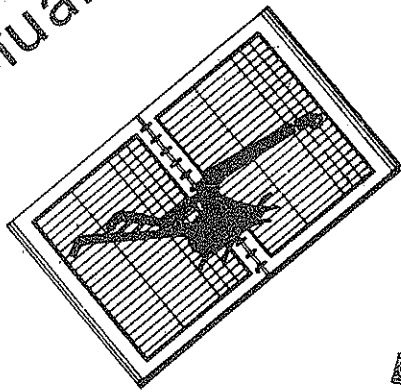
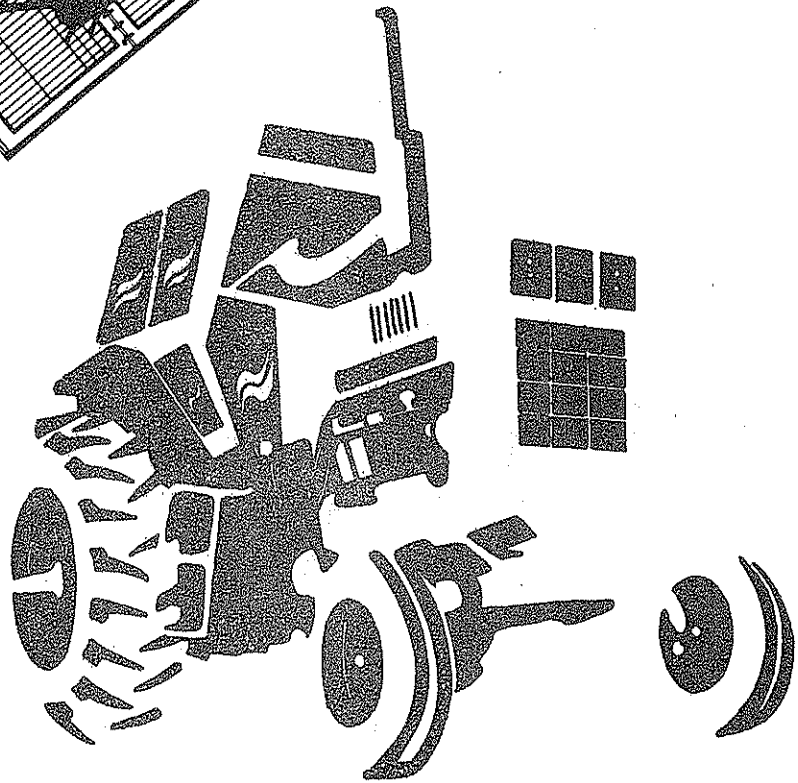


FARM BUSINESS MANAGEMENT

1988 Annual Report



NORTHWESTERN MINNESOTA
REPORT NO. 34
THIEF RIVER FALLS TECHNICAL
INSTITUTE
THIEF RIVER FALLS, MN
APRIL, 1989

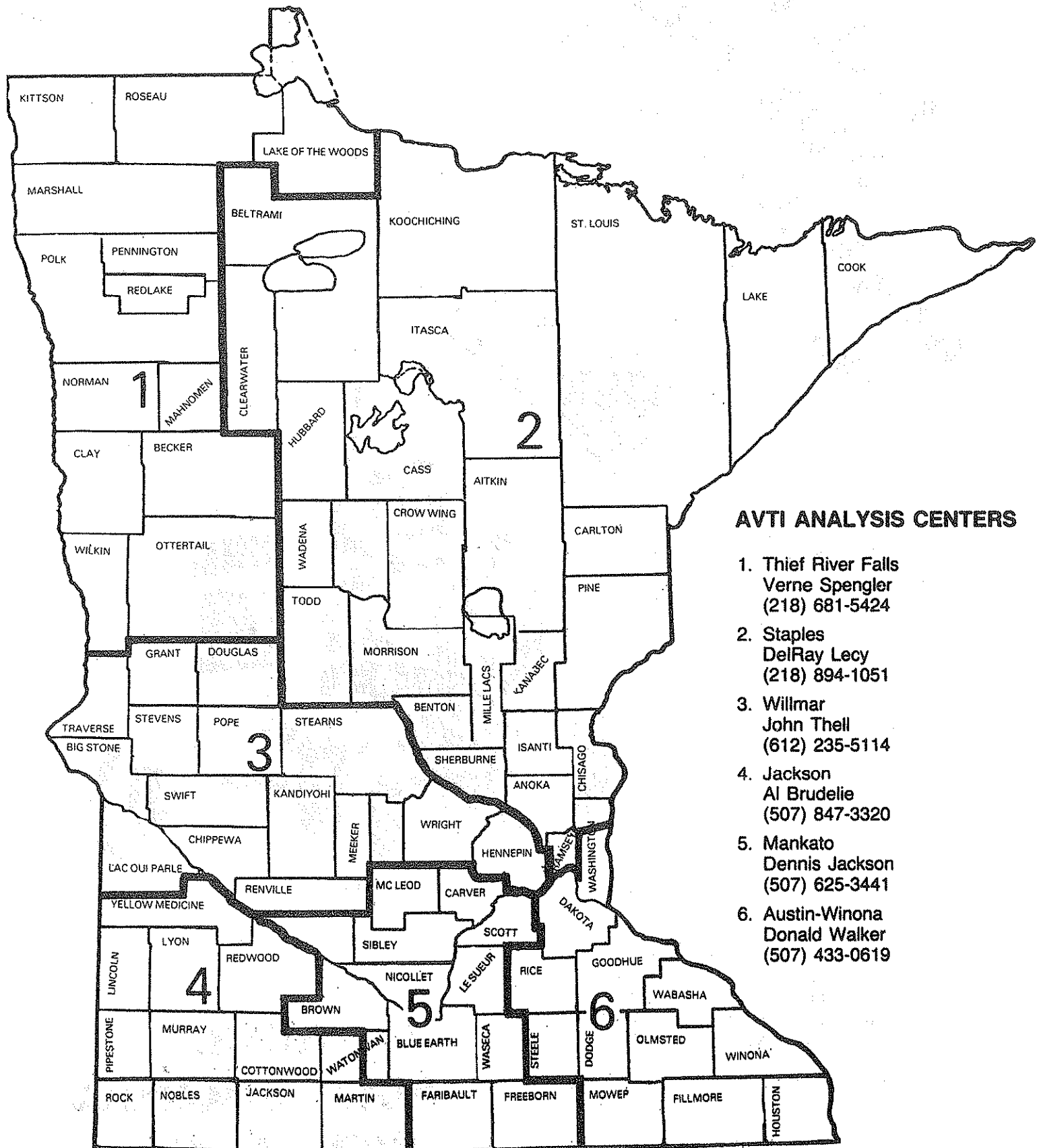


In Cooperation With
STATE BOARD OF VOCATIONAL
TECHNICAL EDUCATION
AGRICULTURAL EDUCATION DEPARTMENT
UNIVERSITY OF MINNESOTA

Price: \$5.00

AN ADULT EDUCATIONAL PROGRAM

VO-AG FARM MANAGEMENT AREAS



AVTI ANALYSIS CENTERS

1. Thief River Falls
Verne Spengler
(218) 681-5424
2. Staples
DelRay Lecy
(218) 894-1051
3. Willmar
John Thell
(612) 235-5114
4. Jackson
Al Brudelite
(507) 847-3320
5. Mankato
Dennis Jackson
(507) 625-3441
6. Austin-Winona
Donald Walker
(507) 433-0619

1988 REPORT OF THE FARM BUSINESS MANAGEMENT PROGRAM
IN NORTHWESTERN MINNESOTA

TABLE OF CONTENTS

	<u>Page</u>
Introduction.....	2
Schools Participating.....	3
Table 1 - Resources Used in the Farm Business, Whole Farm* ..	4-5
Table 2A - Whole Farm Summary of Cash Receipts*	6
Table 2B - Whole Farm Summary of Cash Expenses*	7
Table 3 - Enterprise Statement, Whole Farm*	8
Table 4 - Non-Farm Income & Household Pers. Expense, Op.	9
Table 5 - Operator's Financial Position	10-14
- Explanation of Table 5 Ratios	12
Table 6A - Operator's Share of Cash Receipts	15
Table 6B - Operator's Share of Cash Expenses	16
Table 8 - Measures of Farm Organization and Management Efficiency.....	17-18
Table 9 - Individual Crop Enterprise Analysis & Supplementary Crop Management Information	19
Table 10 - Detailed Crop Analyses:	
- Small Grains: Barley, Flax, Oats, Spring Wheat, Winter Wheat	20-27
- Row Crops: Corn, Potatoes, Soybeans, Sugar Beets, Sunflowers (Oil)	28-35
- Forages: Alfalfa Hay, Corn Silage.....	36-37
- Grass and Legume Seeds: Red Clover Seed, Bluegrass Seed, Timothy Seed.....	38-39
- Summer Fallow, Owned & Rented	40
Costs & Returns from Livestock Enterprises	41
Table 11B - Hogs, Finishing.....	42
Table 11C - Hogs, Weaning Pig Production.....	43
Table 12 - Dairy Cows.....	44
Table 13 - Other Dairy.....	45
Table 14 - All Dairy + Dual Purpose Cattle	46
Table 15A - Beef Cows	47
Table 15B - Beef Feeders.....	48
Average Prices Used & Work Units Explanation.....	49
Summary of Miscellaneous Items by Years.....	50
Summary of Farm Earnings by Years.....	51

*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 Institutes 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 year the farm business and enterprise analysis has been redesigned. Beginning this year all specific and general farm expenses have been allocated to each enterprise. The items are: building expenses, interest, utilities, insurance and general farm expense.

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 accurate report to be used for long range planning, short term cash purchase planning and cash flow projections.

1987 - U.S. Census of Ag.

Numbers of Farms in Minnesota Counties - Sorted by Area & Income

Selection: Area contains TRF									
Area	County	Total #	\$25-50,000	\$50-100,000	\$100,000+	25,000+	50,000+		
TRF	Lake -- Woods	222	31	27	13	71	40		
TRF	Mahnomen	393	82	67	49	198	116		
TRF	Red Lake	404	76	79	52	207	131		
TRF	Pennington	585	83	91	52	226	143		
TRF	Wilkin	505	85	106	178	369	284		
TRF	Kittson	576	95	121	163	379	284		
TRF	Roseau	1124	177	160	124	461	284		
TRF	Becker	1220	166	185	140	491	325		
TRF	Norman	718	108	157	186	451	343		
TRF	Marshall	1299	247	219	221	687	440		
TRF	Clay	1017	136	198	295	629	493		
TRF	Polk	1556	215	251	502	968	753		
TRF	Otter Tail	2925	433	561	410	1404	971		
		12544*	1934*	2222*	2385*	6541*	4607*		

THE 1970-71

1970-71

1970-71

1970-71

1970-71

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

Esther Mattson, our secretary, oversees 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:

<u>Schools</u>	<u>Instructors</u>
Ada	Peter Revier
Agassiz Valley Voc.(Fertile)	Ron Salber
Barnesville	Tom Risdal
Baudette	Gerald Ausmus
Detroit Lakes	Duane Lemmon
Fergus Falls	Allen Schoenbauer
Fosston	Doug Fjerstad
Frazee	Ron Monson
Goodridge	Wayne Ditmer
Hawley	Dennis Olsen
Henning	Charles Erickson
Karlstad-Greenbush	Bob Bollesen
Kittson County (Lancaster)	Mark Prosser
Mahnomen, Ulen	Mike Lockhart
Moorhead	Rick Morgan
Norman County West (Halstad)	Ray Bisek
Red Lake Falls	Mark Berg
Roseau	Duane Jaenicke
Thief River Falls	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

302 Records were included in the average.
560 Records were processed.

TABLE 1 RESOURCES USED IN THE BUSINESS, 1988

Average of 302 Farms

MEASURES OF FARM SIZE

2	Acres - Total	991.4
3	- Tillable	897.6
4	Work Units - Crops	349.2
5	- Livestock	143.7
6	- Other	5.5
7	- Total	498.4
8	Workers-Operator(s) Year Equivalents	1.19
9	-Hired	0.37
10	-Custom	0.03
11	-Unpaid Family	
12	-Total	1.59
13	Capital Invested-Per Worker	302239
14	Per Work Unit	964

WHOLE FARM INVENTORIES

	<u>January 1</u>	<u>December 31</u>
22 Feeder Cattle	7441	7810
23 Market Hogs	469	523
24 Feeder Lambs	212	204
25 Poultry-All Types		
26 Other Lvstk-Incl. Other Dairy	2957	2990
27 Crops Held For Sale & Lvstk Feed	56372	61855
28 Supplies/Prepays, Fuel & Lub.	9964	9636
29 Accts. Rec. & Hedging Acct. Equity	1872	3796
30 Dairy Cows	10368	10269
31 Other Dairy	3304	3623
32 Beef Breeding	6502	6901
33 Swine Breeding	502	417
34 Sheep Breeding	263	299
35 Other Breeding Livestock		
36 Auto & Truck (Farm Share)	8429	8935
37 Power & Machinery	51982	49588
38 Livestock Equipment	3054	2980
39 Custom Equipment	302	442
40 Irrigation Equipment	139	128
50 Bare Land	280563	286672
51 Land Improvements & Tile	26	23
52 Buildings-Fences-Etc.	30254	29053
60 Total Farm Capital	474975	486144
70 Increase or Decrease in Total Farm Capital		11169

* 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, 1988

		Average of 60 High Farms	Average of 60 Low Farms
MEASURES OF FARM SIZE			
2	Acres - Total	1528.2	828.7
3	- Tillable	1437.6	761.8
4	Work Units - Crops	558.9	304.7
5	- Livestock	92.8	99.5
6	- Other	3.6	2.0
7	- Total	655.3	406.2
8	Workers-Operator(s) Year Equiv.	1.36	1.10
9	-Hired	0.51	0.39
10	-Custom	0.03	0.02
11	-Unpaid Family		
12	-Total	1.90	1.51
13	Capital Invested-Per Worker	360369	337466
14	Per Work Unit	1045	1254

WHOLE FARM INVENTORIES*

		Jan 1	Dec 31	Jan 1	Dec 31
22	Feeder Cattle	18806	16784	3951	4345
23	Market Hogs	768	878	659	535
24	Feeder Lambs			1007	999
25	Poultry-All Types				
26	Other Lvstk-Incl.Other Dairy	1433	1468	1736	1700
27	Crops Held For Sale&Lvstk Fd	89305	129181	49173	38702
28	Supplies/Prepays,Fuel & Lub.	18357	15910	7372	6081
29	Accts Rec.& Hedg.Acct.Equity	5124	8382	1533	2932
30	Dairy Cows	6825	6679	5562	4838
31	Other Dairy	1813	2338	1278	1586
32	Beef Breeding	3287	4230	5368	5875
33	Swine Breeding	509	333	1205	1041
34	Sheep Breeding			304	294
35	Other Breeding Livestock				
36	Auto & Truck (Farm Share)	12590	13882	7437	8253
37	Power & Machinery	85687	80866	55240	51025
38	Livestock Equipment	2518	2408	972	1120
39	Custom Equipment			753	677
40	Irrigation Equipment	695	640		
50	Bare Land	373202	383137	339691	348113
51	Land Improvements & Tile			6	5
52	Buildings-Fences-Etc.	41982	39386	29458	28321
60	Total Farm Capital	662901	706502	512705	506442
70	Inc./Dec. in Total Fm.Cap.		43601		-6263

* 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 - WHOLE FARM SUMMARY OF CASH RECEIPTS, 1988

	Average of 302 Farms	High 60 Farms	Low 60 Farms
SALES OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2 Dairy Cows	2511	1423	1548
3 Dairy Products	22988	13901	11219
4 Other Dairy Cattle	2049	1006	976
5 Beef Breeding Cattle	4838	2804	3940
6 Beef Feeder Cattle	5829	16263	921
7 Hogs Complete & Mixed	972	2689	104
8 Hogs Finishing	242	447	221
9 Hogs Producing Feeder Pigs	746		2036
10 Sheep, Goats, Wool Breeding	149		403
11 Sheep, Goats, Wool, Feeding	164		825
13 Eggs	215		1081
16 Other Misc. Lvstk Income	34		
17 Total Sales or Prod. Lvstk.	40737	38531	23275
SALES OF CROPS			
21 Wheat	35937	76244	26360
22 Durum	540	2092	443
23 Other Small Grain	19840	40812	15267
24 Corn	7429	20498	6070
25 Soybeans	10147	13625	16067
26 Sunflowers	3074	10567	1718
27 Other Row Crops	27666	42308	27263
28 Legumes & Other Roughage	2384	1650	834
29 Grass Seed	1602	2473	477
32 Nursery, Timber & Other	48	241	
33 Sale of Crops&Supp.Purch.for Resale	3751	10760	
34 Total Sales From Crops & Supp.	112419	221269	94499
40 Government Payments & Set Aside	24647	46839	19461
41 Gas Tax Refund	12	15	7
42 Income From Work Off The Farm	1219	1892	817
43 Custom Work Enterprise Income	583		157
44 Patron Refunds(Cash 800, Equity 2000)	1541	2136	1502
45 Miscellaneous Farm Income	6406	10205	5359
46 Total Other Farm Income	34408	61088	27303
Total Farm Oper. Inc.	187564	320888	145076
50 Auto, Truck, & Machinery Sold	830	858	823
51 Irrigation Equipment Sold			
52 Custom Work Equipment Sold			
53 Livestock Equipment Sold	41		
54 Buildings & Fence Sold	78	206	
55 Land & Land Improvements Sold	205	317	667
56 Farm Capital Lease Income	312	516	440
57 Total Farm, Capital Sales	1466	1897	1930
58 Total Farm Sales	189030	322785	147006
60 Increase in Farm Capital	11169	43601	
61 Family Living From The Farm	379	249	330
62 Total Farm Receipts(58)+(60)+(61)	200578	366635	147336

This table includes both operator and landlord's share of cash receipts and inventory changes. For operators share of receipts see Table 6A.

TABLE 2B - WHOLE FARM SUMMARY OF CASH EXPENSES, 1988

	Average of 302 Farms	High 60 Farms	Low 60 Farms
PURCHASE OF LIVESTOCK			
5 Dairy Cows	292	316	196
6 Other Dairy Cattle	340	30	43
7 Beef Breeding Cattle	789	1472	101
8 Beef Feeder Cattle	2734	7318	897
9 Hogs Complete and Mixed	50	33	
10 Hogs Finishing	82	281	3
11 Hogs Producing Feeder Pigs	28		86
12 Sheep and Goats	10		3
13 Sheep, Feeders	125		628
17 Total Livestock Purchases	4451	9450	1958
20 Vet, Breeding & Misc. Lvstk.Exp.	2720	1767	1419
21 Purch. of Crops/Supplies for Resale	26943	63346	19593
22 Feed Bought	7898	6758	5519
23 Fertilizer	12224	20917	11214
24 Chemicals	7077	10602	7106
25 Other Crop Expense	9246	16352	8930
26 Irrigation Operating Expense	84	294	
27 Custom Work Oper.Costs Incl.Labor	239		
28 Custom Work Hired	3372	4346	3063
29 Gas, Diesel, Lub. (Farm Share)	6731	10041	5782
30 Repair & Upkeep of Lvstk. Equip.	643	557	494
31 Repair & Upkeep of Farm Real Estate	1159	1487	1058
32 Rep.& Oper.Of Mach,Trac,Truck,Auto	10725	15752	10504
33 Rep.& Upkeep of Irrigation Equip.	2	11	
34 Rep.& Upkeep of Cust.Work Ent.	54		13
35 Total All Repairs	12583	17807	12069
36 Wages of Hired Labor	6165	7648	6618
37 Pers.Property & Real Estate Taxes	3842	5510	4723
38 General Farm Expenses	4462	7387	3514
39 Utilities	2285	2364	1878
40 Total Cash Operating Expense	110322	184589	93386
50 Auto, Truck & Machinery Bought	10587	15618	9787
51 Irrigation Equipment Bought	5	23	
52 Custom Work Equipment Bought	269		
53 Livestock Equipment Bought	485	271	340
54 New Real Estate-Bldgs. & Improv.	1539	953	1979
55 New Real Estate-Land & Improv.	6150	9702	9155
56 Farm Cap.Lease Pmts, Except Land	1323	1708	2303
57 Total Capital Purchases	20357	28274	23563
58 Total Farm Purchases	130679	212863	116949
60 Decrease in Farm Capital			6263
61 Interest on Farm Capital (7% Chg)	33639	47929	35670
63 Board Furnished Hired Labor	62	26	
64 Total Farm Expense	164380	260818	158882
70 Ret To W.F.Oper Labor & Mgmt (T2A, L62-L64)	36198	105817	-11546
71 Number of Operators	1	1	1
72 Full Time Operator Equivalents	1.19	1.36	1.10
73 Ret/Oper Lab.& Mgmt/Full Time Op. Equiv (70/72)	30418	77807	-10496

TABLE 3 - ENTERPRISE STATEMENT WHOLE FARM

	Average of 302 Farms	High 60 Farms	Low 60 Farms
RETURNS & NET INCREASES			
3 Productive Livestock			
5 Net Livestock Lease Income	-107		-457
6 Dairy Cows Cattle	22223	13359	10856
7 Other Dairy Cattle	5422	3254	2429
8 Beef Breeding Cattle	5623	3648	4312
9 Beef Feeder Cattle	2429	5649	607
10 Hogs Complete and Mixed	894	2450	43
11 Hogs Finishing Enterprise	151	314	54
12 Producing Feeder Pigs	739		1912
13 Sheep & Goats and Wool	151		277
14 Sheep & Goats Feeders	62		311
15 Poultry, All Fowl	215		1081
18 Total All Productive Lvstck	37802	28674	21426
19 Value Of Feed Fed To Livestock	17598	12766	11623
20 Return Over Feed From Lvstck	20204	15908	9803
21 Crop, Seed, & Feed	124167	258584	90333
22 Fert. Chemicals, Seed & Other	29008	50710	28407
23 Ret.Over Direct Costs:Crops	95160	207874	61926
24 Crops&Supp.Purch For Resale(Net)	-23191	-52586	-19593
25 Cooperative Patronage Refunds	1541	2136	1502
26 Misc. Farm Income/Accts Rec.	7785	11197	6463
27 Custom Work Enterprise	65		67
28 Government Payment & Set Aside	24647	46839	19461
29 Total Returns & Net Increases	126211	231369	79629
EXPENSES & NET DECREASES			
31 Truck & Auto (Farm Share)	5783	7667	5088
32 Tractors & Crop Machinery	26019	39744	27399
33 Irrigation Equipment	18	89	
34 Utilities	2285	2364	1878
35 Livestock Equipment	1204	980	715
36 Buildings & Fences	3759	4956	3952
37 Land Improvements & Tile	222	186	233
38 Land	-409	-1063	-361
39 Vet & Misc. Lvstk. Expense	2720	1767	1419
40 All Labor Costs-Paid & Unpaid	6470	8036	6948
41 Property Tax	3842	5510	4723
42 General Farm Expense	4462	7387	3514
43 Int. on Fm.Cap.(7% Opport.Chg)	33639	47929	35670
44 Total Exp.& Net Decreases	90014	125552	91178
45 Ret. to W. F. Oper.Lab.& Mgmt.	36197	105817	-11549
46 Number of Farm Operators	1	1	1
47 Full Time Operator Equivalent	1.19	1.36	1.10
48 Ret.to Oper Lab.Mgmt/Full Time Oper	30418	77807	-10499

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 & HOUSEHOLD PERSONAL EXPENSE, 1988

	Average of 154 Farms	High 30 Farms	High 30 Farms
4 Number of Persons-Family	4	4	4
5 Number of Adult Equiv.-Family	3.0	3.2	2.9
6 Non Farm Income			
7 Outside Investment Income	1124	2731	916
8 Other Pers.Inc.& Inc.Tax Ref.	8836	7510	12139
9 Sale of Dwell.,Auto & Truck (Personal Share)	90	69	325
10 Net Cash From Non Farm Business	766	139	2063
11 Total Non Farm Income	10816	10449	15444
HOUSEHOLD EXPENSE			
14 Church & Charity	970	1619	850
15 Medical Care & Health Ins.	2988	3102	2509
16 Food & Meals Bought	4305	4866	3590
17 Operating Expense & Supplies	2012	2595	2169
18 Furnishings & Equipment	1231	1587	862
19 Clothing & Clothing Materials	1418	1901	767
20 Personal Care, Pers.Spending	2727	2559	2987
21 Education	1027	1036	1060
22 Recreation	355	874	171
23 Gifts & Special Events	696	979	505
24 Personal Interest	313	690	213
Tot Cash HH Detail Exp (Line 14-Line 24)	18042	21808	15683
26 Truck & Auto Expense:Personal	931	1043	939
27 Upkeep on Dwelling:Personal	6	9	15
29 Tele.& Elect.Expense: Personal	869	854	818
30 General Farm Expense: Personal	18	7	44
31 Total Cash Liv.& Oper. Exp.	19866	23722	17500
32 New Truck & Auto Personal	785	1016	637
33 New Dwell.Build.Land Bought:Pers.	701	1353	1039
34 Taxes & Other Deductions	3222	5841	1701
35 Life Insurance	870	1793	513
36 Paid on Personal Debt (Principal)	381	317	505
37 Savings & Invest.(Exc. Life Ins.)	2427	5480	965
38 Total Non Farm Cash Expense	28252	39521	22861
39 Tot.N/F Exp.Minus N/F Inc.	17435	29072	7417
40 Total Family Living From Farm	314	93	260
41 Tot Cash & Non Cash Expenses	28566	39614	23121
SUPPLEMENTARY INFORMATION			
43 Family Living From The Farm			
44 Milk & Cream (Quarts)	71	18	37
45 Beef & Buffalo (Pounds)	226	75	206
46 Pork (Pounds)	17		16
51 Total Family Living From Farm	314	93	260
52 Calculated Living Expense			
53 Total Family Living	49774	116131	10364
54 Minus Change in Net Worth	19654	73034	-15807
55 Apparent Family Living	30120	43097	26171
56 Tot Fam. Liv. Per Work Unit: Calculated	56.69	60.31	56.28
57 Net Family Living Per Work Unit	34.98	44.36	18.26

TABLE 5.1 OPERATORS FINANCIAL POSITION

Average of 302 Farms

	<u>January 1</u>	<u>December 31</u>
CURRENT ASSETS:		
4 Cash, Check. & Saving Acct. Bal: Pers.	3201	3605
5 Cash, Check. & Saving Acct. Bal: Farm	11641	11978
6 Hedging Account Equity	-5	539
7 Notes & Accts. Receivables Personal	111	238
8 Notes & Accts. Receivables: Farm	1877	3257
9 Crops Held For Sale	48432	52952
10 Livestock Feed	6480	7888
11 Supplies/Prepays	9769	9501
12 Feeder Cattle & Mkt. Other Dairy	10113	10547
13 Market Hogs	469	523
14 Feeder Lambs & Goats	212	204
17 Total Current Assets	92300	101233
INTERMEDIATE ASSETS:		
19 Dairy Cows	10088	10003
20 Other Dairy	3155	3492
21 Beef Breeding Cattle	6284	6606
22 Breeding Hogs	502	417
23 Breeding Sheep/Goats	263	299
25 Auto & Truck: Personal Share	1853	2297
26 Auto & Truck: Farm Share	8360	8845
27 Power, Machinery & Equipment	51315	48912
28 Livestock Equipment	3038	2970
29 Custom Work Equipment	302	442
30 Irrigation Equipment	139	128
31 Stocks & Bonds & Co-op Equity	17551	18604
35 Other Household Personal	6438	6760
36 Retirement Accts. & Life Ins.	9605	12067
37 Total Intermediate Assets	118891	121841
LONG TERM ASSETS;		
39 Buildings & Fences	29658	28511
40 Land & Land Improvements	171511	177734
41 Dwelling	28355	29401
42 Real Estate Personal	3778	3838
43 Total Long Term Assets	233302	239483
44 Total Assets	444493	462557
45 Total Personal Assets (Incl Cash)	70891	76810
46 Total Farm Assets (Incl Cash)	373602	385748

TABLE 5.2 OPERATORS FINANCIAL POSITION, 1988, (CON'T.)

Average of 302 Farms

	January 1	December 31		
CURRENT LIABILITIES				
4 Accounts Payable:Personal	175	151		
5 Accounts Payable:Farm	1045	1281		
6 Cur.Port.of Intermed. & L-Term Debt	35155	34602		
7 Delinquent Interest	673	1092		
8 Rents & Lease Pmts.Due From Past Yr.	27	89		
9 Total Current Liabilities	37075	37215		
INTERMEDIATE LIABILITIES:*				
11 Notes Payable:Personal	138	253		
12 Notes Payable:Farm	4642	4673		
13 Chattel Mortgages:Personal	176	164		
14 Chattel Mortgages:Farm	52484	50296		
16 Total Intermediate Liabilities	57441	55385		
LONG TERM LIABILITIES:*				
18 R.E.Mortgages & Contracts:Pers.	2201	2750		
19 R.E.Mortgages & Contracts:Farm	112985	112761		
21 Total Long Term Liabilities	115186	115512		
22 Total Liabilities	209701	208112		
23 Equity	234791	254445		
24 Change in Equity		19654		
*****RATIOS*****				
	Formula	Descr.	Beg.Yr.	End Yr.
32 Current	T5.1 L17 / T5.2 L9	Debt	2.49	2.72
Current Assets / Current Liabilities				
33 Intermediate	T5.1 L37/T5.2 L16	Debt	2.07	2.20
Intermed. Assets/Intermed. Liab.				
34 Working	(T5.1L17+L37)/(T5.2L9+L16)	Debt	2.23	2.41
(C.Assets+I.Assets)/(C.Liab.+I.Liab)				
35 Fixed	T.51 L43/T5.2 L21	Debt	2.03	2.07
Long Term Assts/Long Term Liab.				
36 Net Capital	T5.1 L44/T5.2 L22	Debt	2.12	2.22
Total Assets/Total Liabilities				
37 Equity/Asset	T5.2 L23/T5.1 L44	Eqty	0.53	0.55
Total Equity/Total Assets				
38 Debt/Equity	T5.2 L22/T5.2L23	Debt	0.89	0.82
Total Liabilities/Total Equity				
39 Current Debt	T5.2 L9/T5.2 L22	Curr	0.18	0.18
Current Liabilities/Total Liab.				
51 Return to Capital,Family Labor & Mgmt.			38958	
52 Total Income From Non-Farm Source			10816	
53 Total Family Income			49774	
54 Total Family Cash & Non-Cash Exp.			28566	
55 Total Money Borrowed			63725	
56 Total Paid on Debt			65959	

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

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 and 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 dept and equity. A ratio of 1.00 indicates that equity and dept. 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.

TABLE 5.1 OPERATORS FINANCIAL POSITION

	High 60 Farms		Low 60 Farms	
	Jan.1	Dec.31	Jan.1	Dec.31
CURRENT ASSETS:				
4 Cash, Check. & Sav. Acct. Bal: Pers.	5301	6780	3474	3809
5 Cash, Check. & Sav. Acct. Bal: Farm	18521	19291	9386	8998
6 Hedging Account Equity	-58	2286	21	281
7 Notes & Accts. Rec.: Personal	339	821	92	67
8 Notes & Accts. Rec.: Farm	2815	4290	2149	4086
9 Crops Held For Sale	91469	124795	60538	44963
10 Livestock Feed	5251	9621	2297	3539
11 Supplies/Prepays	21505	19735	8254	7439
12 Feeder Cattle & Mkt. Other Dairy	22088	20524	5081	5553
13 Market Hogs	768	878	530	552
14 Feeder Lambs & Goats			731	842
17 Total Current Assets	167999	209019	92552	80130
INTERMEDIATE ASSETS:				
19 Dairy Cows	7339	6993	4568	4264
20 Other Dairy	1478	2028	1354	1656
21 Beef Breeding Cattle	4893	5872	5250	4815
22 Breeding Hogs	509	333	1209	1062
23 Breeding Sheep/Goats				
25 Auto & Truck: Personal Share	2788	3223	1513	2014
26 Auto & Truck: Farm Share	12443	13656	7520	8331
27 Power, Machinery & Equipment	89531	83866	57029	52602
28 Livestock Equipment	2992	2812	934	1097
29 Custom Work Equipment			1520	2117
30 Irrigation Equipment	695	640		
31 Stocks & Bonds & Co-op Equity	29019	31111	23614	23222
35 Other Household Personal	10415	10951	6950	7269
36 Retirement Accts. & Life Ins.	24437	31387	5960	7104
37 Total Intermediate Assets	186538	192871	117422	115552
LONG TERM ASSETS:				
39 Buildings & Fences	38532	36709	30669	29796
40 Land & Land Improvements	283566	295055	169420	177257
41 Dwelling	46095	48582	27052	27857
42 Real Estate Personal	9393	9368	3157	3264
43 Total Long Term Assets	377586	389714	230297	238174
44 Total Assets	732124	791604	440271	433856
45 Total Pers. Assets (Incl Cash)	127786	142223	71811	74606
46 Total Farm Assets (Incl Cash)	604337	649381	368459	359250

TABLE 5.2 OPERATORS FINANCIAL POSITION, 1988, (CON'T.)

		High 60 Farms		Low 60 Farms	
		Jan.1	Dec.31	Jan.1	Dec.31
CURRENT LIABILITIES					
4	Accounts Payable:Personal	383	450	353	104
5	Accounts Payable:Farm	261	541	1295	1679
6	Cur.Port.-Intermed.& L-Term Debt	57728	54077	32486	33984
7	Delinquent Interest	1257	1359	111	760
8	Rent & Lease Pmts.Due Fr.Past Yr.		82		
9	Total Current Liabilities	59628	56509	34244	36528
INTERMEDIATE LIABILITIES:*					
11	Notes Payable:Personal	-16	538	160	80
12	Notes Payable:Farm	7197	7795	8375	9388
13	Chattel Mortgages:Personal	397	284	11	
14	Chattel Mortgages:Farm	74878	65144	58008	58623
16	Total Intermediate Liabilities	82456	73762	66553	68090
LONG TERM LIABILITIES:*					
18	R.E.Mortgages & Contracts:Pers.	1302	2943	2032	2705
19	R.E.Mortgages & Contracts:Farm	168494	165113	100771	105670
21	Total Long Term Liabilities	169796	168056	102803	108375
22	Total Liabilities	311880	298327	203600	212993
23	Equity	420243	493278	236670	220863
24	Change in Equity		73034		-15807
*****RATIOS*****					
Formula		Descr.	Beg.Yr.		End Yr.
			Jan.1	Dec.31	Jan.1 Dec.31
32	Current T5.1 L17 / T5.2 L9 Current Assets / Current Liab.	Debt	2.82	3.70	2.70 2.19
33	Intermediate T5.1 L37/T5.2 L16 Intermed. Assets/Intermed. Liab.	Debt	2.26	2.61	1.76 1.70
34	Working(T5.1L17+L37)/(T5.2L9+L16) (C.Assets+I.Assets)/(C.Liab.+I.Liab)	Debt	2.50	3.09	2.08 1.87
35	Fixed T5.1 L43/T5.2 L21 Long Term Assts/Long Term Liab.	Debt	2.22	2.32	2.24 2.20
36	Net Capital T5.1 L44/T5.2 L22 Total Assets/Total Liabilities	Debt	2.35	2.65	2.16 2.04
37	Equity/Asset T5.2 L23/T5.1 L44 Total Equity/Total Assets	Eqty	0.57	0.62	0.54 0.51
38	Debt/Equity T5.2 L22/T5.2L23 Total Liabilities/Total Equity	Debt	0.74	0.60	0.86 0.96
39	Current Debt T5.2 L9/T5.2 L22 Current Liabilities/Total Liab.	Curr	0.19	0.19	0.17 0.17
51	Return to Capital,Family Labor & Mgmt.		105682		-5080
52	Total Income From Non-Farm Source		10449		15444
53	Total Family Income		116131		10364
54	Total Family Cash & Non-Cash Exp.		39614		23121
55	Total Money Borrowed		124850		67991
56	Total Paid on Debt		138682		59720

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

TABLE 6A - OPERATOR'S SHARE OF CASH RECEIPTS, 1988

	Average of 302 Farms	High 60 Farms	Low 60 Farms
SALE OF LIVESTOCK & LIVESTOCK PRODUCTS			
2 Dairy Cows	2453	1506	1147
3 Dairy Products	22580	17308	10046
4 Other Dairy Cattle	2000	1576	839
5 Beef Breeding Cattle	4604	5027	3816
6 Beef Feeder Cattle	5689	17003	1248
7 Hogs Complete & Mixed	972	2689	
8 Hogs Finishing	242	447	84
9 Hogs Producing Feeder Pigs	743		2133
10 Sheep, Goats, Wool:Breeding	149		
11 Sheep, Wool:Feeders	164		825
13 Eggs	215		1081
16 Other Misc. Livestock Income	34		
17 Total Sales of Prod. Lvstk	39844	45557	21218
SALE OF CROPS			
21 Wheat	35201	75392	28673
22 Durum	526	2092	369
23 Other Small Grain	19230	40279	15227
24 Corn	7357	14639	6531
25 Soybeans	10005	10853	14227
26 Sunflowers	2663	8782	1511
27 Grain Sorghum & Other Row Crops	26654	48604	35799
28 Legumes & Other Roughage	2379	3861	981
29 Grass Seed	1589	2967	525
32 Nursery, Timber, & Other	48	241	
33 Sale of Crops Sup.Purch for Resale	3751	12677	1892
34 Total Sales From Crops & Sup.	109402	220385	105735
40 Government Pmts.& Set Aside Acres	24325	43686	22424
41 Gas Tax Refund	12	15	26
42 Income From Work Off Farm	1198	1712	1614
43 Custom Work Enterprise Income	583		2243
44 Patron Refunds(Cash 800,Equity 2000)	1508	2491	1619
45 Miscellaneous Farm Income	6380	10105	6483
46 Total Other Farm Income	34006	58009	34409
47 Total Farm Operating Income	183253	323951	161362
50 Auto, Truck & Machinery Sold	830	1165	1004
53 Livestock Equipment Sold	41		
54 Buildings & Improvements Sold	78	206	
55 Land & Land Improvements Sold	205	317	667
56 Farm Capital Lease Income	312	507	422
57 Total Farm Capital Sales	1466	2195	2093
58 Total Farm Sales	184719	326145	163455
60 Increase in Farm Capital	11809	44274	
61 Family Living From The Farm	374	278	207
62 Total Farm Rec.+(58)+(60)+(61)	196902	370697	163662
70 Tot.Farm Operating Income(58)-(57)	183253	323951	161362
71 Total Cash Farm Oper.Exp.(65/43)	139184	236699	137832
72 Net Cash Operating Income (70)-(71)	44069	87252	23530

TABLE 6B OPERATOR'S SHARE OF CASH EXPENSES, 1988

	Average of 302 Farms	High 60 Farms	Low 60 Farms
PURCHASE OF LIVESTOCK			
5 Dairy Cows	292	316	106
6 Other Dairy Cattle	339	23	60
7 Beef Breeding Cattle	788	2361	82
8 Beef Feeder Cattle	2724	7391	897
9 Hogs Complete & Mixed	50	33	
10 Hogs Finishing	82	281	3
11 Hogs Producing Feeder Pigs	28		86
12 Sheep, Goats, Wool: Breeding	10		
13 Sheep, Wool: Feeders	125		628
17 Total Livestock Purchases	4437	10405	1861
20 Vet, Breeding & Misc.Lvstk.Exp.	2683	2346	1353
21 Purch.of Crops & Sup.For Resale	26641	61965	20759
22 Feed Bought	7819	7595	5013
23 Fertilizer	11967	20623	11794
24 Chemicals	6988	11185	8533
25 Other Crop Expense	9091	15572	9889
26 Irrigation Operation Cost	84	231	
27 Custom Work Oper Excl Lab.& Rep.	239		601
28 Custom Work Hired	3322	4788	3328
29 Gas, Diesel & Lubricants	6630	10331	6685
30 Rep.& Upkeep of Lvstk Equip.	639	616	387
31 Repair & Upkeep of Farm Real Estate	1145	1685	1246
32 Rep.& Oper.of Mach,Trac,Truck,Auto	10590	16482	12473
33 Rep.& Upkeep of Irrigation Equip.	2	11	
34 Rep.& Upkeep of Custom Work Equip.	54		273
35 Total All Repairs	12430	18794	14379
36 Wages of Hired Labor	6114	8804	9701
37 Personal Prop. & Real Estate Taxes	2589	4575	2429
38 General Farm Expense	4391	7158	4007
39 Utilities	2249	2609	1979
40 Farm Capital Lease Expense	16647	27337	20283
41 Total Interest Payable This Year	14864	22382	15237
42 Interest Actually Paid (\$ 14581)			
43 Total Cash Operating Expense	139184	236699	137832
50 Auto,Truck & Machinery Bought	10334	16224	9778
51 Irrigation Equipment Bought	5	23	
52 Custom Work Equipment Bought	269		1242
53 Livestock Equipment Bought	485	414	340
54 New R.E.: Buildings & Fences	1539	1400	2184
55 New R. E.: Land & Land Improve.	6150	10285	8568
57 Total Capital Purchases	18782	28347	22111
58 Total Farm Purchases	157966	265045	159943
60 Decrease In Farm Capital			8821
61 Interest on Farm Capital: 7% Chg	10887	20175	9589
63 Board Furnished Hired Labor	60	3	197
64 Total Farm Expense	168913	285223	178550
70 Return to Oper.Labor & Mgmt (6A, L62 -6B, L64)	27989	85474	-14888
71 *Return to Cap & Fam Labor (Incl Spouse-L41)	38958	105682	-5080

MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

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

1. Ret. to Lab. & Mgmt. - A measure of the relative financial return for the operators 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 and the Thermometer Chart 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, 1988

Items	Average of 302 Farms	60 High Farms	60 Low Farms
3 Return to Oper. Labor & Management, Whole Farm T2	36198	105817	-11546
4 Crop Yield Index	99.5	101.7	84.6
5 Return Over All Listed Cost Per Tillable Acre (Excl Pasture)	23.73	30.57	-14.76
6 Gross Return Per Tillable Acre (Excl. Pasture)	155.95	152.07	124.87
7 Index Return/\$100 Feed Fed	100.0	106.3	81.9
8 Livestock Units/100 Acres*	5.21	3.02	4.35
9 Size of Business in Tot.Work Units	498.4	655.3	406.2
10 Work Units/Worker	313.46	344.89	269.01
11 Power,Mach.,Equip,Bldg Exp/Work Unit	78.39	85.15	96.09
30 Number of Animal Units	47.38	43.82	33.09
31 Work Units:			
32 Crops	349.2	558.9	304.7
33 Productive Livestock	143.7	92.8	99.5
34 Other Productive Units	5.5	3.6	2.0
35 Expenses/Work Unit:			
36 Tractor & Crop Machinery	52.24	60.79	67.45
37 Auto & Truck: Farm Share	11.60	11.70	12.53
38 Electricity: Farm Share	3.55	2.70	3.55
39 Livestock Equipment	2.42	1.50	1.76
40 Building, Fence & Tiling	7.54	7.56	9.73
41 Other Expense Per Total Work Units			
42 General Farm, Tele.& Other Util.	9.99	12.18	9.72
43 Wages For Hired Labor	12.37	11.67	16.29
44 Tractor, Crop Mach,Exp./Crop Acre**	29.15	27.65	36.46
45 Fm.Pow.&Mach.Cost Allocated to Lvstk	2528.60	1251.96	2279.63
46 Fm.Pow.&Mach.Cost Allocated to Crops	25692.40	44109.04	28319.37
47 Bldg,Fence,Tile Cost Alloc.To Lvstk	1028.86	651.65	999.61
48 Bldg,Fence,Tile Cost Alloc.to Crops	2716.55	4870.82	3248.61
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.Living	38958	99344	-2727
53 Oper.Depreciation:Farm Power&Crop Mach.	11422	18014	11814
54 Oper.Depreciation:Irrigation Equipment	16	78	
55 Oper.Depreciation:Custom Work Equip.	129		76
56 Oper.Depreciation:Livestock Equipment	512	365	192
57 Oper.Depreciation:Buildings,Fences	2608	3204	3056
58 Oper.Depreciation:Land Improv.&Tile	222	186	233
59 Total Operator's Depreciation	14909	21847	15371
60 Crop Marketing Index			

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. This year for the first time all interest expense, wages paid, utilities and general farm expense have been allocated to each crop. This change, when compared with previous years, will generally show higher listed costs per acre and per unit of production.

Land cost on owned land is the greater of the opportunity cost or the actual cost of ownership. Individual records show the calculation of both actual and opportunity costs. Area averages report only the higher of the two costs on line 37. 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 302 Farms	High 60 Farms	Low 60 Farms
PERCENT LAND TILLABLE	89.5	93.4	90.6
FERTILIZER COST PER ACRE	17.20	18.58	18.27
CROP CHEMICALS PER ACRE	10.49	10.44	12.63
SEED & OTHER COST PER ACRE	14.93	16.91	15.77
FUEL & LUBR. USED PER ACRE	9.93	9.25	10.36
REP. & MAINT. COST PER ACRE	15.97	14.69	18.40
*TOTAL ACRES CROPPED	671.61	1071.97	570.84

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

TABLE 10 - CROP DATA FOR BARLEY, OWNED LAND, 1988

Items	Average of 146 Farms Per Acre	29 High Farms Per Acre	29 Low Farms Per Acre
3 Acres	91.4	108.1	55.0
4 Yield	36.1	57.3	9.6
5 Value per Unit	3.07	3.25	3.01
6 Crop Product Return	110.85	186.32	28.87
7 Other Crop Income	<u>26.64</u>	<u>3.82</u>	<u>84.44</u>
8 Total Crop Return	137.49	190.14	113.31
VARIABLE COSTS			
10 Fertilizer	19.62	21.49	19.38
11 Chemicals	8.76	10.92	8.22
12 Seed	6.42	6.40	6.55
13 Crop Drying	0.07	0.14	0.02
14 Crop Insurance	0.91	0.78	1.13
15 Other Expenses	1.96	2.54	1.93
16 Special Hired Labor	0.73	0.08	0.69
17 Custom Work Hired	1.37	2.25	0.40
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	<u>39.84</u>	<u>44.60</u>	<u>38.31</u>
21 Return Over Variable Costs	97.65	145.54	75.00
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	13.83	14.50	16.60
32 Farm Power & Machinery - Operation	18.27	18.67	16.65
33 Building & Fence Cost	3.04	2.89	3.09
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	29.01	29.00	26.30
38 Utilities & Gen. Farm Expense	4.32	4.32	4.64
39 Hired Labor	2.81	3.07	1.87
41 Actual Non R.E.Int. Allocated	<u>4.08</u>	<u>3.37</u>	<u>5.29</u>
42 Total Allocated Costs	75.36	75.82	74.44
43 Total Listed Costs	<u>115.20</u>	<u>120.42</u>	<u>112.75</u>
44 Return Over Listed Costs	22.29	69.72	0.56
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	115.91	122.62	112.84
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.	3.19	2.10	11.74
55 Total Adjusted Cost/Unit of Prod.	3.21	2.14	11.78
56 Cash Variable Cost/Unit of Prod.	1.92	1.29	6.95
57 Return Over Listed Costs Per Unit	0.62	1.22	0.06
58 Breakeven Yield/Unit of Prod.	37.5	37.1	37.5

TABLE 10 - CROP DATA FOR BARLEY, RENTED LAND, 1988

Items	Average of 146 Farms Per Acre	29 High Farms Per Acre	29 Low Farms Per Acre
3 Acres	80.8	88.8	73.8
4 Yield	31.3	57.0	8.1
5 Value per Unit	3.05	3.12	3.26
6 Crop Product Return	95.46	178.16	26.41
7 Other Crop Income	26.23	2.78	49.81
8 Total Crop Return	121.69	180.94	76.22
VARIABLE COSTS			
10 Fertilizer	18.76	19.75	16.50
11 Chemicals	8.06	9.65	5.51
12 Seed	6.35	6.06	6.40
13 Crop Drying	0.02	0.05	
14 Crop Insurance	1.23	1.73	0.38
15 Other Expenses	1.86	2.38	1.63
16 Special Hired Labor	0.16	0.02	0.58
17 Custom Work Hired	1.03	1.46	0.26
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	37.46	41.10	31.26
21 Return Over Variable Costs	84.23	139.84	44.96
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	10.47	12.11	7.66
32 Farm Power & Machinery - Operation	17.33	15.35	14.72
33 Building & Fence Cost	2.46	2.55	1.96
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	31.21	32.66	24.41
38 Utilities & Gen. Farm Expense	3.90	4.12	3.27
39 Hired Labor	2.10	1.96	1.30
41 Actual Non R.E.Int. Allocated	4.00	4.67	4.04
42 Total Allocated Costs	71.47	73.42	57.36
43 Total Listed Costs	108.93	114.52	88.62
44 Return Over Listed Costs	12.76	66.42	-12.40
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	109.93		
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.	3.48	2.01	10.94
55 Total Adjusted Cost/Unit of Prod.	3.52		
56 Cash Variable Cost/Unit of Prod.	2.07	1.18	6.74
57 Return Over Listed Costs Per Unit	0.41	1.17	-1.53
58 Breakeven Yield/Unit of Prod.	35.7	36.7	27.2

TABLE 10 - CROP DATA FOR FLAX, 1988

Items	OWNED LAND	RENTED LAND
	Average of 8 Farms Per Acre	Average of 9 Farms Per Acre
3 Acres	28.9	33.3
4 Yield	9.3	10.5
5 Value per Unit	8.23	7.84
6 Crop Product Return	76.57	82.67
7 Other Crop Income	18.72	6.31
8 Total Crop Return	95.29	88.98
VARIABLE COSTS		
10 Fertilizer	10.31	7.69
11 Chemicals	2.66	6.43
12 Seed	9.45	8.41
13 Crop Drying		
14 Crop Insurance		
15 Other Expenses	2.70	1.59
16 Special Hired Labor		
17 Custom Work Hired	1.11	1.44
18 Irrigation Operation		
19 Assigned Interest		
20 Total Variable Costs	26.23	25.56
21 Return Over Variable Costs	69.06	63.42
ALLOCATED COSTS (VARIABLE & FIXED)		
31 Farm Power & Machinery - Ownership	13.81	8.35
32 Farm Power & Machinery - Operation	16.54	16.46
33 Building & Fence Cost	4.26	2.04
34 Irrigation Ownership Cost		
35 Land Ownership Cost		
36 Land Oppor. Ownership Cost		
37 Land Cost	21.70	26.78
38 Utilities & Gen. Farm Expense	3.77	3.33
39 Hired Labor	1.56	0.24
41 Actual Non R.E.Int. Allocated	6.26	2.34
42 Total Allocated Costs	67.90	59.54
43 Total Listed Costs	94.13	85.10
44 Return Over Listed Costs	1.16	3.88
SUPPLEMENTARY MANAGEMENT INFORMATION		
51 Total Cost Adj to a Min 7% Int.	94.39	86.79
52 Work Units Assigned/Acre	0.30	0.30
53 Power Cost Allocation Factor	1.00	1.00
54 Total Listed Cost/Unit of Prod.	10.12	8.10
55 Total Adjusted Cost/Unit of Prod.	10.14	8.23
56 Cash Variable Cost/Unit of Prod.	5.85	4.56
57 Return Over Listed Costs Per Unit	0.12	0.37
58 Breakeven Yield/Unit of Prod.	11.4	10.9

TABLE 10 - CROP DATA FOR OATS, OWNED LAND, 1988

Items	Average of 62 Farms Per Acre	12 High Farms Per Acre	12 Low Farms Per Acre
3 Acres	54.9	64.0	56.8
4 Yield	34.4	61.3	5.9
5 Value per Unit	2.17	2.17	2.26
6 Crop Product Return	74.72	133.06	13.40
7 Other Crop Income	11.40	1.56	32.98
8 Total Crop Return	86.12	134.62	46.38
VARIABLE COSTS			
10 Fertilizer	15.81	16.91	17.87
11 Chemicals	2.30	2.61	1.44
12 Seed	7.72	8.72	6.88
13 Crop Drying			
14 Crop Insurance	0.15		0.60
15 Other Expenses	0.62	0.77	0.39
16 Special Hired Labor	0.05		
17 Custom Work Hired	1.35	1.48	0.30
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	28.00	30.48	27.48
21 Return Over Variable Costs	58.12	104.14	18.90
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	12.88	12.73	12.38
32 Farm Power & Machinery - Operation	17.81	19.64	19.37
33 Building & Fence Cost	2.39	2.09	3.33
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	25.01	34.00	26.81
38 Utilities & Gen. Farm Expense	3.64	4.44	4.86
39 Hired Labor	1.53	2.08	1.07
41 Actual Non R.E.Int. Allocated	4.41	4.92	7.36
42 Total Allocated Costs	67.67	79.90	75.18
43 Total Listed Costs	95.67	110.38	102.66
44 Return Over Listed Costs	-9.55	24.24	-56.28
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	95.61	110.84	100.39
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.	2.78	1.80	17.40
55 Total Adjusted Cost/Unit of Prod.	2.78	1.81	16.97
56 Cash Variable Cost/Unit of Prod.	1.61	1.00	10.19
57 Return Over Listed Costs Per Unit	-0.28	0.40	-9.54
58 Breakeven Yield/Unit of Prod.	44.1	50.9	45.4

TABLE 10 - CROP DATA FOR OATS, RENTED LAND, 1988

Items	Average of 54 Farms Per Acre	10 High Farms Per Acre	10 Low Farms Per Acre
3 Acres	59.2	38.0	76.3
4 Yield	34.3	66.4	6.7
5 Value per Unit	2.25	2.40	2.29
6 Crop Product Return	77.18	159.74	15.37
7 Other Crop Income	<u>11.20</u>	<u>5.11</u>	<u>33.58</u>
8 Total Crop Return	88.38	164.85	48.95
VARIABLE COSTS			
10 Fertilizer	13.38	17.08	10.05
11 Chemicals	2.74	3.32	1.52
12 Seed	6.71	7.76	4.40
13 Crop Drying			
14 Crop Insurance	0.57	1.42	1.05
15 Other Expenses	0.76	1.18	0.42
16 Special Hired Labor	0.59	1.87	
17 Custom Work Hired	0.95	0.50	0.07
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	<u>25.69</u>	<u>33.13</u>	<u>17.51</u>
21 Return Over Variable Costs	62.69	131.72	31.44
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	13.13	12.63	14.72
32 Farm Power & Machinery - Operation	19.22	18.16	15.60
33 Building & Fence Cost	1.67	2.55	2.04
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	21.26	22.20	22.20
38 Utilities & Gen. Farm Expense	3.56	3.61	3.81
39 Hired Labor	0.78	0.71	0.64
41 Actual Non R.E.Int. Allocated	<u>3.85</u>	<u>2.87</u>	<u>3.05</u>
42 Total Allocated Costs	63.47	62.73	62.06
43 Total Listed Costs	<u>89.16</u>	<u>95.86</u>	<u>79.57</u>
44 Return Over Listed Costs	-0.78	68.99	-30.62
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	89.75	97.89	61.51
52 Work Units Assigned/Acre	0.30	0.30	0.30
53 Power Cost Allocation Factor	0.99	1.00	1.00
54 Total Listed Cost/Unit of Prod.	2.60	1.44	11.88
55 Total Adjusted Cost/Unit of Prod.	2.62	1.47	9.15
56 Cash Variable Cost/Unit of Prod.	1.55	0.88	6.06
57 Return Over Listed Costs Per Unit	-0.02	1.04	-4.57
58 Breakeven Yield/Unit of Prod.	39.6	39.9	34.7

TABLE 10 - CROP DATA FOR SPRING WHEAT, OWNED LAND, 1988

Items	Average of 286 Farms Per Acre	57 High Farms Per Acre	57 Low Farms Per Acre
3 Acres	127.4	114.6	149.6
2 Yield	23.7	40.1	7.4
5 Value per Unit	3.74	3.76	3.66
6 Crop Product Return	88.81	150.63	27.15
7 Other Crop Income	51.50	28.60	95.21
8 Total Crop Return	140.31	179.23	122.36
VARIABLE COSTS			
10 Fertilizer	21.26	22.46	20.93
11 Chemicals	9.49	10.08	7.45
12 Seed	8.06	8.04	7.74
13 Crop Drying	0.10	0.08	0.11
14 Crop Insurance	1.32	0.68	1.51
15 Other Expenses	1.72	3.02	1.54
16 Special Hired Labor	0.40	0.28	0.15
17 Custom Work Hired	1.24	1.50	1.02
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	43.59	46.12	40.44
21 Return Over Variable Costs	96.72	133.11	81.92
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	13.05	16.05	11.94
32 Farm Power & Machinery - Operation	16.92	20.02	14.45
33 Building & Fence Cost	2.95	3.65	2.85
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	33.36	30.87	30.58
38 Utilities & Gen. Farm Expense	5.32	4.69	6.14
39 Hired Labor	3.49	3.32	3.05
41 Actual Non R.E.Int. Allocated	5.25	5.02	6.75
42 Total Allocated Costs	80.34	83.62	75.76
43 Total Listed Costs	123.93	129.74	116.20
44 Return Over Listed Costs	16.38	49.49	6.16
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	123.43	130.98	114.57
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.	5.23	3.24	15.70
55 Total Adjusted Cost/Unit of Prod.	5.20	3.27	15.43
56 Cash Variable Cost/Unit of Prod.	3.15	1.97	9.57
57 Return Over Listed Costs Per Unit	0.69	1.23	0.83
58 Breakeven Yield/Unit of Prod.	33.1	34.5	31.7

TABLE 10 - CROP DATA SPRING WHEAT, RENTED LAND, 1988

Items		Average of 385 Farms Per Acre	77 High Farms Per Acre	77 Low Farms Per Acre
3	Acres	118.7	108.0	111.1
4	Yield	22.6	39.5	7.4
5	Value per Unit	3.74	3.72	3.55
6	Crop Product Return	84.46	146.62	26.12
7	Other Crop Income	<u>52.54</u>	<u>27.35</u>	<u>92.35</u>
8	Total Crop Return	137.00	173.97	118.47
VARIABLE COSTS				
10	Fertilizer	20.66	20.56	19.10
11	Chemicals	9.20	8.19	7.46
12	Seed	7.79	7.62	8.24
13	Crop Drying	0.06	0.05	0.01
14	Crop Insurance	2.01	2.41	2.09
15	Other Expenses	1.29	1.50	1.35
16	Special Hired Labor	0.13	0.01	0.05
17	Custom Work Hired	1.26	0.77	1.04
18	Irrigation Operation			
19	Assigned Interest			
20	Total Variable Costs	<u>42.40</u>	<u>41.09</u>	<u>39.33</u>
21	Return Over Variable Costs	94.60	132.88	79.14
ALLOCATED COSTS (VARIABLE & FIXED)				
31	Farm Power & Machinery - Ownership	9.68	10.89	7.86
32	Farm Power & Machinery - Operation	15.58	16.92	13.40
33	Building & Fence Cost	2.02	2.34	1.66
34	Irrigation Ownership Cost			
35	Land Ownership Cost			
36	Land Oppor. Ownership Cost			
37	Land Cost	38.46	37.21	35.75
38	Utilities & Gen. Farm Expense	4.05	4.06	4.63
39	Hired Labor	2.40	2.43	1.79
41	Actual Non R.E.Int. Allocated	<u>4.85</u>	<u>5.63</u>	<u>3.99</u>
42	Total Allocated Costs	77.04	79.48	69.08
43	Total Listed Costs	<u>119.44</u>	<u>120.57</u>	<u>108.41</u>
44	Return Over Listed Costs	17.56	53.40	10.06
SUPPLEMENTARY MANAGEMENT INFORMATION				
51	Total Cost Adj to a Min 7% Int.	119.30		
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.	5.28	3.05	14.65
55	Total Adjusted Cost/Unit of Prod.	5.28		
56	Cash Variable Cost/Unit of Prod.	3.07	1.78	8.53
57	Return Over Listed Costs Per Unit	0.78	1.35	1.36
58	Breakeven Yield/Unit of Prod.	31.9	32.4	30.5

TABLE 10 - CROP DATA FOR WINTER WHEAT, 1988

Items	OWNED LAND	RENTED LAND
	Average of 22 Farms Per Acre	Average of 20 Farms Per Acre
3 Acres	58.5	79.6
4 Yield	27.4	30.3
5 Value per Unit	3.45	3.52
6 Crop Product Return	94.34	106.62
7 Other Crop Income	30.87	31.78
8 Total Crop Return	125.21	138.40
VARIABLE COSTS		
10 Fertilizer	14.51	18.12
11 Chemicals	2.41	2.27
12 Seed	5.97	7.15
13 Crop Drying	0.14	0.24
14 Crop Insurance	0.55	1.70
15 Other Expenses	1.54	3.40
16 Special Hired Labor	0.20	0.11
17 Custom Work Hired	1.71	1.80
18 Irrigation Operation		
19 Assigned Interest		
20 Total Variable Costs	26.84	34.79
21 Return Over Variable Costs	98.37	103.61
ALLOCATED COSTS (VARIABLE & FIXED)		
31 Farm Power & Machinery - Ownership	11.49	9.99
32 Farm Power & Machinery - Operation	18.74	20.70
33 Building & Fence Cost	2.60	2.14
34 Irrigation Ownership Cost		
35 Land Ownership Cost		
36 Land Oppor. Ownership Cost		
37 Land Cost	27.98	27.70
38 Utilities & Gen. Farm Expense	4.58	4.86
39 Hired Labor	3.11	1.02
41 Actual Non R.E.Int. Allocated	3.08	4.16
42 Total Allocated Costs	71.58	70.57
43 Total Listed Costs	98.42	105.36
44 Return Over Listed Costs	26.79	33.04
SUPPLEMENTARY MANAGEMENT INFORMATION		
51 Total Cost Adj to a Min 7% Int.	99.90	105.64
52 Work Units Assigned/Acre	0.30	0.30
53 Power Cost Allocation Factor	0.98	1.00
54 Total Listed Cost/Unit of Prod.	3.59	3.48
55 Total Adjusted Cost/Unit of Prod.	3.65	3.49
56 Cash Variable Cost/Unit of Prod.	2.06	2.16
57 Return Over Listed Costs Per Unit	0.98	1.09
58 Breakeven Yield/Unit of Prod.	28.5	29.9

TABLE 10 - CROP DATA FOR CORN - GRAIN, OWNED LAND, 1988

Items	Average of 98 Farms Per Acre	19 High Farms Per Acre	19 Low Farms Per Acre
3 Acres	47.6	44.0	34.4
4 Yield	75.8	113.7	28.5
5 Value per Unit	2.41	2.45	2.41
6 Crop Product Return	182.94	278.98	68.84
7 Other Crop Income	<u>28.66</u>	<u>16.43</u>	<u>37.97</u>
8 Total Crop Return	211.60	295.41	106.81
VARIABLE COSTS			
10 Fertilizer	23.95	24.70	23.52
11 Chemicals	10.38	7.89	5.52
12 Seed	17.14	17.52	15.44
13 Crop Drying	3.72	8.66	0.99
14 Crop Insurance	0.74	0.66	0.52
15 Other Expenses	1.53	2.50	1.02
16 Special Hired Labor	0.67	1.25	0.44
17 Custom Work Hired	2.90	3.66	3.72
18 Irrigation Operation			
19 Assigned Interest	<u>0.11</u>		
20 Total Variable Costs	61.14	66.84	51.16
21 Return Over Variable Costs	150.46	228.57	55.65
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	25.17	23.75	17.21
32 Farm Power & Machinery - Operation	31.74	34.16	30.00
33 Building & Fence Cost	8.55	9.23	3.17
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	40.14	44.64	36.40
38 Utilities & Gen. Farm Expense	9.33	10.70	6.02
39 Hired Labor	3.76	4.52	2.88
41 Actual Non R.E.Int. Allocated	<u>12.44</u>	<u>11.14</u>	<u>12.09</u>
42 Total Allocated Costs	131.13	138.14	107.77
43 Total Listed Costs	<u>192.27</u>	<u>204.98</u>	<u>158.93</u>
44 Return Over Listed Costs	19.33	90.43	-52.12
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	188.99	201.48	151.89
52 Work Units Assigned/Acre	0.55	0.55	0.55
53 Power Cost Allocation Factor	0.99	0.99	1.00
54 Total Listed Cost/Unit of Prod.	2.54	1.80	5.58
55 Total Adjusted Cost/Unit of Prod.	2.49	1.77	5.33
56 Cash Variable Cost/Unit of Prod.	1.56	1.12	3.58
57 Return Over Listed Costs Per Unit	0.26	0.80	-1.83
58 Breakeven Yield/Unit of Prod.	79.8	83.7	65.9

TABLE 10 - CROP DATA FOR CORN - GRAIN, RENTED LAND, 1988

Items	Average of 118 Farms Per Acre	23 High Farms Per Acre	23 Low Farms Per Acre
3 Acres	53.9	62.2	34.4
4 Yield	60.3	99.2	22.0
5 Value per Unit	2.39	2.41	2.29
6 Crop Product Return	144.08	239.13	50.38
7 Other Crop Income	<u>33.71</u>	<u>21.95</u>	<u>55.26</u>
8 Total Crop Return	177.79	261.08	105.64
VARIABLE COSTS			
10 Fertilizer	26.05	27.77	25.32
11 Chemicals	11.32	11.09	8.72
12 Seed	16.79	15.58	17.53
13 Crop Drying	3.65	7.32	0.38
14 Crop Insurance	1.24	1.08	1.51
15 Other Expenses	1.39	2.38	0.78
16 Special Hired Labor	0.26	0.80	
17 Custom Work Hired	1.99	2.36	0.67
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	<u>62.69</u>	<u>68.38</u>	<u>54.91</u>
21 Return Over Variable Costs	115.10	192.70	50.73
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	17.42	31.96	14.77
32 Farm Power & Machinery - Operation	29.26	37.77	23.40
33 Building & Fence Cost	5.73	11.32	4.71
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	39.46	40.04	28.83
38 Utilities & Gen. Farm Expense	8.16	10.88	5.78
39 Hired Labor	4.86	3.30	2.01
41 Actual Non R.E.Int. Allocated	<u>10.63</u>	<u>15.61</u>	<u>9.45</u>
42 Total Allocated Costs	115.52	150.88	88.95
43 Total Listed Costs	<u>178.21</u>	<u>219.26</u>	<u>143.86</u>
44 Return Over Listed Costs	-0.42	41.82	-38.22
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	176.27	180.59	117.47
52 Work Units Assigned/Acre	0.55	0.55	0.55
53 Power Cost Allocation Factor	0.99	1.00	0.99
54 Total Listed Cost/Unit of Prod.	2.96	2.21	6.54
55 Total Adjusted Cost/Unit of Prod.	2.92	1.82	5.35
56 Cash Variable Cost/Unit of Prod.	1.92	1.37	4.34
57 Return Over Listed Costs Per Unit	-0.01	0.42	-1.74
58 Breakeven Yield/Unit of Prod.	74.6	91.0	62.8

TABLE 10 - CROP DATA FOR POTATOES, SEED, OWNED & RENTED, 1988

Items	Average of 26 Farms Per Acre
3 Acres	37.9
4 Yield, in CWT.	101.6
5 Value per Unit	9.82
6 Crop Product Return	997.64
7 Other Crop Income	<u>113.65</u>
8 Total Crop Return	<u>1111.29</u>
VARIABLE COSTS	
10 Fertilizer	30.42
11 Chemicals	23.94
12 Seed	71.43
13 Crop Drying	
14 Crop Insurance	1.75
15 Other Expenses	35.03
16 Special Hired Labor	28.52
17 Custom Work Hired	3.69
18 Irrigation Operation	
19 Assigned Interest	
20 Total Variable Costs	<u>194.78</u>
21 Return Over Variable Costs	<u>916.51</u>
ALLOCATED COSTS (VARIABLE & FIXED)	
31 Farm Power & Machinery-Ownership	43.36
32 Farm Power & Machinery-Operation	94.93
33 Building & Fence Cost	30.65
34 Irrigation Ownership Cost	
35 Land Ownership Cost	
36 Land Oppor.Ownership Cost	
37 Land Cost	40.88
38 Utilities & Gen. Farm Expense	40.27
39 Hired Labor	20.59
41 Actual Non R.E.Int. Allocated	<u>37.39</u>
42 Total Allocated Costs	<u>308.07</u>
43 Total Listed Costs	<u>502.85</u>
44 Return Over Listed Costs	<u>608.44</u>
SUPPLEMENTARY MANAGEMENT INFORMATION	
51 Total Cost Adj to a Min 7% Int.	488.68
52 Work Units Assigned/Acre	3.00
53 Power Cost Allocation Factor	1.00
54 Total Listed Cost/Unit of Prod.	4.95
55 Total Adjusted Cost/Unit of Prod.	4.81
56 Cash Variable Cost/Unit of Prod.	1.92
57 Return Over Listed Costs Per Unit	5.99
58 Breakeven Yield/Unit of Prod.	51.2

TABLE 10 - CROP DATA FOR SOYBEANS, OWNED LAND, 1988

Items	Average of 100 Farms Per Acre	20 High Farms Per Acre	20 Low Farms Per Acre
3 Acres	79.2	90.0	87.5
4 Yield	20.9	33.5	6.8
5 Value per Unit	7.33	7.33	7.03
6 Crop Product Return	153.41	245.40	47.83
7 Other Crop Income	19.09	0.80	60.53
8 Total Crop Return	172.50	246.20	108.20
VARIABLE COSTS			
10 Fertilizer	8.51	9.27	7.45
11 Chemicals	15.58	13.08	15.84
12 Seed	10.93	11.27	12.75
13 Crop Drying	0.03		
14 Crop Insurance	3.57	4.78	4.90
15 Other Expenses	3.23	6.79	0.78
16 Special Hired Labor	0.73	2.10	0.08
17 Custom Work Hired	1.62	1.54	0.22
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	44.20	48.82	42.02
21 Return Over Variable Costs	128.30	197.38	66.34
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	18.81	18.73	10.89
32 Farm Power & Machinery - Operation	22.06	24.07	17.51
33 Building & Fence Cost	4.86	6.03	3.55
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	44.53	45.77	46.73
38 Utilities & Gen. Farm Expense	8.35	8.60	8.75
39 Hired Labor	5.35	4.31	4.56
41 Actual Non R.E.Int. Allocated	8.79	12.19	4.58
42 Total Allocated Costs	112.75	119.70	96.57
43 Total Listed Costs	156.95	168.52	138.59
44 Return Over Listed Costs	15.55	77.68	-30.23
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	154.43	161.33	138.65
52 Work Units Assigned/Acre	0.45	0.45	0.45
53 Power Cost Allocation Factor	0.97	0.97	0.90
54 Total Listed Cost/Unit of Prod.	7.51	5.03	20.38
55 Total Adjusted Cost/Unit of Prod.	7.38	4.82	20.39
56 Cash Variable Cost/Unit of Prod.	4.25	2.93	11.39
57 Return Over Listed Costs Per Unit	0.74	2.32	-4.45
58 Breakeven Yield/Unit of Prod.	21.4	23.0	19.7

TABLE 10 - CROP DATA FOR SOYBEANS, RENTED LAND, 1988

Items	Average of	31 High	31 Low
	156 Farms Per Acre	Farms Per Acre	Farms Per Acre
3 Acres	76.5	73.1	79.3
4 Yield	18.4	31.6	7.2
5 Value per Unit	7.30	7.29	8.27
6 Crop Product Return	134.44	230.71	59.26
7 Other Crop Income	<u>28.03</u>	<u>2.52</u>	<u>71.12</u>
8 Total Crop Return	162.47	233.23	130.38
VARIABLE COSTS			
10 Fertilizer	5.82	6.09	3.13
11 Chemicals	15.29	12.97	16.24
12 Seed	11.57	11.34	11.88
13 Crop Drying	0.17		0.01
14 Crop Insurance	3.54	1.74	3.58
15 Other Expenses	2.33	3.60	2.50
16 Special Hired Labor	0.29	1.92	0.06
17 Custom Work Hired	2.09	0.78	0.33
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	<u>41.10</u>	<u>38.43</u>	<u>37.73</u>
21 Return Over Variable Costs	121.37	194.80	92.65
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Mach.- Ownership	12.69	19.64	12.75
32 Farm Power & Mach.- Operation	21.76	27.46	19.32
33 Building & Fence Cost	2.30	3.39	2.17
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor.Ownership Cost			
37 Land Cost	44.66	47.10	35.32
38 Utilities & Gen. Farm Expense	5.74	5.81	6.19
39 Hired Labor	3.14	2.67	4.46
41 Actual Non R.E.Int. Allocated	<u>9.06</u>	<u>12.24</u>	<u>10.98</u>
42 Total Allocated Costs	99.35	118.31	91.19
43 Total Listed Costs	<u>140.45</u>	<u>156.74</u>	<u>128.92</u>
44 Return Over Listed Costs	22.02	76.49	1.46
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	137.50	108.25	105.17
52 Work Units Assigned/Acre	0.45	0.45	0.45
53 Power Cost Allocation Factor	0.94	1.00	0.89
54 Total Listed Cost/Unit of Prod.	7.63	4.96	17.91
55 Total Adjusted Cost/Unit of Prod.	7.47	3.42	14.68
56 Cash Variable Cost/Unit of Prod.	4.39	2.74	10.93
57 Return Over Listed Costs Per Unit	1.20	2.42	0.20
58 Breakeven Yield/Unit of Prod.	19.2	21.5	15.6

TABLE 10 - CROP DATA FOR SUGAR BEETS, OWNED LAND, 1988

Items	Average of 31 Farms Per Acre	10 High Farms Per Acre	10 Low Farms Per Acre
3 Acres	125.8	118.4	72.8
4 Yield*	37.2	45.3	26.7
5 Value per Unit	14.79	14.99	14.65
6 Crop Product Return	550.57	678.51	390.81
7 Other Crop Income	29.75	33.45	53.65
8 Total Crop Return	580.32	711.96	444.46
VARIABLE COSTS			
10 Fertilizer	18.43	18.81	23.28
11 Chemicals	50.63	38.74	39.24
12 Seed	31.32	28.47	32.66
13 Crop Drying			
14 Crop Insurance	9.38	9.34	2.06
15 Other Expenses	26.19	28.61	23.43
16 Special Hired Labor	34.68	25.63	29.77
17 Custom Work Hired	16.68	27.09	13.90
18 Irrigation Operation			
19 Assigned Interest	2.35	3.43	5.41
20 Total Variable Costs	189.67	180.12	169.76
21 Return Over Variable Costs	390.65	531.84	274.70
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	47.95	54.16	55.47
32 Farm Power & Machinery - Operation	78.20	73.44	86.48
33 Building & Fence Cost	12.12	10.63	4.86
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	62.69	56.68	49.38
38 Utilities & Gen. Farm Expense	26.72	24.87	18.63
39 Hired Labor	27.38	19.81	26.66
41 Actual Non R.E.Int. Allocated	29.79	26.20	37.17
42 Total Allocated Costs	284.85	265.79	278.65
43 Total Listed Costs	474.52	445.91	448.41
44 Return Over Listed Costs	105.80	266.05	-3.95
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	462.44	443.77	427.51
52 Work Units Assigned/Acre	2.00	2.00	2.00
53 Power Cost Allocation Factor	0.84	0.84	0.85
54 Total Listed Cost/Unit of Prod.	12.76	9.84	16.79
55 Total Adjusted Cost/Unit of Prod.	12.43	9.80	16.03
56 Cash Variable Cost/Unit of Prod.	9.46	7.16	12.69
57 Return Over Listed Costs Per Unit	2.84	5.87	-0.15
58 Breakeven Yield/Unit of Prod.	32.1	29.7	30.6

* Yield of sugar beets is expressed in CWT. of extractable sugar.

TABLE 10 - CROP DATA FOR SUGAR BEETS, RENTED LAND, 1988

Items	Average of 72 Farms Per Acre	14 High Farms Per Acre	14 Low Farms Per Acre
3 Acres	111.1	66.3	97.4
4 Yield*	34.0	49.3	21.0
5 Value per Unit	14.80	14.95	14.74
6 Crop Product Return	503.49	737.68	309.71
7 Other Crop Income	<u>39.12</u>	<u>9.43</u>	<u>64.16</u>
8 Total Crop Return	542.61	747.11	373.87
VARIABLE COSTS			
10 Fertilizer	20.10	21.76	24.92
11 Chemicals	41.93	42.20	51.51
12 Seed	30.65	31.00	28.95
13 Crop Drying			
14 Crop Insurance	6.21	1.70	3.28
15 Other Expenses	37.10	56.70	26.58
16 Special Hired Labor	37.55	42.04	33.82
17 Custom Work Hired	12.39	11.03	8.28
18 Irrigation Operation			
19 Assigned Interest	<u>4.45</u>	<u>4.59</u>	<u>1.74</u>
20 Total Variable Costs	190.38	211.01	179.07
21 Return Over Variable Costs	352.23	536.10	194.80
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	39.18	44.65	38.09
32 Farm Power & Machinery - Operation	67.52	60.35	71.57
33 Building & Fence Cost	7.09	3.85	7.87
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	57.75	47.29	50.64
38 Utilities & Gen. Farm Expense	24.19	14.90	26.76
39 Hired Labor	20.24	4.34	22.95
41 Actual Non R.E.Int. Allocated	24.88	21.99	42.92
42 Total Allocated Costs	<u>240.85</u>	<u>197.37</u>	<u>260.80</u>
43 Total Listed Costs	431.23	408.38	439.87
44 Return Over Listed Costs	111.38	338.73	-66.00
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	421.17	380.74	366.61
52 Work Units Assigned/Acre	2.00	2.00	2.00
53 Power Cost Allocation Factor	0.85	0.81	0.80
54 Total Listed Cost/Unit of Prod.	12.68	8.28	20.95
55 Total Adjusted Cost/Unit of Prod.	12.38	7.72	17.44
56 Cash Variable Cost/Unit of Prod.	9.62	6.34	16.35
57 Return Over Listed Costs Per Unit	3.28	6.87	-3.14
58 Breakeven Yield/Unit of Prod.	29.1	27.3	29.8

TABLE 10 - CROP DATA FOR SUNFLOWERS - OIL, 1988

Items	Owned Land	Rented Land
	Average of 20 Farms Per Acre	Average of 24 Farms Per Acre
3 Acres	85.5	82.0
4 Yield	10.6	12.3
5 Value per Unit	10.63	10.60
6 Crop Product Return	112.71	130.38
7 Other Crop Income	13.56	12.34
8 Total Crop Return	126.27	142.72
VARIABLE COSTS		
10 Fertilizer	10.75	15.02
11 Chemicals	6.61	5.98
12 Seed	13.49	11.85
13 Crop Drying	0.22	0.13
14 Crop Insurance	1.66	0.83
15 Other Expenses	0.99	1.15
16 Special Hired Labor	0.11	
17 Custom Work Hired	0.98	0.32
18 Irrigation Operation		
19 Assigned Interest		
20 Total Variable Costs	34.81	35.28
21 Return Over Variable Costs	91.46	107.44
ALLOCATED COSTS (VARIABLE & FIXED)		
31 Farm Power & Machinery-Ownership	15.60	13.30
32 Farm Power & Machinery-Operation	21.03	18.89
33 Building & Fence Cost	3.73	2.32
34 Irrigation Ownership Cost		
35 Land Ownership Cost		
36 Land Oppor. Ownership Cost		
37 Land Cost	26.58	35.58
38 Utilities & Gen. Farm Expense	12.12	7.46
39 Hired Labor	5.93	2.18
41 Actual Non R.E.Int. Allocated	6.56	3.90
42 Total Allocated Costs	91.55	83.63
43 Total Listed Costs	126.36	118.91
44 Return Over Listed Costs	-0.09	23.81
SUPPLEMENTARY MANAGEMENT INFORMATION		
51 Total Cost Adj to a Min 7% Int.	127.29	122.20
52 Work Units Assigned/Acre	0.40	0.40
53 Power Cost Allocation Factor	1.00	1.00
54 Total Listed Cost/Unit of Prod.	11.92	9.67
55 Total Adjusted Cost/Unit of Prod.	12.01	9.93
56 Cash Variable Cost/Unit of Prod.	7.58	5.51
57 Return Over Listed Costs Per Unit	-0.01	0.73
58 Breakeven Yield/Unit of Prod.	11.9	11.2

TABLE 10 - CROP DATA FOR ALFALFA HAY, OWNED LAND, 1988

Items	Average of 136 Farms Per Acre	27 High Farms Per Acre	27 Low Farms Per Acre
3 Acres	75.5	60.4	83.4
4 Yield	1.6	3.0	0.6
5 Value per Unit	61.14	60.58	57.63
6 Crop Product Return	96.37	183.56	33.86
7 Other Crop Income	30.93	6.90	48.25
8 Total Crop Return	127.30	190.46	82.11
VARIABLE COSTS			
10 Fertilizer	10.60	9.98	7.04
11 Chemicals	0.24	0.58	
12 Seed	2.78	3.20	0.91
13 Crop Drying			
14 Crop Insurance	0.04	0.23	
15 Other Expenses	1.31	0.78	1.29
16 Special Hired Labor	0.41	0.15	
17 Custom Work Hired	1.03	0.96	1.37
18 Irrigation Operation			
19 Assigned Interest	0.07		
20 Total Variable Costs	16.48	15.88	10.61
21 Return Over Variable Costs	110.82	174.58	71.50
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	17.60	24.85	15.49
32 Farm Power & Machinery - Operation	25.26	31.16	20.64
33 Building & Fence Cost	5.59	8.23	5.30
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	30.28	29.87	24.22
38 Utilities & Gen. Farm Expense	7.23	7.78	6.52
39 Hired Labor	3.89	4.78	3.96
41 Actual Non R.E.Int. Allocated	8.52	10.91	9.11
42 Total Allocated Costs	98.37	117.58	85.24
43 Total Listed Costs	114.85	133.46	95.85
44 Return Over Listed Costs	12.45	57.00	-13.74
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	113.76	133.13	95.08
52 Work Units Assigned/Acre	0.60	0.60	0.60
53 Power Cost Allocation Factor	0.68	0.67	0.67
54 Total Listed Cost/Unit of Prod.	71.78	44.49	159.75
55 Total Adjusted Cost/Unit of Prod.	72.18	43.94	161.84
56 Cash Variable Cost/Unit of Prod.	38.36	23.50	84.73
57 Return Over Listed Costs Per Unit	7.78	19.00	-22.90
58 Breakeven Yield/Unit of Prod.	1.9	2.2	1.7

TABLE 10 - CROP DATA FOR CORN SILAGE, OWNED LAND, 1988

Items	Average of 70 Farms Per Acre	14 High Farms Per Acre	14 Low Farms Per Acre
3 Acres	33.9	27.1	37.6
4 Yield	7.9	12.7	3.6
5 Value per Unit	16.02	15.49	15.85
6 Crop Product Return	126.17	196.57	57.74
7 Other Crop Income	27.26	21.33	29.55
8 Total Crop Return	153.43	217.90	82.29
VARIABLE COSTS			
10 Fertilizer	17.14	19.19	11.09
11 Chemicals	6.55	5.06	5.56
12 Seed	12.48	12.66	12.63
13 Crop Drying	0.80	4.28	
14 Crop Insurance	0.09		
15 Other Expenses	0.91	0.37	0.77
16 Special Hired Labor	0.03		
17 Custom Work Hired	1.68	2.69	1.86
18 Irrigation Operation			
19 Assigned Interest			
20 Total Variable Costs	39.68	44.24	31.91
21 Return Over Variable Costs	113.75	173.66	55.38
ALLOCATED COSTS (VARIABLE & FIXED)			
31 Farm Power & Machinery - Ownership	23.66	35.50	15.40
32 Farm Power & Machinery - Operation	38.61	43.51	37.50
33 Building & Fence Cost	5.84	5.06	5.77
34 Irrigation Ownership Cost			
35 Land Ownership Cost			
36 Land Oppor. Ownership Cost			
37 Land Cost	29.96	30.57	30.25
38 Utilities & Gen. Farm Expense	7.20	6.72	6.65
39 Hired Labor	5.07	5.79	2.45
41 Actual Non R.E.Int. Allocated	8.44	11.59	7.66
42 Total Allocated Costs	118.78	138.74	105.68
43 Total Listed Costs	158.46	182.98	137.59
44 Return Over Listed Costs	-5.03	34.92	-50.30
SUPPLEMENTARY MANAGEMENT INFORMATION			
51 Total Cost Adj to a Min 7% Int.	158.23	180.22	139.18
52 Work Units Assigned/Acre	0.60	0.60	0.60
53 Power Cost Allocation Factor	0.98	0.99	1.00
54 Total Listed Cost/Unit of Prod.	20.06	14.41	38.22
55 Total Adjusted Cost/Unit of Prod.	20.09	14.20	38.20
56 Cash Variable Cost/Unit of Prod.	12.53	8.81	23.94
57 Return Over Listed Costs Per Unit	-0.64	2.75	-13.97
58 Breakeven Yield/Unit of Prod.	9.9	11.8	8.7

TABLE 10 - CROP DATA FOR MEDIUM RED CLOVER SEED, 1988

Items	<u>Owned Land</u>	<u>Rented Land</u>
	Average of 8 Farms Per Acre	Average of 8 Farms Per Acre
3 Acres	55.4	33.9
4 Yield	214.5	178.1
5 Value per Unit	0.73	0.67
6 Crop Product Return	155.74	119.56
7 Other Crop Income	9.37	10.86
8 Total Crop Return	165.11	130.42
VARIABLE COSTS		
10 Fertilizer	1.95	
11 Chemicals	6.66	3.33
12 Seed	4.91	6.55
13 Crop Drying		
14 Crop Insurance		
15 Other Expenses	0.36	1.06
16 Special Hired Labor		
17 Custom Work Hired	1.50	2.68
18 Irrigation Operation		
19 Assigned Interest		
20 Total Variable Costs	15.38	13.63
21 Return Over Variable Costs	149.73	116.79
ALLOCATED COSTS (VARIABLE & FIXED)		
31 Farm Power & Machinery-Ownership	15.38	15.04
32 Farm Power & Machinery-Operation	25.67	27.79
33 Building & Fence Cost	3.18	3.10
34 Irrigation Ownership Cost		
35 Land Ownership Cost		
36 Land Oppor. Ownership Cost		
37 Land Cost	26.67	22.75
38 Utilities & Gen. Farm Expense	10.02	9.65
39 Hired Labor	7.38	2.80
41 Actual Non R.E.Int. Allocated	5.34	12.36
42 Total Allocated Costs	93.64	93.49
43 Total Listed Costs	109.02	107.12
44 Return Over Listed Costs	56.09	23.30
SUPPLEMENTARY MANAGEMENT INFORMATION		
51 Total Cost Adj to a Min 7% Int.	109.42	102.36
52 Work Units Assigned/Acre	0.50	0.50
53 Power Cost Allocation Factor	0.81	0.81
54 Total Listed Cost/Unit of Prod.	0.51	0.60
55 Total Adjusted Cost/Unit of Prod.	0.51	0.57
56 Cash Variable Cost/Unit of Prod.	0.30	0.37
57 Return Over Listed Costs Per Unit	0.26	0.13
58 Breakeven Yield/Unit of Prod.	149.3	159.9

TABLE 10 - CROP DATA FOR GRASS SEED, OWNED LAND, 1988

Items	Bluegrass	Timothy
	Average of 6 Farms Per Acre	Average of 16 Farms Per Acre
3 Acres	188.6	81.0
4 Yield	75.3	165.1
5 Value per Unit	1.06	0.62
6 Crop Product Return	79.64	101.75
7 Other Crop Income	24.68	20.88
8 Total Crop Return	104.32	122.63
VARIABLE COSTS		
10 Fertilizer	31.74	22.19
11 Chemicals	8.17	5.02
12 Seed	1.13	1.05
13 Crop Drying		
14 Crop Insurance		
15 Other Expenses	1.30	0.65
16 Special Hired Labor		
17 Custom Work Hired	1.04	2.05
18 Irrigation Operation		
19 Assigned Interest		
20 Total Variable Costs	43.38	30.96
21 Return Over Variable Costs	60.94	91.67
ALLOCATED COSTS (VARIABLE & FIXED)		
31 Farm Power & Machinery-Ownership	6.47	6.35
32 Farm Power & Machinery-Operation	13.05	12.95
33 Building & Fence Cost	1.50	1.93
34 Irrigation Ownership Cost		
35 Land Ownership Cost		
36 Land Oppor. Ownership Cost		
37 Land Cost	21.40	25.34
38 Utilities & Gen. Farm Expense	7.28	5.10
39 Hired Labor	9.28	4.36
41 Actual Non R.E.Int. Allocated	2.33	5.33
42 Total Allocated Costs	61.31	61.36
43 Total Listed Costs	104.69	92.32
44 Return Over Listed Costs	-0.37	30.31
SUPPLEMENTARY MANAGEMENT INFORMATION		
51 Total Cost Adj to a Min 7% Int.	107.26	90.33
52 Work Units Assigned/Acre	0.40	0.30
53 Power Cost Allocation Factor	0.52	0.61
54 Total Listed Cost/Unit of Prod.	1.39	0.56
55 Total Adjusted Cost/Unit of Prod.	1.43	0.55
56 Cash Variable Cost/Unit of Prod.	1.00	0.36
57 Return Over Listed Costs Per Unit		0.18
58 Breakeven Yield/Unit of Prod.	98.8	148.9

TABLE 10 - CROP DATA FOR SUMMER FALLOW, OWNED & RENTED, 1988

		Owned Land	Rented Land
		Average of	Average of
		50 Farms	53 Farms
Items		Per Acre	Per Acre
3	Acres	100.3	107.1
4	Yield		0.2
5	Value per Unit		4.00
6	Crop Product Return		0.63
7	Other Crop Income	<u>0.15</u>	<u>0.18</u>
8	Total Crop Return	0.15	0.81
VARIABLE COSTS			
10	Fertilizer	0.21	0.03
11	Chemicals	0.20	0.26
12	Seed	1.15	1.09
13	Crop Drying		
14	Crop Insurance	0.08	
15	Other Expenses		0.05
16	Special Hired Labor		
17	Custom Work Hired	0.88	1.94
18	Irrigation Operation		
19	Assigned Interest		
20	Total Variable Costs	<u>2.51</u>	<u>3.37</u>
21	Return Over Variable Costs	-2.36	-2.56
ALLOCATED COSTS (VARIABLE & FIXED)			
31	Farm Power & Machinery - Ownership	9.03	5.91
32	Farm Power & Machinery - Operation	11.69	10.65
33	Building & Fence Cost	1.72	0.87
34	Irrigation Ownership Cost		
35	Land Ownership Cost		
36	Land Oppor.Ownership Cost		
37	Land Cost	57.68	45.66
38	Utilities & Gen. Farm Expense	1.88	1.80
39	Hired Labor	1.51	1.59
41	Actual Non R.E.Int. Allocated	<u>2.22</u>	<u>2.71</u>
42	Total Allocated Costs	85.73	69.19
43	Total Listed Costs	<u>88.24</u>	<u>72.56</u>
44	Return Over Listed Costs	-88.09	-71.75
SUPPLEMENTARY MANAGEMENT INFORMATION			
51	Total Cost Adj to a Min 7% Int.	88.19	72.32
52	Work Units Assigned/Acre	0.20	0.20
53	Power Cost Allocation Factor	1.12	1.05
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, allocated charges for hired labor, utilities, power and machinery, livestock equipment and building and fence costs. These costs are allocated to each livestock enterprise by the computer using a carefully devised formula to make the proper allocations.

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, 1988

Items	Average of 5 Farms	
	Per CWT.	Per Head
1 Production - Pounds 25081		135.6
2 Net Increase In Value: Hogs	34.68	47.01
3 Other Miscellaneous Income		
4 Total Value Produced	34.68	47.01
FEED FED: QUANTITY & COST LBS/CWT		
6 Corn 199.2	7.46	10.12
7 Other Grain 11.5	0.35	0.47
8 Complete Ration 103.8	15.06	20.42
9 Prot., Salt, Min. 182.5	16.66	22.59
10 Total Grain Mix 497.0	39.53	53.60
13 Total Feed Cost	39.53	53.60
14 Return Over Feed Costs	-4.85	-6.59
OTHER DIRECT COSTS		
16 Veterinary	0.28	0.38
17 Miscellaneous	0.10	0.14
21 Total Other Direct Costs	0.38	0.52
22 Total Direct Costs Incl Feed	39.91	54.12
23 Return Over All Direct Costs	-5.23	-7.11
ALLOCATED COSTS		
26 Act Int Pd Less Int Assigned-L20	1.25	1.70
27 General Hired Labor	0.79	1.07
28 Utilities & Miscellaneous	0.72	0.97
29 Power & Machinery PCAF 1.00	0.64	0.87
30 Livestock Equipment ECAF 1.00	0.83	1.12
31 Buildings & Fences BCAF 1.00	0.39	0.53
32 Total Allocated Costs	4.62	6.26
33 Total Actual Listed Costs	44.53	60.38
34 Return Over Actual Listed Costs	-9.85	-13.37
35 Total Costs Adj to 7% Min Int	45.87	62.19
36 Return Over Listed & 7% Opportunity		
37 Interest Cost	-11.19	-15.18
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****		
39 Return/\$100 Feed Fed	87.72	
40 Ave Wt./Mkt. Hog Sold	205.39	
41 Price Rec'd/CWT. Mkt. Hogs	46.66	
42 Ave. Weight/Pig Purchased	40.97	
43 Ave. Price/Pig Purchased	39.05	
44 No. Pigs Purchased	126	
46 Pounds of Pork Purchased	5162	
48 Percent Death Loss	1.02	
49 Effective Daily Gain	0.67	
50 Price/CWT. Grain Mix Fed	7.27	
51 Price/CWT. Prot., Salt, Min	9.13	
52 Number of Pigs Produced	185	

TABLE 11C - HOGS, WEANING PIG PRODUCTION

Item	Average of 9 Farms	
	Per Pig	Per Litter
1 Production 93 Litters, 36152 Lbs.		
2 Net Increase In Value: Hogs	37.77	253.40
3 Other Miscellaneous Income		
4 Total Value Produced	37.77	253.40
FEED FED: QUANTITY & COST		
6 Corn	55.89	1.17
7 Other Grain	110.70	2.44
8 Complete Ration	302.86	14.19
9 Prot., Salt, Min	94.97	7.61
10 Total Grain Mix	564.42	25.41
11 Forages	13.89	0.15
13 Total Feed Cost	25.56	171.45
14 Return Over Feed Costs	12.21	81.95
OTHER DIRECT COSTS		
16 Veterinary	1.29	8.69
17 Breeding		
18 Miscellaneous	1.56	10.49
19 Custom Work & Lease	0.35	2.32
22 Total Other Direct Costs	3.20	21.50
23 Total Direct Costs Incl Feed	28.76	192.95
24 Return Over All Direct Costs	9.01	60.45
ALLOCATED COSTS		
27 Act Int P Less Int Assigned-L21	11.46	76.87
28 General Hired Labor	0.85	5.73
29 Utilities & Miscellaneous	4.62	30.99
30 Power & Machinery PCAF 1.00	1.96	13.14
31 Livestock Equipment ECAF 1.00	1.02	6.83
32 Buildings & Fences BCAF 1.00	1.29	8.67
33 Total Allocated Costs	21.20	142.23
34 Total Actual Listed Costs	49.96	335.18
35 Return Over Actual Listed Costs	-12.19	-81.78
36 Total Costs Adj to 7% Min Int.	40.95	274.74
37 Return Over Listed & 7% Opportunity		
38 Interest Cost	-3.18	-21.34
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****		
40 Return /\$100 Feed Fed	147.79	
41 Ave Wt./Pig Sold or Transfer	48	
42 Price Rec'd/Pig Sold	41.20	
43 Litters/Sow/Year	3.4 1.6	
44 No. Pigs Born/Litter	9	
45 No. Pigs Wean/Litter	7.6	
46 Pigs Produced/Sow/Year	23.1	
47 Litters/Crate/Year	5.2	
48 Pigs Weaned/Crate/Year	39.11	
49 FDR Pig Deaths: AS % of Total Loss	98.2	
50 Breeding Deaths: As % of Total Loss	1.8	
51 Price/CWT. Grain Mix Fed	7.77	
52 Price/CWT. Prot., Salt, Min.	13.82	

TABLE 12 - DAIRY COWS, COMMERCIAL, 1988

Items		Average of 97 Farms Per Cow	19 High Farms Per Cow	19 Low Farms Per Cow
1	Average Number of Cows	46.8	56.0	42.6
2	Pounds of Milk	15629	18212	12320
3	Pounds of Butterfat	563	656	429
4	Percent of Butterfat in Milk	3.61	3.60	3.48
5	Value of Produce			
6	Dairy Products Sold	1764.19	2059.71	1339.08
7	Dairy Products Used in Home	6.75	8.68	4.81
8	Milk Fed to Livestock	17.63	25.82	12.49
9	Net Increase in Value	-81.90	-81.93	-70.31
10	Other Miscellaneous Income			
11	Total Value Produced	1706.67	2012.28	1286.07
12	Feed Fed: Qty. & Cost	Lbs/Cow		
13	Corn	3081 120.04	134.00	53.94
14	Small Grain	794 37.91	23.95	60.33
15	Complete Ration	1067 81.47	71.71	125.77
16	Prot., Salt, Min.	<u>1562 168.89</u>	<u>161.55</u>	<u>184.39</u>
17	Total Grain Mix	6504 408.31	391.21	424.43
18	Legume Hay	7659 209.64	215.79	207.58
19	Other Dry Hay & Roughage	384 9.06	1.61	19.65
20	Haylage	1594 22.35	25.93	21.20
21	Silage	7160 41.54	41.52	37.79
22	Pasture	<u>1.86</u>	<u>1.18</u>	<u>2.23</u>
23	Total Feed Costs	692.76	677.24	712.88
24	Return Over Feed Cost	1013.91	1335.04	573.19
OTHER DIRECT COSTS				
26	Veterinary	39.38	55.07	17.58
27	Breeding	22.52	36.84	7.54
28	Miscellaneous	110.43	140.11	88.97
29	Custom Work & Lease Expense	78.01	77.93	65.31
30	Special Hired Labor	0.24		
31	Assigned Interest			
32	Total Other Direct Costs	250.58	309.95	179.40
33	Total Direct Costs Incl Feed	943.34	987.19	892.28
34	Return Over All Direct Costs	763.33	1025.09	393.79
ALLOCATED COSTS				
37	Act Int Pd Less Int Assigned-L31	97.92	61.81	90.83
38	General Hired Labor	59.74	78.76	24.22
39	Utilities & Miscellaneous	95.77	121.42	84.13
40	Power & Machinery PCAF 1.00	75.48	87.78	63.69
41	Livestock Equipment ECAF 1.00	57.89	75.15	32.06
42	Buildings & Fences BCAF 1.00	<u>63.38</u>	<u>71.95</u>	<u>56.17</u>
43	Total Allocated Costs	450.18	496.87	351.10
44	Total Actual Listed Costs	1393.52	1484.06	1243.38
45	Return Over Act. Listed Costs	313.15	528.22	42.69
46	Tot. Costs Adj to 7% Min Int.	1396.75	1533.64	1238.06
47	Return Over Listed & 7% Opportunity			
48	Interest Cost	309.92	478.64	48.01
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****				
50	Return/\$100 Feed Fed	246.36	297.13	180.40
51	Pounds of Milk/Pound Grain Mix	2.40	2.98	1.88
52	Average Price/CWT. Sold	11.45	11.50	11.00
53	Dairy Cow Turnover Percentage	40.6	37.5	35.2
54	Approximate Dry Matter Consumed/Cow/	43	39	42

TABLE 13 - OTHER DAIRY/COMMERCIAL REPL., 1988

Items		Average of Farms Per Head	19 High Farms Per Head	19 Low Farms Per Head
1	Average Number of Head	59.6	56.7	64.0
2	Net Increase in Value	330.12	468.87	222.78
3	Other Miscellaneous Income			
4	Total Value Produced	330.12	468.87	222.78
FEED FED: QTY & COST LBS/HEAD				
6	Corn 467	18.26	20.35	16.84
7	Small Grain 197	9.82	5.10	11.31
8	Complete Ration 248	22.13	14.06	58.52
9	Prot., Salt, Min. 218	26.04	17.72	23.84
10	Total Grain Mix 1130	76.25	57.23	110.51
11	Legume Hay 2870	75.20	64.20	86.73
12	Other Dry Hay & Rough. 203	4.66	0.19	14.31
13	Haylage 200	3.04	1.39	3.25
14	Silage 2932	23.10	19.33	27.84
15	Milk 123	13.81	8.91	12.64
16	Pasture	1.56	2.22	1.22
17	Total Feed Cost	197.62	153.47	256.50
18	Return Over Feed Cost	132.50	315.40	-33.72
OTHER DIRECT COSTS				
20	Veterinary	0.77	1.36	0.25
21	Breeding			
22	Miscellaneous	0.55	0.56	1.06
23	Custom Work & Lease Expense	0.17		0.80
24	Special Hired Labor			
25	Assigned Interest			
26	Total Other Direct Costs	1.49	1.92	2.11
27	Total Direct Costs Incl Feed	199.11	155.39	258.61
28	Return Over All Direct Costs	131.01	313.48	-35.83
ALLOCATED COSTS				
30	Actual Interest Paid Less			
31	Interest Assigned-L25	16.76	21.72	17.55
32	General Hired Labor	10.94	10.55	10.77
33	Utilities & Miscellaneous	16.63	19.35	17.24
34	Power & Machinery PCAF 1.00	12.83	13.26	12.69
35	Livestock Equipment ECAF 1.00	10.18	10.61	7.94
36	Buildings & Fences BCAF 1.00	11.02	12.69	11.06
37	Total Allocated Costs	78.36	88.18	77.25
38	Total Actual Listed Costs	277.47	243.57	335.86
39	Return Over Act. Listed Costs	52.65	225.30	-113.08
40	Total Costs Adj to 7% Min Int	305.83	271.37	361.80
41	Return Over Listed & 7% Opportunity			
42	Interest Cost	24.29	197.50	-139.02
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****				
44	Return/\$100 Feed Fed	167.05	305.50	86.85
45	Percent Calf Death Loss	12.0	8.3	17.3

TABLE 14 - ALL DAIRY + DUAL PURPOSE CATTLE, 1988

Items	Average of 98 Farms Per Cow	20 High Farms Per Cow	20 Low Farms Per Cow
1 Average Number of Cows	47.0	56.3	44.8
2 Pounds of Milk	15583.64	18043.52	12673.33
3 Pounds of Butterfat	556.08	649.87	441.96
4 Percent of Butterfat in Milk	3.57	3.60	3.49
5 Value of Produce			
6 Dairy Products Sold	1762.64	2057.02	1384.71
7 Dairy Products Used in Home	6.70	8.58	4.53
8 Milk Fed to Livestock	17.49	22.34	10.67
9 Net Increase in Value	331.64	477.82	232.59
10 Other Miscellaneous Income			
11 Total Value Produced	2118.47	2565.76	1632.50
12 Feed Fed: Qty. & Cost Lbs/Cow			
13 Corn 3667	143.15	165.40	94.46
14 Small Grain 1046	50.23	51.67	66.05
15 Complete Ration 1363	108.06	76.06	173.21
16 Prot., Salt, Min. 1833	219.13	247.92	169.80
17 Total Grain Mix 7909	520.57	541.05	503.52
18 Legume Hay 11221	302.96	320.98	304.04
19 Other Dry Hay & Roughage 632	14.79	5.13	56.00
20 Haylage 1848	26.43	27.57	4.38
21 Silage 10818	70.74	68.37	73.55
22 Pasture	3.79	3.52	2.90
23 Total Feed Costs	939.28	966.62	944.39
24 Return Over Feed Cost	1179.19	1599.14	688.11
OTHER DIRECT COSTS			
26 Veterinary	41.68	49.68	25.31
27 Breeding	22.43	31.81	11.23
28 Miscellaneous	110.85	142.45	86.09
29 Custom Work & Lease Expense	78.26	86.31	65.92
30 Special Hired Labor	0.23		
31 Assigned Interest			
32 Total Other Direct Costs	253.45	310.25	188.55
33 Total Direct Costs Incl Feed	1192.73	1276.87	1132.94
34 Return Over All Direct Costs	925.74	1288.89	499.56
ALLOCATED COSTS			
37 Act Int Pd Less Int Assigned-L31	117.77	104.85	95.16
38 General Hired Labor	73.81	105.90	47.66
39 Utilities & Miscellaneous	116.98	125.72	95.92
40 Power & Machinery	91.17	96.67	69.55
41 Livestock Equipment	70.13	98.19	33.02
42 Buildings & Fences	76.89	95.31	66.42
43 Total Allocated Costs	546.75	626.64	407.73
44 Total Actual Listed Costs	1739.48	1903.51	1540.67
45 Return Over Act. Listed Costs	378.99	662.25	91.83
46 Tot. Costs Adj to 7% Min Int.	1778.62	1798.76	1694.11
47 Return Over Listed & 7% Opportunity			
48 Interest Cost	339.85	767.00	-61.61
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****			
50 Return/\$100 Feed Fed	226	265	173
51 Pounds of Milk/Pound Grain Mix			
52 Average Price/CWT. Sold	11.47	11.58	11.03
53 Dairy Cow Turnover Percentage	40.4	44.4	35.7
54 Approximate Dry Matter Consumed/Cow/	59	59	57
56 Total Investment/Cow	6334.87	7176.82	5734.93
57 Total Debt/Cow	3667.51	3043.39	3536.65

TABLE 15A - BEEF COWS, COMMERCIAL, 1988

Items	Average of 50 Farms Per Cow	High 11 Farms Per Cow	Low 11 Farms Per Cow
1 Average Number of Beef Cows	70.1	71.1	54.3
2 Average Number of Other Beef/Bulls	53.5	61.1	34.4
3 Pounds of Beef Produced	39924	45274	26281
4 Net Increase in Value: Beef	460.41	551.77	376.06
5 Other Miscellaneous Income	2.64	11.81	
6 Total Value Produced	463.05	563.58	376.06
FEED FED:QUANTITY & COST LBS/COW			
8 Grain	422.8 15.69	27.96	14.03
9 Prot., Salt, Min.	234.0 9.42	8.41	13.76
10 Legume Hay	6975.1 144.14	144.09	194.71
11 Other Dry Hay & Roughage	1514.8 20.41	1.08	27.18
12 Silage	2105.6 16.42	11.43	11.34
14 Pasture	15.52	11.18	14.97
15 Total Feed Costs	221.60	204.15	275.99
16 Return Over Feed Costs	241.45	359.43	100.07
OTHER DIRECT COSTS			
18 Veterinary	8.52	10.97	6.39
19 Breeding	0.03		
20 Miscellaneous	13.24	37.52	3.74
21 Custom Work & Lease Expense	6.68	8.19	3.79
22 Special Hired Labor			
23 Assigned Interest			
24 Total Other Direct Costs	28.47	56.68	13.92
25 Total Direct Costs Incl Feed	250.07	260.83	289.91
26 Return Over All Direct Costs	212.98	302.75	86.15
ALLOCATED COSTS			
28 Actual Interest Paid Less			
29 Interest Assigned-L23	39.34	27.09	61.99
30 General Hired Labor	13.85	2.93	3.20
31 Utilities & Miscellaneous	23.65	24.44	17.98
32 Power & Machinery PCAF 1.00	16.47	13.70	25.26
33 Livestock Equipment ECAF 1.00	8.30	5.78	4.57
34 Buildings & Fences BCAF 1.00	11.68	11.67	9.69
35 Total Allocated Costs	113.29	85.61	122.69
36 Total Actual Listed Costs	363.36	346.44	412.60
37 Return Over Actual Listed Costs	99.69	217.14	-36.54
38 Total Costs Adj To 7% Min Int.	386.04	389.53	411.29
39 Return Over Listed & 7% Opportunity			
40 Interest Cost	77.01	174.05	-35.23
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
42 Return/\$100 Feed Fed	208.96	276.05	136.25
43 \$/CWT Breeding Animals Sold	47.20	42.20	49.31
44 Ave Weight of Animals Sold	654.32	679.64	631.37
45 Number of Head Bought	8	10	2
46 Percent Death Loss	3.78	2.99	4.51
47 Price/CWT Calf Sold/Transfer	84.68	84.38	83.39
48 Ave Weight Calf Sold/Transfer	520	588	467
49 Percent Calf Crop Born	97.14	94.52	
50 Percent Calf Crop Weaned	90.00	89.04	
51 Percent Calf Death Loss	7.35	5.80	7.69
52 Cull Income/Breeding Cow	64.07	66.74	44.92
53 Hay Equivalent/Cow	4.60	3.97	5.69
54 Corn Equivalent/Cow	7.55	12.03	5.23

TABLE 15B - BEEF FEEDERS, 1988

		Average of 25 Farms Per CWT	13 High Farms Per CWT	12 Low Farms Per CWT
1	Average Number of Animals	73.7	95.8	49.9
2	Pounds of Animal Produced	<u>39129</u>	<u>39129</u>	<u>29083</u>
3	Net Increase in Value:Animals	63.37	66.74	57.30
4	Other Miscellaneous Income			
5	Total Value Produced	63.37	66.74	57.30
FEED FED:QTY & COST				
	LBS/CWT			
7	Corn 188.5	6.82	2.96	13.76
8	Small Grains 60.9	2.24	0.81	4.82
9	Complete Rations 357.8	5.43	7.59	1.55
10	Prot., Salt, Min. 69.9	3.38	1.97	5.92
11	Legume Hay 392.8	8.66	6.67	12.24
12	Other Dry Hay & Rouage 116.9	1.74	2.14	1.00
13	Silage 345.6	2.83	1.20	5.76
14	Haylage 42.5	0.53		1.49
15	Pasture	<u>0.07</u>		<u>0.18</u>
16	Total Feed Cost	31.70	23.34	46.72
17	Return Over Feed Costs	31.67	43.40	10.58
OTHER DIRECT COSTS				
19	Veterinary	1.83	1.74	2.00
20	Miscellaneous	0.84	1.09	0.39
21	Custom Work & Lease Expense	2.65	3.43	1.25
22	Special Hired Labor			
23	Assigned Interest			
24	Total Other Direct Costs	<u>5.32</u>	<u>6.26</u>	<u>3.64</u>
25	Total Direct costs Incl Feed	37.02	29.60	50.36
26	Return Over All Direct Costs	26.35	37.14	6.94
ALLOCATED COSTS				
28	Actual Interest Paid Less			
29	Interest Assigned-L23	7.11	9.07	3.78
30	General Hired Labor	0.91	0.78	1.16
31	Utilities & Miscellaneous	1.92	2.31	1.36
32	Power & Machinery PCAF 1.00	1.32	1.33	1.30
33	Livestock Equipment ECAF 1.00	0.70	0.63	0.83
34	Buildings & Fences BCAF 1.00	<u>1.15</u>	<u>1.14</u>	<u>1.17</u>
35	Total Allocated Costs	<u>13.11</u>	<u>15.26</u>	<u>9.60</u>
36	Total Actual Listed Costs	50.13	44.86	49.96
37	Return Over Actual Listed Costs	13.24	21.88	-2.66
38	Total Cost Adj to 7% Min Int.	54.14	47.96	65.32
39	Return Over Listed & 7% Opportunity			
40	Interest Cost	9.23	18.78	-8.02
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****				
42	Return/\$100 Feed Fed	199.98	285.86	122.60
43	Price/CWT Sold	74.28	76.28	68.56
44	Average Weight All Cattle Sold	862	853	900
45	Price/CWT Bought	89.18	93.63	83.43
46	Average Weight Cattle Bought	496	503	484
47	Number of Head Bought	59	63	55
48	Percent Death Loss	0.60	0.27	1.22
49	Effective Daily Gain-Pound/Head/Day	1.45	1.38	1.60
51	Hay Equivalent/CWT	0.32	0.25	0.45
52	Corn Equivalent/CWT	4.45	1.82	9.20

AVERAGES PRICES OF FEED AND PRODUCE USED IN HOME, 1988

Farm Grown Grains

Oats	\$2.08 Bu.
Barley, Feed	1.78 Bu.
Wheat	2.95 Bu.
Oats Mixture	1.94 Bu.
Corn	2.22 Bu.

Forages

Alfalfa	63.63 Ton
Wild Hay	26.00 Ton
Mixed Legume	42.06 Ton
Haylage(55% Moisture)	27.25 Ton
Corn Silage	15.80 Ton
Straw	.72 Bale

Milk for Feed

Whole Milk-Gr. A \$10.84 Cwt.

Home Produce

Milk	.25 Qt.	Board for Hired Labor - \$5.00 per
Beef (live)	.67 lb.	day (unless otherwise specified)
Hogs (live)	.43 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, 1988

<u>Items</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
<u>Miscellaneous</u>					
Average Tillable Acres	762.5	839.4	775.9	857.4	897.6
Total Farm Capital	497770	501762	439821	507656	486144
Expenses/Dollar Income	.94	.94	.93	.84	.86
Percent Inc.from Farm Crops	80	72	74	69	68
Percent Inc.from Farm Lvstk.	20	23	20	23	20
HH & Personal Expenses	22593	23439	22800	28772	28566
Trac. & Mach. Exp./Crop Acre	36.70	35.26	32.04	30.38	29.15

Efficiencies

<u>Yield per Acre</u>					
Oats	64.3	59.7	50.3	55.1	34.4
Alfalfa	2.6	2.7	3.6	2.9	1.6
Barley	61.5	62.6	53.4	54.6	36.1
Wheat, Spring	48.8	53.1	34.1	41.0	23.7
Flax	16.5	15.2	14.1	13.4	9.3
Sugar Beets	40.3*	42.5*	43.6*	53.4*	37.2*
Corn	62.2	56.3	83.5	99.4	75.8
Sunflowers, Oil	11.1	8.1	13.9	16.7	16.8
Soybeans	25.4	22.3	34.4	32.7	20.9

*CWT Extractable Sugar

Return Above Feed Cost Per:

Dairy Cow	\$ 1008	968	990	1106	1014
CWT Hogs	6	7	23	12	11
Ewe	34	39	64	99	----
Hogs, Litter	120	101	207	183	82
CWT Cattle	14	10	18	39	168
Beef Cow	75	60	126	291	241

Prices Received Per:

Oats, Bushel	\$ 1.54	1.22	1.23	1.50	2.17
Alfalfa, Ton	46.12	46.66	41.40	43.26	61.14
Barley, Bushel	2.03	1.87	1.47	1.51	3.07
Wheat, Bushel	3.40	3.30	2.40	2.45	3.74
Flax, Bushel	5.92	5.09	3.73	3.19	8.23
Sugar Beets, CWT Ext. Sugar	14.64	12.76	13.55	14.24	14.79
Corn, Bushel	2.56	2.01	1.55	1.67	2.41
Sunflowers, CWT	10.87	7.97	7.01	7.09	6.71
Soybeans, Bushel	5.77	4.82	4.40	4.95	7.33
CWT, Milk	12.61	11.90	11.65	11.72	11.45
CWT, Beef	59.02	51.14	53.36	68.04	74.28
CWT, Hogs	47.62	42.99	50.02	50.06	46.66
CWT, Lambs	61.67	67.07	68.21	88.84	----

SUMMARY OF FARM EARNINGS BY YEARS, 1988

<u>Items</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
Number of Records Analyzed	512	490	520	535	560

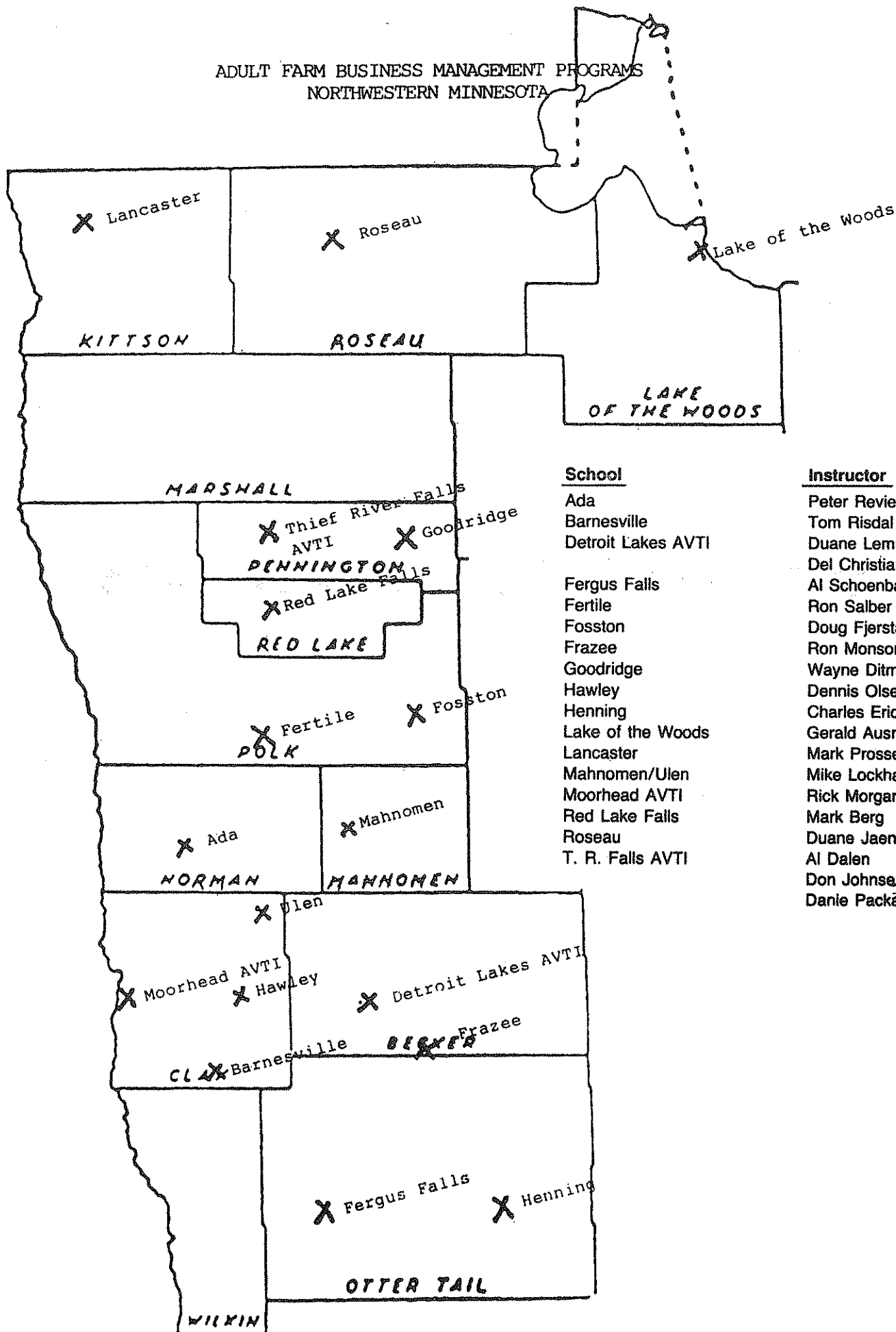
Farm Receipts

Livestock	\$ 34897	35603	36841	36662	40737
Crops	92475	95623	79715	104490	112419
Mach. & Equipment Sold	2911	3457	1866	3189	1466
Custom Work & Work Off the Farm	1924	1433	1383	2583	1802
Gov.t. Pay'ts. & Other Farm Inc.	<u>17416</u>	<u>22597</u>	<u>31869</u>	<u>42133</u>	<u>32606</u>
(1) Total Farm Sales	\$ 149623	158714	151674	189097	189030
(2) Increase in Fm Capital	8829	9	0	20731	11169
(3) Family Living from Farm	460	369	370	279	379
(4) Total Farm Rec. (1+2+3)	158912	159092	152044	210107	200578

Farm Expenses

Livestock & Livestock Exp.	5384	5614	5823	7268	7171
Feed Bought	6021	6151	7092	6356	7898
Fertilizers & Chemicals	20176	21243	17239	21329	19301
Other Crop Expenses	16880	14441	19632	33867	36273
Custom Work Hired	4117	4357	3938	4593	3611
Gas, Oil & Grease Bought (F.S.)	8647	9031	6474	7094	6731
Rep. & Op. Mach, Trac, Auto (F.S.)	9282	10300	9573	11420	10781
Rep. & Upkeep of Real Estate	860	919	1047	915	1159
Rep. & Upkeep of Livstk Equip.	661	624	641	549	643
Wages of Hired Labor	5066	5580	5672	6937	6165
Utility Exp. (F.S.)	2032	2148	2092	2064	2285
Real Estate Taxes	4769	5312	4413	4755	3842
Gen. Farm Expense	<u>3202</u>	<u>3612</u>	<u>3895</u>	<u>4847</u>	<u>4462</u>
(5) Total Cash Operating Exp.	87097	89334	87531	111994	110322
(6) Equipment Purchased (F.S.)	14674	12238	11072	13520	11346
(7) Capital Lease Payments	0	0	0	0	1323
(8) Real Estate Bot. & Improv.	8787	7691	5196	8934	7689
(9) Total Farm Purch. (5to8)	110558	109763	103799	134447	130679
(10) Decrease in Farm Capital			3034		
(11) Interest on Farm Capital	34535	35123	30686	34810	33639
(12) Unpaid Family Labor	92	16	10	0	0
(13) Lbr Chg. for Part. & Other Op.	142	0	0	0	0
(14) Bd. Furn. Hired Labor	<u>73</u>	<u>51</u>	<u>38</u>	<u>34</u>	<u>62</u>
(15) Total Farm Exp. (9to14)	\$ 145400	144953	137567	169292	164380
(16) Ret to Labor & Mgmt (4-15)	13512	14139	14477	40816	36198

ADULT FARM BUSINESS MANAGEMENT PROGRAMS
NORTHWESTERN MINNESOTA



School

Ada
Barnesville
Detroit Lakes AVTI

Fergus Falls
Fertile
Fosston
Frazee
Goodridge
Hawley
Henning
Lake of the Woods
Lancaster
Mahnomen/Ulen
Moorhead AVTI
Red Lake Falls
Roseau
T. R. Falls AVTI

Instructor

Peter Revier
Tom Risdal
Duane Lemmon
Del Christianson
Al Schoenbauer
Ron Salber
Doug Fjerstad
Ron Monson
Wayne Ditmer
Dennis Olsen
Charles Erickson
Gerald Ausmus
Mark Prosser
Mike Lockhart
Rick Morgan
Mark Berg
Duane Jaenicke
Al Dalen
Don Johnsen
Danie Packard

LOOK TO

VOCATIONAL EDUCATION

FOR YOUR FUTURE IN

MINNESOTA