1	41.0	23.7	41.5
Flax	15.2	14.1	13.4	9.3	11.6
Sugar Beets *	42.5	43.6	53.4	37.2	15.8
Corn	56.3	83.5	99.4	75.8	57.7
Sunflowers, Oil	8.1	13.9	16.7	16.8	13.0
Soybeans	22.3	34.4	32.7	20.9	23.4

Return Above Feed Cost Per:

Dairy Cow	\$	968	990	1106	1014	1188
CWT Hogs		7	23	12	11	10
Ewe		39	64	99	----	30
Hogs, Litter		101	207	183	82	126
CWT Cattle		10	18	39	168	17
Beef Cow		60	126	291	241	264

Prices Received Per:

Oats, Bushel	\$	1.22	1.23	1.50	2.17	1.41
Alfalfa, Ton		46.66	41.40	43.26	61.14	57.36
Barley, Bushel		1.87	1.47	1.51	3.07	2.71
Wheat, Bushel		3.30	2.40	2.45	3.74	3.67
Flax, Bushel		5.09	3.73	3.19	8.23	7.08
Sugar Beets *		12.76	13.55	14.24	14.79	34.89
Corn, Bushel		2.01	1.55	1.67	2.41	2.18
Sunflowers, Oil		7.97	7.01	7.09	6.71	10.50
Soybeans, Bushel		4.82	4.40	4.95	7.33	5.48
CWT, Milk		11.90	11.65	11.72	11.45	12.85
CWT, Beef		51.14	53.36	68.04	74.28	72.22
CWT, Hogs		42.99	50.02	50.06	46.66	42.20
CWT, Lambs		67.07	68.21	88.84	----	67.71

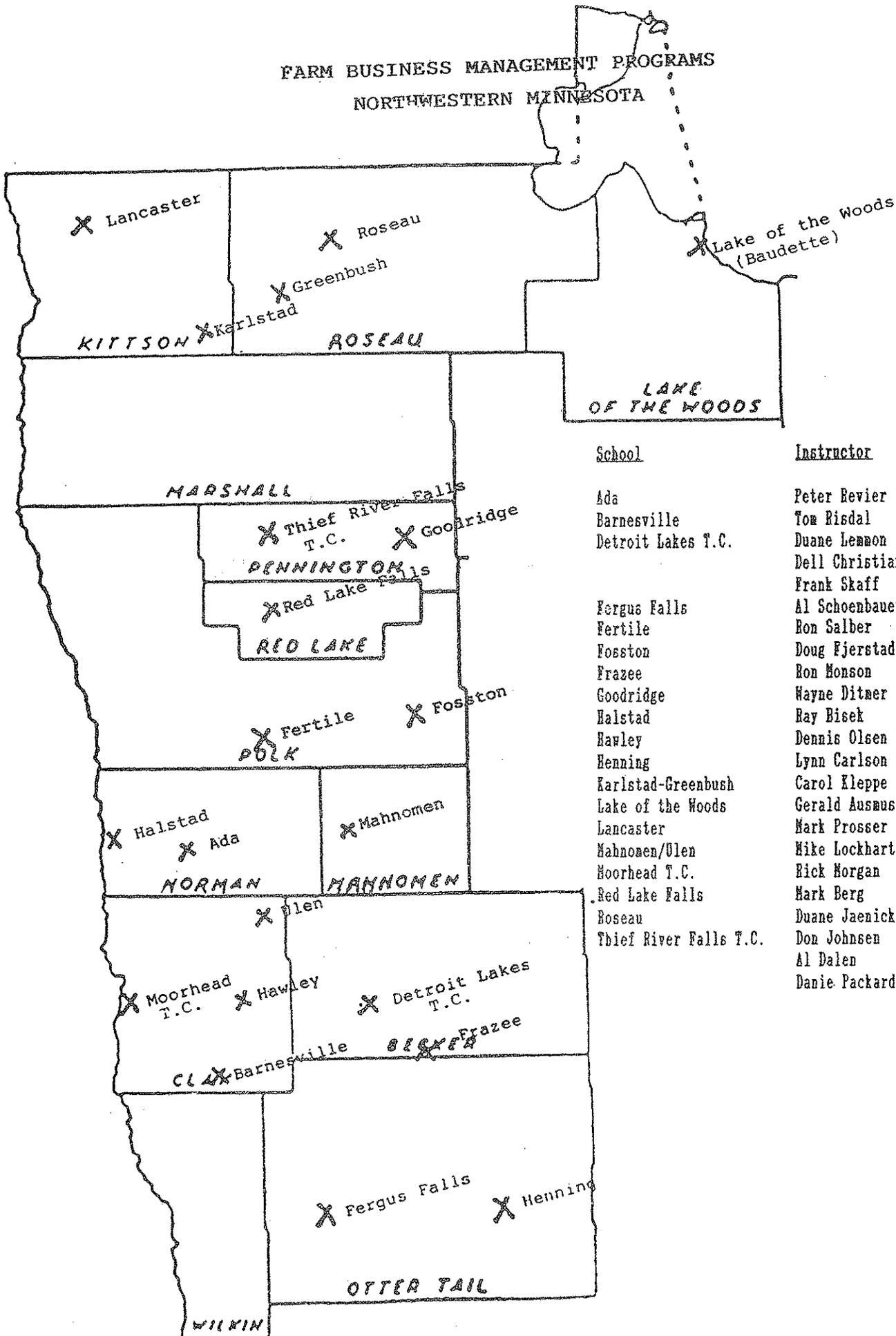
\* Sugar Beets: 1989 ---- Yield and price expressed in tons.  
 1985-88 - Yield & price expressed in cwt. extractable sugar.

SUMMARY OF FARM EARNINGS BY YEARS, 1989

<u>Items</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Number of Records Analyzed	490	520	535	605	630
<u>Farm Receipts</u>					
Livestock	\$ 35603	36841	36662	40737	57664
Crops	95623	79715	104490	112419	116973
Mach. & Equip. Sold & Gas Tax Ref.	3457	1866	3189	1465	2620
Income from Work Off the Farm	1433	1383	2583	1802	1917
Miscellaneous	<u>22597</u>	<u>31869</u>	<u>42133</u>	<u>32606</u>	<u>21010</u>
(1) Total Farm Sales	158714	151674	189097	189030	200183
(2) Increase in Farm Capital	9	0	20731	11169	17557
(3) Family Living from the Farm	369	370	279	379	396
(4) Total Farm Rec. (1+2+3)	159092	152044	210107	200573	218136
<u>Farm Expenses</u>					
Livestock & Livestock Exp.	5614	5823	7268	7171	15832
Feed Bought	6151	7092	6356	7898	11505
Fertilizers & Chemicals	21243	17239	21329	19301	24508
Other Crop Expenses	14441	19632	33867	36273	28615
Custom Work Hired	4357	3938	4593	3611	4762
Gas, Oil & Grease Bought (F.S.)	9031	6474	7094	6731	7492
Rep. & Op. Mach., Trac., Auto (F.S.)	10300	9573	11420	10781	12224
Rep. & Upkeep of Real Estate	919	1047	915	1159	1375
Rep. & Upkeep of Livestock Equip.	624	641	549	643	647
Wages of Hired Labor	5580	5672	6937	6165	6271
Utility Exp. (F.S.)	2148	2092	2064	2285	2396
Real Estate Taxes	5312	4413	4755	3842	2805
Gen. Farm Expense	<u>3612</u>	<u>3895</u>	<u>4847</u>	<u>4462</u>	<u>6449</u>
(5) Total Cash Operating Exp.	89334	87531	111994	110322	124882
(6) Pw. Crop & Gen. Mach. Bot (F.S.)	12238	11072	13520	11346	15843
(7) Livestock Equip. Bought	0	0	0	1323	0
(8) Real Estate Bought	7691	5196	8934	7689	6082
(9) Total Farm Purch. (5 to 8)	109763	103799	134447	130679	146806
(10) Decrease in Farm Capital		3034			
(11) Interest Paid on Farm Capital	35123	30686	34810	33639	31405
(12) Unpaid Family Labor	16	10	0	0	23
(13) Labor Chg. for Part. & Other Op.	0	0	0	0	0
(14) Bd. Furn. Hired Labor	<u>51</u>	<u>38</u>	<u>34</u>	<u>62</u>	<u>12</u>
(15) Total Farm Exp. (9 to 14)	144953	137567	169292	164380	178246
(16) Return to Labor & Mgmt (4-15)	14139	14477	40816	36198	39890



FARM BUSINESS MANAGEMENT PROGRAMS  
NORTHWESTERN MINNESOTA



School	Instructor
Ada	Peter Revier
Barnesville	Tow Bisdal
Detroit Lakes T.C.	Duane Lemmon
	Dell Christianson
	Frank Skaff
Fergus Falls	Al Schoenbauer
Fertile	Ron Salber
Fosston	Doug Ejerstad
Frazee	Ron Monson
Goodridge	Wayne Ditner
Halstad	Ray Bisek
Hawley	Dennis Olsen
Henning	Lynn Carlson
Karlstad-Greenbush	Carol Kleppe
Lake of the Woods	Gerald Ausmus
Lancaster	Mark Prosser
Mahnommen/Ulen	Hike Lockhart
Moorhead T.C.	Rick Morgan
Red Lake Falls	Mark Berg
Roseau	Duane Jaenicke
Thief River Falls T.C.	Don Johnson
	Al Dalen
	Danie Packard

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