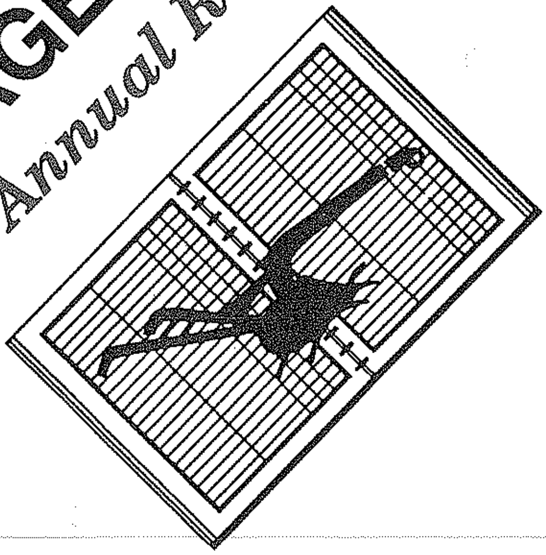
FARM BUSINESS MANAGEMENT

1990 Annual Report

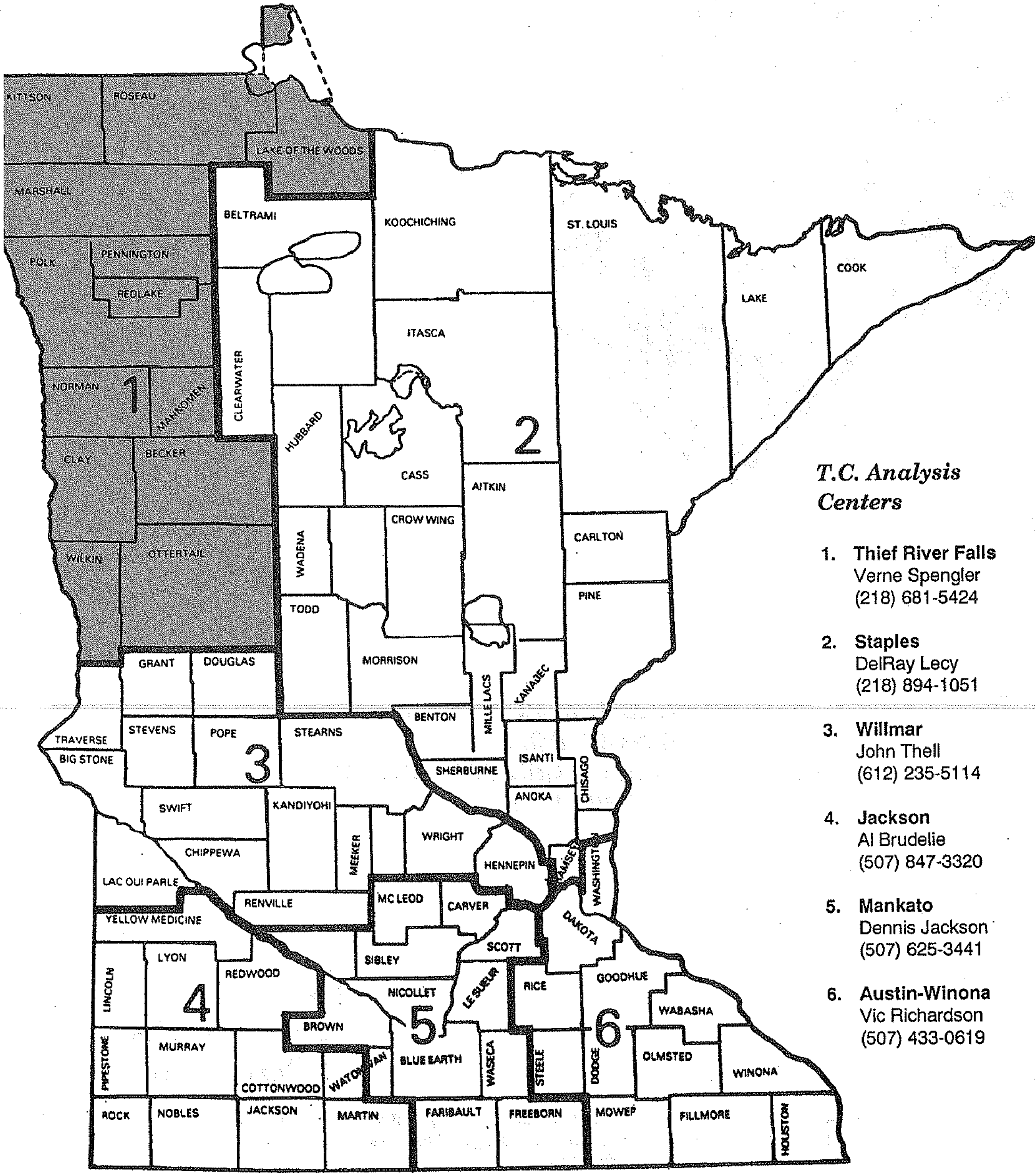


NORTHWESTERN MINNESOTA
REPORT NO. 36
THIEF RIVER FALLS TECHNICAL COLLEGE
APRIL, 1991

AN ADULT EDUCATION PROGRAM

In cooperation with: Minnesota State Board of Technical Education; Agricultural Education Department, University of Minnesota; Thief River Falls Technical College, Thief River Falls, Minnesota
Price: $5.00

FARM MANAGEMENT AREA



T.C. 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 Brudelie
   (507) 847-3320

5. **Mankato**
   Dennis Jackson
   (507) 625-3441

6. **Austin-Winona**
   Vic Richardson
   (507) 433-0619

TABLE OF CONTENTS

FARM FINANCIAL HIGHLIGHTS OF 1990

Net Cash Farm Income	*$ 39,536*
Net Profit or Loss	*40,323*
Return to Capital, Family Labor and Management	*40,838*
Expenses per Dollar of Income	*.87*
Change in Net Worth	*20,495*
Average Net Worth	*276,543*
Rate of Return on Capital	*8.5%*
Asset Turnover Rate	*51%*
Percent in Debt	*41%*
Total Investment	*422,371*
Dollars Available to Save or Reduce Debt	*25,100*

SUMMARY OF 1990 FARM ANALYSIS
REPORT FOR NORTHWESTERN MINNESOTA

The format of the 1990 analysis has changed from previous years to coincide with new standards for farm financial accounting. It clearly distinguishes between cash and accrual earnings. Measures of Profitability, Liquidity and Solvency have been added to meet farmers' and creditors' needs in the 1990's. These changes should make the summary more easily understood and increase its usage for planning purposes.

Return to Capital and Family Labor for farms included in this report averaged $40,838. Nineteen-ninety provided the second highest earnings on record for program participants, exceeded only by earnings of $42,116 in 1987.

Some reasons for very good earnings that stand out in the annual analysis are:

- The highest spring wheat yields on record at 52.9 bu./acre.
- A return to very good yields, coupled with good prices for both oil and confectionery sunflowers.
- Net return from sugar beets that averaged $213 per acre.
- Excellent cattle prices that improved earnings for both beef and dairy producers.
- The farm price of milk averaged $13.45 per Cwt., the highest in the past 10 years.

Government payments averaged $16,556, an increase of $2,210 over 1989. This increase is partially due to increased acreage enrolled in the conservation reserve program.

There was an extremely wide variation between earnings of the top 20% and bottom 20% of farm records analyzed. Top earners averaged $108,016. Return to Capital and Family Labor, with a rate of return on equity of 15.6% and a net profit margin of 25%. The lower 20% averaged a return to Capital and Family Labor of $2,580 with a rate of return on equity of minus 5.1% and a net profit margin of - 3.0%.

Some additional comparisons between the high and low return farms are as follows:

	Top 20%	Bottom 20%
Total Investment	$863,135	$479,130
Work Units	901	359
Investment/Work Unit	769	1,088
Percent in Debt	37.9	36.0
Total Acres	1562	866

The lack of timely rains in certain areas, particularly the central part of Northwestern Minnesota, was a major factor in reduced earnings on some farms. Crops with low or reduced yields and earnings include:

	Yield/Acre	Net Return/Acre
Corn Grain	74.6 Bu.	$ 7.43
Pinto Beans	8.8 Cwt.	- 8.41
Navy Beans	1.4 Cwt.	- 9.97
Soy Beans	27.2 Bu.	8.37
Alfalfa Hay	2.0 Tons	7.18
Bluegrass Seed	145 Lbs.	-32.00

Very good net returns from nearly all livestock enterprises occurred in 1990. Illustrated below is a summary of net returns for those enterprises included in this report.

	Net Return
Dairy Cows	$ 559./Cow
Other Dairy	111./Head
Beef Cows	149./Cow
Beef: Finishing	17.85/Cwt.
Weaning Pigs	82./Litter
Hogs: Finishing	12.34/Cwt.

Family Living costs, including income taxes paid and savings and investments averaged $36,117 per farm. Living costs are up $1,936 from 1989 and are the highest on record for Northwestern Minnesota. Non-farm income increased to $12,039 from $11,915 in 1989.

This report represents 387 farms enrolled in farm business management education programs in a thirteen-county area of Northwestern Minnesota. The farms averaged 979 owned and rented acres, with an investment of $399,448. A total of 38 different kinds of crops and 10 types of livestock enterprises, are represented. The report is not intended to be inclusive of all farms in the region.

FARM OPERATING INCOME CASH STATEMENT - 1990

Items	Average of 387 Farms	High 77 Farms	Low 77 Farms
**** SALE OF MKT LVSTK & LVSTK PRODUCTS ****			
Dairy Products	28525	22397	12742
Other Dairy Animals	3054	1823	1593
Beef Calves, Yearlings	4553	1337	10255
Beef Finishing	17583	45245	11247
Hogs, Farrow to Finish	327		112
Finished Hogs	228	163	326
Feeder Pigs	1116		391
Sheep & Lambs	43		172
Chick, Layers	228		
**** TOTAL MARKET LIVESTOCK SALES ****	**55657**	**70965**	**36838**
**** SALE OF CROPS ****			
Wheat, Durum	43792	87395	33103
Barley	17782	35583	13370
Oats	818	606	1121
Corn	4763	5875	5876
Flax	218	152	216
Soybeans	6980	11807	5989
Edible Beans	1327	2539	432
Sunflowers	4070	10216	1695
Other Grains	309	344	179
Potatotes	2758	2105	4160
Sugar Beets	25314	104690	1709
Grass, Legume Seeds	952	785	1632
Legume, Hay	1137	399	1442
Other Hay, Silage	185	295	19
Timber & Other Crops	144	193	498
Sales of Purch/Resale	1507	4517	1423
**** TOTAL CROP SALES ****	**112056**	**267501**	**72864**
**** OTHER FARM INCOME ****			
Government Payments	16556	27735	14738
Gas Tax Refund	10	13	5
Income/Work Off Farm	1269	2684	474
Custom Enterprise Income	872	1674	368
Patronage Refund (Cash)	662	1637	400
Misc Farm Income	4069	7873	3232
Capital Lease Income	284	396	636
**** TOTAL OTHER INCOME ****	**23722**	**42012**	**19853**
(A) Cash Operating Income	**191435**	**380478**	**129555**

FARM OPERATING EXPENSES CASH STATEMENT, 1990

Items	Averages of 387 Farms	High 77 Farms	Low 77 Farms
** PURCHASE OF MKT LVSTK & LVSTK EXPENSES **			
Dairy Other	1003	31	306
Beef Breeding	385	847	571
Beef, Feeders	9425	23312	2826
Far: Fin Hogs	121	38	209
Fdr Pigs	12		3
Sheep & Lambs	1		
Vet & Misc Lvstk Exp	3401	2955	2214
Feed Bought	11902	16821	7695
** TOTAL LIVESTOCK EXPENSES **	26250	44004	13824
** CROP EXPENSES **			
Fertilizer	14245	26155	10637
Chemicals	10838	27290	6434
Seed	7752	15603	4940
Drying	492	1047	286
Irrigation Operation	64	81	25
Other Crop Expenses	4619	9833	2958
Purchase for Resale	5336	7778	6839
** TOTAL CROP EXPENSES **	43346	87787	32119
** OPERATING EXPENSES **			
Fuel & Lubricants	8428	14785	7094
Repair: Lvstk Equip.	550	326	376
Repair: Farm Real Estate	1461	2219	1407
Repair: Machy & Vehicles	12111	21881	9667
Repair: Irrigation Equip	13	5	
** TOTAL FUEL/REPAIR EXPENSES **	22563	39216	18544
** MISC. FARM EXPENSES **			
Custom Work Hired	4861	7698	3335
Custom Ent. Oper. Costs	574	1145	4122
Hired Labor	6338	15181	
Personal Prop. & RE Taxes	2669	4110	3255
General Farm Expenses	4834	8064	4235
Utilities	2303	2726	1950
Capital Lease Payment	22385	60270	8492
Interest Actually Paid	15776	28679	12550
** TOTAL MISC. EXPENSES **	59740	127873	37939
(B) Cash Operating Expense	151899	298880	102426
(C) Net Cash Income (A-B)	39536	81598	27129

OPERATOR'S FARM PROFIT OR LOSS ACCRUAL STATEMENT, 1990

Item	Average 397 Farms	High 77 Farms	Low 77 Farms
(C) Net Cash Income	39536	81598	27129

Inventory Changes	Inventory Change	Inventory Change	Inventory Change
** MARKET LIVESTOCK **			
Dairy: Other	178	-129	-500
Beef Breeding	95	402	-669
Beef Feeders	-460	-2604	-4434
Far:Fin Hogs	23		66
Finish Hogs	49	-40	158
Feeder Pig Prod	18		-23
Sheep & Lambs	25		113
Supplies, Prepaids & Fuel	2474	7025	-307
Crop, Seed & Feed	5484	34672	-11160
Stock, Bonds, Co-op Equities	1305	4001	85
Accounts Receivable	286	1457	-1187
(E) Net Inventory Change	**9477**	**44784**	**-17858**
(F) Net Operating Income (C+E)	**49013**	**126382**	**9271**

DEPRECIATION AND CAPITAL ADJUSTMENTS			
** BREEDING STOCK **			
Dairy Cows	2665	2362	896
Dairy: Other	320	214	277
Beef Breed	965	690	1239
Far: Fin Hogs	18		-37
Feeder Pig Prod	125		42
Sheep	15		79
** VEHICLES, MACHY & EQUIP **			
Vehicles	-1729	-3334	-1241
Power & Machinery	-8189	-14293	-7607
Livestock Equipment	-579	-351	-307
Custom Equipment	-100	-45	-40
Irrigation Equipment	-38	-28	-26
** REAL ESTATE **			
Buildings & Fences	-2021	-2343	-1905
Land Impr & Tile	-70	-15	45
Bare Land	75	4	-7
(H) Total Depr/Capital Adj.	**-8543**	**-17139**	**-8592**

OTHER ADJUSTMENTS			
Accounts Payable	-137	-1440	1430
Delinq. Rent, RE Tax	100		205
Delinquent Interest	-110		-263
(J) Other Adjustments	**-147**		**1372**
(K) Net Farm Profit or Loss (F+H+J)	**40323**	**107803**	**2051**

MEASURES OF FARM PROFITABILITY LIQUIDITY, SOLVENCY, 1990

	Average of 387 Farms	
**** PROFITABILITY ****		
(K) Net Farm Profit or Loss	40323	
(L) Family Living from the Farm	439	
(M) Wages Paid to Spouse	87	
(N) Board Furnished Hired Labor	11	
(O) Return:Capital & Family Lbr (K+L+M+N)		40838
CAPITAL COST CALCULATION:		
(I) Avg Total Farm Capital	398066	
(P) Opport Cost on Capital (1*7%)	27865	
(Q) Interest Actually Paid	15776	
(R) Interest on Operator Equity (P-Q)	12089	
(S) Value of Unpaid Family Labor	72	
Net Return: Oper Labor & Mgmt (O-R-S-M)		28590
Number of Oper., Full-time Equiv	1.15	
Net Return to Lbr & Mgmt/Full-time Equiv	24861	
(T) Value of Operator Labor & Mgmt.	22708	
(U) Return to Farm Capital (O+Q-T)	33906	
Rate of Return to Avg Capitol		8.5
(V) Operator Avg Net Worth (T5.2 L23)	276543	
(W) Return to Oper Net Worth (O-T)	18130	
Rate of Return to Net Worth (W/V)		6.6
(X) Value of Farm Production (A+E)	200912	
Net Profit Margin (U/X)		16.9
Asset Turnover Rate (X/I)		50.5

**** LIQUIDITY ****	CASH	ACCRUAL
(C) Net Cash Farm Income	39536	39536
(E) Net Change in Inventory	XXX	9477
(F) Net Operating Income (C+E)	39536	49013
(Y) Non-Farm & Spouse Income	11739	11739
(Z) Total Spendable Income (F+Y)	51275	60752
(AA) Family Living & Taxes Pd (T4 L38)	35652	35652
(AB) Scheduled Rl Est Principal Pymts	6695	6695
(AC) Avail for Non Rl Est Debt (Z-AA-AB)	8928	18405
(AD) Average Non Real Estate Debt	92098	92098
Years to Turnover Non RE Debt (AD/AC)	10.3	5.0

**** SOLVENCY ****		BEGIN	ENDING
Total Assets	**(T5.1 L44)**	**459754**	**486972**
Total Liabilities	**(T5.2 L22)**	**193459**	**200182**
Operator Equity	**(T5.2 L23)**	**266295**	**286790**
Change in Equity	(T5.2 L24)	XXX	20495
Percent in Debt:			
Farm, Current		43.7	42.1
Farm, Intermediate		47.1	46.6
Farm, Working	(Curr + Intermed)	45.4	44.3
Farm, Fixed		50.8	49.8
Non-Farm		7.4	7.4
Total	**(Farm & Non-Farm)**	**42.1**	**41.1**

MEASURES OF FARM PROFITABILITY, LIQUIDITY, SOLVENCY - 1990

	High 77 Farms	Low 77 Farms
** PROFITABILITY **		
(K) Net Farm Profit or Loss	107803	2051
(L) Family Living from the Farm	334	308
(M) Wages Paid to Spouse	-121	228
(N) Board Furnished Hired Labor		7
(O) Return:Capital & Family Lbr (K+L+M+N)	108016	2580
CAPITAL COST CALCULATION:		
(I) Avg Total Farm Capital	693293	390501
(P) Opport Cost on Capital (1*7%)	48530	27335
(Q) Interest Actually Paid	28679	12550
(R) Interest on Operator Equity (P-Q)	19851	14785
(S) Value of Unpaid Family Labor		
Net Return: Oper Labor & Mgmt (O-R-S-M)	88286	-12433
Number of Oper., Full-time Equiv	1.39	1.02
Net Return to Lbr & Mgmt/Full-time Equiv	63515	-12189
(T) Value of Operator Labor	30319	18489
(U) Return to Farm Capital (O+Q-T)	106376	-3359
Rate of Return of Avg Capital (U/I)	15.3	-0.9
(V) Operator Avg Net Worth (T5.2 L23)	499595	310458
(W) Return to Oper Net Worth (O-T)	77697	-15909
Rate of Return to Net Worth (W/V)	15.6	-5.1
(X) Value of Farm Production (A+E)	425262	111697
Net Profit Margin (U/X)	25.0	-3.0
Asset Turnover Rate (X/I)	61.3	28.6

** LIQUIDITY **	CASH	ACCRUAL	CASH	ACCRUAL
Net Cash Farm Income	81598	81598	27129	27129
(E) Net Change in Inventory	XXX	44784	XXX	-17858
(F) Net Operating Income (C+E)	81598	126382	27129	9271
(Y) Non-Farm & Spouse Income	15923	15923	16102	16102
(Z) Total Spendable Income (F+Y)	97521	142305	43231	25373
(AA) Family Living & Taxes Pd (T4 L38)	57004	57004	27478	27478
(AB) Scheduled Rl Est Principal Pymts	10304	10304	6031	6031
(AC) Avail for Non Rl Est Debt (Z-AA-AB)	30213	74997	9722	-8136
(AD) Average Non Real Estate Debt	153908	153908	68266	68266
Years to Turnover Non Real Estate Debt (AD/AC)	5.1	2.1	7.0	-8.4

** SOLVENCY **	BEGIN	END	BEGIN	END
Total Assets	**778848**	**863135**	**487479**	**479130**
Total Liabilities	**315623**	**327171**	**173342**	**172353**
Operator Equity	463225	535964	314138	306777
Change in Equity	XXX	72739	XXX	-7361
Percent in Debt:				
Farm, Current	46.1	37.1	36.1	41.2
Farm, Intermediate	34.7	37.6	38.9	39.5
Farm, Working (Curr + Intermed)	41.1	37.3	37.4	40.3
Farm, Fixed	53.8	51.9	41.5	40.5
Non-Farm	7.9	8.4	3.4	3.0
Total (Farm & Non-Farm)	**40.5**	**37.9**	**35.6**	**36.0**

OPERATOR'S FINANCIAL POSITION, 1990

		Average of 382 Farms	
		January 1	December 31
** CURRENT ASSETS:			
4	Cash,Check.& Saving Acct.Bal:Pers.	$ 1970	$ 1812
5	Cash,Check.& Saving Acct.Bal:Farm	10443	10658
6	Hedging Account Equity	87	60
7	Notes & Accts.Receivables:Personal	812	1524
8	Notes & Accts.Receivables:Farm	1990	2274
9	Crops Held For Sale	60645	64549
10	Livestock Feed	7223	8716
11	Supplies/Prepaids	9889	12439
12	Feeder Cattle & Mkt.Other Dairy	17718	17484
13	Market Hogs	334	423
14	Feeder Lambs & Goats	4	29
17	**Total Current Assets**	**111113**	**119969**
** INTERMEDIATE ASSETS:			
19	Dairy Cows	11482	11852
20	Other Dairy	2191	2440
21	Beef Breeding Cattle	6632	6962
22	Breeding Hogs	350	352
23	Breeding Sheep/Goats	167	177
25	Auto & Truck:Personal Share	3081	3884
26	Auto & Truck:Farm Share	9419	10367
27	Power, Machinery & Equipment	55484	59515
28	Livestock Equipment	3474	3492
29	Custom Work Equipment	371	636
30	Irrigation Equipment	94	179
31	Stocks & Bonds & Co-op Equity-Farm	17812	19130
32	Stocks & Bonds & Co-op Equity-Pers.	4336	4744
35	Other Household Personal	6585	6961
36	Retirement Accts. & Life Ins.	9301	10412
37	**Total Intermediate Assets**	**130780**	**141104**
** LONG TERM ASSETS:			
39	Buildings & Fences	23764	23879
40	Land & Land Improvements	159875	166756
41	Dwelling	30307	31287
42	Real Estate Personal	3915	3977
43	**Total Long Term Assets**	**217861**	**225899**
44	**Total Assets**	**459754**	**486972**
45	**Total Personal Assets(Incl.Cash)**	**60306**	**64601**
46	**Total Farm Assets (Incl.Cash)**	**399448**	**422371**

OPERATOR'S FINANCIAL POSITION, 1990 (cont.)

Average of 382 Farms

		January 1	December 31
** CURRENT LIABILITIES			
4	Accounts Payable:Personal	$ 63	$ 84
5	Accounts Payable:Farm	2097	2235
5A	Cur.Port.,Real Estate	6609	6433
6	Cur.Port. of Intermed. & L-Term Debt	10051	10886
6A	Cur.Port.,Notes & Line of Credit	28736	29798
7	Delinquent Interest	296	407
8	Rents & Lease Pmts.Due From Past Yr.	248	149
9	**Total Current Liabilities**	**48100**	**49992**
** INTERMEDIATE LIABILITIES:			
11	Notes Payable:Personal	190	224
12	Notes Payable:Farm	1637	1572
13	Chattel Mortgages:Personal	363	369
14	Chattel Mortgages:Farm	45939	48886
16	**Total Intermediate Liabilities**	**48130**	**51051**
** LONG TERM LIABILITIES:*			
18	R.E.Mortgages & Contracts:Pers.	3824	4082
19	R.E.Mortgages & Contracts:Farm	93406	95057
21	**Total Long-Term Liabilities**	**97229**	**99139**
22	**Total Liabilities**	**193459**	**200182**
23	**Equity**	**266295**	**286790**
24	**Change in Equity**		**20495**

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

	Formula	Beg.Yr.	End Yr.	Percentage
32	Current T5.1 L17 / T5.2 L9 Current Assets / Current Liabilities	2.31	2.40	41.67
33	Intermediate T5.1 L37/T5.2 L16 Intermed. Assets/Intermed. Liab.	2.72	2.76	36.18
34	Working (T5.1L17+L37)/(T5.2L9+L16) (C.Assets+I.Assets)/(C.Liab.+I.Liab)	2.51	2.58	38.70
35	Fixed T.51 L43/T5.2 L21 Long Term Assts/Long Term Liab.	2.24	2.28	43.89
36	Net Capital T5.1 L44/T5.2 L22 Total Assets/Total Liabilities	2.38	2.43	41.11
37	Equity/Asset T5.2 L23/T5.1 L44 Total Equity/Total Assets	0.58	0.59	58.89
38	Debt/Equity T5.2 L22/T5.2L23 Total Liabilities/Total Equity	0.73	0.70	69.80
39	Current Debt T5.2 L9/T5.2 L22 Current Liabilities/Total Liab.	0.25	0.25	24.97

51	Return to Capital,Family Labor & Mgmt.	$ 40838
52	Total Income From Non-Farm Source	12039
53	Total Family Income	52877
54	Total Family Cash & Non-Cash Exp.	36117
55	Total Money Borrowed	92479
56	Total Paid on Debt	85922

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

OPERATOR'S FINANCIAL POSITION - 1990

		High 76 Farms		Low 76 Farms	
		Jan.1	Dec.31	Jan.1	Dec.31
	** CURRENT ASSETS:				
4	Cash,Check.& Sav.Acct.Bal:Pers.	$ 5805	$ 5114	$ 2081	$ 1977
5	Cash,Check.& Sav.Acct.Bal:Farm	18842	18979	14636	14382
6	Hedging Account Equity	250	212		9
7	Notes & Accts.Rec.:Personal	16	3248	1403	1381
8	Notes & Accts.Rec.:Farm	5741	7151	1649	445
9	Crops Held For Sale	138305	171342	46088	33701
10	Livestock Feed	4203	6360	6784	8896
11	Supplies/Prepaids	22991	30147	7606	7247
12	Feeder Cattle & Mkt.Other Dairy	25282	22921	27283	19445
13	Market Hogs	115	75	168	583
14	Feeder Lambs & Goats			9	123
17	Total Current Assets	**221550**	**265547**	**107705**	**88190**
	** INTERMEDIATE ASSETS:				
19	Dairy Cows	7423	8260	6585	6487
20	Other Dairy	1881	2101	1026	1220
21	Beef Breeding Cattle	1255	1996	12735	12978
22	Breeding Hogs			157	97
23	Breeding Sheep/Goats			798	853
25	Auto & Truck:Personal Share	4330	5371	3011	3526
26	Auto & Truck:Farm Share	16903	19710	6870	7115
27	Power, Machinery & Equipment	95646	108304	54735	54378
28	Livestock Equipment	2921	2644	2578	2980
29	Custom Work Equipment	310	265		778
30	Irrigation Equipment	117	445	26	
31	Stocks & Bonds & Coop Equity Farm	56044	60093	8714	8831
32	Stocks & Bonds & Coop Equity Pers.	6524	7457	9734	10395
35	Other Household Personal	8897	9694	6996	7489
36	Retirement Accts. & Life Ins.	23400	25609	10455	11747
37	Total Intermediate Assets	**225649**	**251949**	**124420**	**128874**
	** LONG TERM ASSETS:				
39	Buildings & Fences	25991	25545	23931	23622
40	Land & Land Improvements	252757	265748	198325	205019
41	Dwelling	44411	46350	29573	29773
42	Real Estate Personal	8490	7997	3526	3653
43	Total Long Term Assets	**331649**	**345639**	**255355**	**262066**
44	Total Assets	**778848**	**863135**	**487479**	**479130**
45	Total Pers.Assets(Incl.Cash)	**101872**	**110840**	**66778**	**69939**
46	Total Farm Assets(Incl.Cash)	**676976**	**752295**	**420702**	**409191**

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

OPERATORS FINANCIAL POSITION, 1990, (CONT.)

		High 76 Farms		Low 76 Farms	
		Jan 1	Dec 31	Jan 1	Dec 31
	** CURRENT LIABILITIES **				
4	Accounts Payable:Personal	$	$	$ 146	$ 146
5	Accounts Payable:Farm	2533	4035	2810	1533
5A	Cur.Port.-Real Estate	10358	9682	5953	6113
6	Cur.Port.-Intermed.& L-Term Debt	15105	16730	6902	7804
6A	Current Portion: Notes & Line/Credit	70898	64984	27252	24924
7	Delinquent Interest				266
8	Rent & Lease Pymts Dye /Past Yr.			703	495
9	Total Current Liabilities	98894	95432	43766	41281
	** INTERMEDIATE LIABILITIES **				
11	Notes Payable:Personal	305	220		36
12	Notes Payable:Farm	6183	5409		132
13	Chattel Mortgages:Personal	290	431	163	119
14	Chattel Mortgages:Farm	52482	65503	35003	36119
16	Total Intermediate Liabilities	59260	71562	35166	36406
	** LONG TERM LIABILITIES **				
18	R.E.Mortgages & Contracts:Pers.	7505	8819	1906	1789
19	R.E.Mortgages & Contracts:Farm	149963	151358	92504	92877
21	Total Long Term Liabilities	157468	160178	94410	94666
22	Total Liabilities	315623	327171	173342	172353
23	Equity	463225	535964	314138	306777
24	Change in Equity		72739		-7361

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

	Formula	Jan 1	Dec 31	Jan 1	Dec 31
32	Current Debt T5.1 L17 / T5.2 L9 Current Assets/Current Liab.	2.24	2.78	2.46	2.14
33	Inter. Debt T5.1 L37/T5.2 L16 Intermed. Assets/Intermed. Liab.	3.81	3.52	3.54	3.54
34	Working (T5.1L17+L37)/(T5.2L9+L16) (C.Assets+I.Assets)/(C.Liab.+I.Liab)	2.83	3.10	2.94	2.79
35	Fixed T5.1 L43/T5.2 L21 Long Term Assts/Long Term Liab.	2.11	2.16	2.70	2.77
36	Net Capital T5.1 L44/T5.2 L22 Total Assets/Total Liabilities	2.47	2.64	2.81	2.78
37	Equity/Asset T5.2 L23/T5.1 L44 Total Equity/Total Assets	0.59	0.62	0.64	0.64
38	Debt/Equity T5.2 L22/T5.2L23 Total Liabilities/Total Equity	0.68	0.61	0.55	0.56
39	Current Debt T5.2 L9/T5.2 L22 Current Liabilities/Total Liab.	0.31	0.29	0.25	0.24

		High 76 Farms	Low 76 Farms
51	Return to Capital,Family Labor & Mgmt.	$ 108016	$ 2580
52	Total Income From Non-Farm Source	11923	16139
53	Total Family Income	119939	18719
54	Total Family Cash & Non-Cash Exp.	57488	27791
55	Total Money Borrowed	204650	71613
56	Total Paid on Debt	194611	71394

EXPLANATION OF TABLE 5.2 RATIOS

LINE 32 THE CURRENT RATIO This is a measure of liquidity. It indicates the shortrun ability of the business to service debt. It demonstrates the adequacy of current assets, if liquidated, to pay off annual debts as they come due. Usually current assets have a life of 1 year or less. It is calculated by dividing current assets by current liabilities.

LINE 33 INTERMEDIATE RATIO Intermediate assets and liabilities are those where the finances used are converted into product in a period usually from one to ten years. Examples may be breeding livestock, machinery and equipment. The increase in the ratio over a period of time is a favorable sign. It is calculated by dividing intermediate assets by intermediate liabilities.

LINE 34 WORKING RATIO The desired trend is for this ratio to increase over time. It is also desirable for this ratio to be larger than the fixed ratio and net capital ratio. The farm business needs to have sufficient liquid assets and retain management flexibility to absorb price decreases and other factors negatively affecting current and intermediate asset values. This ratio is calculated by dividing current assets and intermediate assets by current liabilities and intermediate liabilities.

LINE 35 FIXED RATIO This ratio should be in excess of one but it is also important for this ratio to be increasing over time. This ratio should not be increased at the expense of a safe working ratio. It is calculated by dividing long term assets by long term liabilities.

LINE 36 NET CAPITAL RATIO Net capital ratio is one of three measures of solvency; how much value remains if all assets are converted to cash at inventoried value and the total debt is paid. This ratio reflects the risk-bearing capacity of the farm business by showing the percentage that assets could decline and still cover liabilities. The higher the ratio number, the better the risk. A ratio of less than 1.0 = insolvent, a ratio of 1.0 = a net worth of zero. A ratio of 2.0 is considered a safe ratio. This would allow a 50% reduction in asset value or 100% increase in liabilities before becoming insolvent. This ratio is calculated by dividing total assets by total liabilities.

LINE 37 EQUITY/ASSET This ratio shows the portion of total assets paid for the owned by the operator clear of financial claims. A ratio of .80 shows that the operator owns 80% of all total assets and a ratio of .44 shows he owns only 44% of all total assets. Therefore, this ratio should be increasing over time. It is calculated by dividing total equity by total assets.

LINE 38 DEBT/EQUITY This is another overall measure of solvency. It shows the relationship between debt and equity. A ratio of 1.00 indicates that equity and debt are equal. That would be equivalent to a net capital ratio of 2.00 to 1.00 and an asset equity/asset ratio of .50 to 1.00. All measures of solvency use the same three measures of financial position. They all express relationships between assets, liabilities and net worth (or equity). Lenders prefer a debt-equity ratio of less than 1.0. It is calculated by dividing total liabilities by total equity.

LINE 39 CURRENT DEBT The lower the current debt structure ratio is, the more liquid the business. A ratio of .10 means only one dollar ($1.00) out of every $10. debt must be paid within the next year. A ratio of .50 means one-half of the total debt must be paid in the next year. This ratio is calculated by dividing current liabilities by total liabilities.

NON-FARM INCOME AND HOUSEHOLD PERSONAL EXPENSE, 1990

		Average of 204 Farms	High 40 Farms	Low 40 Farms
4	Number of Persons-Family	4	5	4
5	Number of Adult Equiv.-Family	3.2	3.9	3.0
6	Non-Farm Income			
7	Outside Investment Income	$ 794	$ 1975	$ 729
8	Other Pers.Inc.& Inc.Tax Ref.	9833	8207	13110
9	Sale of Dwell.,Auto & Truck (Personal Share)	544	1258	1025
10	Net Cash From Non-Farm Business	868	484	1275
11	**Total Non-Farm Income**	**12039**	**11923**	**16139**
	**** HOUSEHOLD EXPENSE ****			
14	Church & Charity	976	1840	544
15	Medical Care & Health Ins.	3082	3812	2800
16	Food & Meals Bought	4990	5721	4601
17	Operating Expense & Supplies	2739	3956	2371
18	Furnishings & Equipment	1453	1678	1479
19	Clothing & Clothing Materials	1531	2330	1266
20	Personal Care, Pers.Spending	4190	7792	2360
21	Education	808	1056	952
22	Recreation	778	1154	871
23	Gifts & Special Events	705	794	569
24	Personal Interest	495	826	388
25	**Total Cash Househld Exp(L14,L24)**	**21747**	**30960**	**18201**
26	Truck & Auto Expense:Personal	1124	1260	1185
27	Upkeep on Dwelling:Personal	116	365	
28	Cash Rent: Personal	30	38	
29	Telephone & Elec.Exp: Personal	1036	1114	992
30	General Farm Expense: Personal	38	31	69
31	**Total Cash Living & Operating Exp**	**24090**	**33766**	**20448**
32	New Truck & Auto Personal	1327	2260	901
33	New Dwelling,Buildings,Land:Persnl	2068	3925	910
34	Taxes & Other Deductions	4503	9198	2895
35	Life Insurance	884	1094	996
36	Paid on Personal Debt (Principal)	954	1668	681
37	Savings & Invest.(Exc. Life Ins.)	1826	5091	647
38	**Total Non-Farm Cash Expense**	**35652**	**57004**	**27478**
39	Tot.N/F Exp.Minus N/F Inc.	23612	45080	11339
40	Total Family Living From Farm	465	485	314
41	**Total Cash & Non-Cash Expenses**	**36117**	**57488**	**27791**
	**** SUPPLEMENTARY INFORMATION ****	**OPER**	**OPER**	**OPER**
43	Family Living from the Farm			
44	Milk & Cream (Quarts)	106	139	30
45	Beef & Buffalo (Pounds)	342	346	280
46	Pork (Pounds)	18		4
51	**Total Family Living From Farm**	**465**	**485**	**314**
52	Calculated Living Expense			
53	Total Family Income	53590	123190	17646
54	Minus Change in Net Worth	20495	72739	-7361
55	Apparent Family Living	33095	50451	25007
56	Total Family Living Per Work Unit: Calculated	67.77	63.25	76.56
57	Net Family Living Per Work Unit	44.88	50.02	31.59

MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY, 1990

	Average of 387 Farms	High 77 Farms	Low 77 Farms
Net Return to Oper. Labor & Management	$ 28590	$ 88286	$ 12433
Oper.Return to Capital & Fam.Labor	40838	108016	2580
Crop Yield Index	100.0	98.2	91.8
Return Over All Listed Cost Per Tillable Acre (Excl.Pasture)	39.60	63.03	18.19
Gross Return Per Tillable Acre (Excl. Pasture)	183.82	239.23	132.63
Index Return/$100 Feed Fed	100.00	104.7	81.9
Livestock Units/100 Acres*	5.29	1.72	5.34
Size of Business in Tot.Work Units	526.1	901.3	358.9
Work Units/Worker	326.77	378.70	271.89
Power,Mach.,Equip,Bldg.Exp/Work Unit	80.63	79.05	97.21
Number of Animal Units	46.95	25.67	39.86
WORK UNITS:			
Crops	372.6	798.8	258.4
Productive Livestock	150.7	96.8	99.6
Other Productive Units	2.9	5.7	0.9
EXPENSES/WORK UNITS:			
Tractor & Crop Machinery	55.20	60.82	64.41
Auto & Truck: Farm Share	12.08	9.25	15.56
Electricity: Farm Share	3.47	2.32	4.20
Livestock Equipment	2.24	0.76	2.31
Building, Fence & Tiling	6.67	5.17	9.41
OTHER EXPENSE PER TOTAL WORK UNITS:			
General Farm, Tele.& Other Util.	10.23	9.72	13.04
Wages For Hired Labor	12.07	16.89	11.49
Tractor, Crop&Mach,Exp/Crop Acre **	32.97	37.35	31.04

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

	Average of 387 Farms	High 77 Farms	Low 77 Farms
Oper.Depreciation:Farm Power&Crop Mach.	9855	17627	876
Oper.Depreciation:Irrigation Equipment	35	28	2
Oper.Depreciation:Custom Work Equip.	95	45	2
Oper.Depreciation:Livestock Equipment	582	351	30
Oper.Depreciation:Buildings,Fences	2044	2343	190
Oper.Depreciation:Land Improv.&Tile	70	15	-4
Total Operator's Depreciation	12681	20409	1097

* Acres Include All Tillable Land, Non-Tillable Hay & Pasture
** Acres Include All Tillable Land Plus Acres in Non-Tillable Hay.

CROP ACRE DISTRIBUTION & SELECTED EXPENSES PER ACRE - 1990

	Average of 381 Farms	76 Most Profitable Farms	76 Least Profitable Farms
Small Grain	503.3	936.6	389.7
Row Crop	169.1	400.6	96.8
Legumes, Including Seed	62.9	28.8	72.0
Other Hay	8.8	3.0	15.3
Silage + Fodder	19.2	11.1	15.9
Tillable Pasture	17.5	1.1	24.0
Grass Crops	10.7	5.2	16.0
Fallow + Set Aside	86.5	78.2	114.1
Commercial Fruits & Nuts	0.1	0.0	0.1
Total Tillable Land	878.0	1464.6	743.9
Non-Tillable Hay/Pasture, Forest	9.2	28.3	2.4
Hay Not Harvested (Non-Tillable)	3.2	2.3	3.9
Pasture Timber Not Harvested	65.5	28.9	93.6
Road + Waste	22.0	18.1	20.6
Farmstead	9.1	7.2	9.0
Land Rented Out	.1	.0	.6
Total Land Not Harvested	99.9	56.5	127.7
Total Non-Tillable Land	109.3	84.8	130.0
Total Acres Cropped	784.7	1419.7	619.3
Total Land in Farm or Ranch	993.9	1561.0	877.0

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

	Average of 381 Farms	76 Most Profitable Farms	76 Least Profitable Farms
Percent Land Tillable	88.3	93.8	84.8
Fertilizer Cost per Acre	16.31	16.51	15.62
Crop Chemicals per Acre	13.29	18.19	10.43
Seed and Other Costs per Acre	21.04	29.75	13.78
Gas, Diesel & Lubricants per Acre	10.43	9.97	11.51
Repair/Maintenance Cost per Acre	16.47	16.40	16.85
* Total Acres Cropped	773.91	1385.36	605.80

* Tillable acres plus recropped acres minus tillable
* Pasture, fallow and idle acres

CROP DATA FOR BARLEY, 1990

		Average of 484 Fields Per Acre	High 96 Fields Per Acre	Low 96 Fields Per Acre
3	Acres	100.8	129.9	65.8
4	Yield	69.5	77.1	51.9
5	Value per Unit	2.06	2.42	1.76
6	Crop Product Return	143.14	186.77	91.60
7	Other Crop Income	9.89	12.49	9.88
8	**Total Crop Return**	**153.03**	**199.26**	**101.48**
	**** VARIABLE COSTS ****			
10	Fertilizer	16.60	16.86	18.09
11	Chemicals	11.43	11.78	11.09
12	Seed	8.13	9.62	7.74
13	Crop Drying	0.07	0.07	0.02
14	Crop Insurance	3.88	4.80	3.98
15	Other Expenses	0.65	0.51	0.73
16	Special Hired Labor	0.30	0.19	0.55
17	Custom Work Hired	2.38	1.87	2.31
18	Irrigation Operation			
19	Assigned Interest	0.73	0.07	1.69
20	**Total Variable Costs**	**44.17**	**45.76**	**46.19**
21	**Return Over Variable Costs**	**108.86**	**153.50**	**55.29**
	**** ALLOCATED COSTS (VARIABLE & FIXED) ****			
31	Farm Power & Machinery-Ownership	8.65	8.71	7.77
32	Farm Power & Machinery-Operation	17.75	18.18	16.91
33	Building & Fence Cost	1.94	1.68	2.19
34	Irrigation Ownership Cost			
37	Land Cost	36.40	43.01	34.42
38	Utilities & Gen. Farm Expense	4.36	4.04	5.06
39	Hired Labor	2.50	2.17	2.60
41	Actual Non-R.E.Int. Allocated	4.82	5.80	3.19
42	**Total Allocated Costs**	**76.42**	**83.59**	**72.14**
43	**Total Listed Costs**	**120.59**	**129.35**	**118.33**
44	**Return Over Listed Costs**	32.44	69.91	-16.85
	**** SUPPLEMENTARY MANAGEMENT INFORMATION ****			
50	Land Opportunity Own.Cost	35.52	36.57	35.62
51	Total Cost Adj.to a Min 7% Int.	119.96	128.08	119.24
52	Work Units Assigned/Acre	0.30	0.30	0.30
53	Power Cost Allocation Factor	1.00	1.00	0.99
54	Total Listed Cost/Unit of Prod.	1.74	1.68	2.28
54A	Total Production Cost Including Net Family Living	1.93	1.87	2.46
55	Total Adjusted Cost/Unit of Prod.	1.72	1.66	2.30
56	Cash Variable Cost/Unit of Prod.	1.06	0.99	1.42
57	Return Over Listed Costs Per Unit	0.47	0.91	-0.32
58	Breakeven Yield/Unit of Prod.	58.5	53.5	67.2
61	Average Price Received/Unit Sold	2.32	2.42	
62	Quantity Sold (O.S.)	161	376	

CROP DATA FOR BUCKWHEAT & CANOLA, 1990

		BUCKWHEAT Average of 10 Fields Per Acre	CANOLA Average of 7 Fields Per Acre
3	Acres	68.3	33.6
4	Yield	9.8	11.8
5	Value per Unit	10.34	10.36
6	Crop Product Return	101.27	122.74
7	Other Crop Income	51.35	
8	Total Crop Return	152.62	122.74
** VARIABLE COSTS **			
10	Fertilizer	5.65	17.08
11	Chemicals	5.77	6.28
12	Seed	10.85	10.33
13	Crop Drying		
14	Crop Insurance	4.20	
15	Other Expenses	0.50	0.60
16	Special Hired Labor		
17	Custom Work Hired	1.17	
18	Irrigation Operation		
19	Assigned Interest		
20	Total Variable Costs	28.14	34.29
21	Return Over Variable Costs	124.48	88.45
** ALLOCATED COSTS (VARIABLE & FIXED) **			
31	Farm Power & Machinery-Ownership	5.43	6.49
32	Farm Power & Machinery-Operation	20.45	20.51
33	Building & Fence Cost	2.14	1.55
34	Irrigation Ownership Cost		
37	Land Cost	23.74	15.75
38	Utilities & Gen. Farm Expense	6.37	2.50
39	Hired Labor	3.03	0.45
41	Actual Non-R.E.Int. Allocated	7.80	0.51
42	Total Allocated Costs	68.96	47.76
43	Total Listed Costs	97.10	82.02
44	Return Over Listed Costs	55.52	40.72
** SUPPLEMENTARY MANAGEMENT INFORMATION **			
50	Land Opportunity Own.Cost	20.80	26.79
51	Total Cost Adj.to a Min 7% Int.	93.21	96.55
52	Work Units Assigned/Acre	0.30	0.20
53	Power Cost Allocation Factor	1.00	1.43
54	Total Listed Cost/Unit of Prod.	9.91	6.95
54A	Total Production Cost Including Net Family Living	11.28	7.71
55	Total Adjusted Cost/Unit of Prod.	9.52	8.15
56	Cash Variable Cost/Unit of Prod.	6.71	4.94
57	Return Over Listed Costs Per Unit	5.67	3.45
58	Breakeven Yield/Unit of Prod.	9.4	7.9

CROP DATA FOR FLAX , 1990

		Average of 20 Fields Per Acre	High 10 Fields Per Acre	Low 10 Fields Per Acre
3	Acres	42.3	48.2	36.4
4	Yield	23.0	25.9	19.1
5	Value per Unit	5.37	5.45	5.22
6	Crop Product Return	123.29	140.83	100.03
7	Other Crop Income	7.75	13.61	
8	Total Crop Return	131.04	154.44	100.03
** VARIABLE COSTS **				
10	Fertilizer	15.32	17.37	12.61
11	Chemicals	11.06	11.33	10.69
12	Seed	10.02	10.95	8.79
13	Crop Drying			
14	Crop Insurance	1.96	1.80	2.17
15	Other Expenses	0.28		0.66
16	Special Hired Labor			
17	Custom Work Hired	6.10	1.10	12.72
18	Irrigation Operation			
19	Assigned Interest	0.38	0.66	
20	Total Variable Costs	45.13	43.22	47.64
21	Return Over Variable Costs	85.91	111.22	52.39
** ALLOCATED COSTS (VARIABLE & FIXED) **				
31	Farm Power & Machinery-Ownership	6.60	7.18	5.80
32	Farm Power & Machinery-Operation	19.15	20.29	17.66
33	Building & Fence Cost	0.78	0.75	0.85
34	Irrigation Ownership Cost			
37	Land Cost	22.49	22.72	22.20
38	Utilities & Gen. Farm Expense	3.92	3.98	3.85
39	Hired Labor	0.61	0.12	1.26
41	Actual Non-R.E.Int. Allocated	3.71	3.15	4.45
42	Total Allocated Costs	57.26	58.19	56.07
43	Total Listed Costs	102.41	101.41	103.71
44	Return Over Listed Costs	28.63	53.03	-3.68
** SUPPLEMENTARY MANAGEMENT INFORMATION **				
50	Land Opportunity Own.Cost	35.14	39.39	28.76
51	Total Cost Adj.to a Min 7% Int.	116.03	120.02	110.03
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.	4.45	3.92	5.43
54A	Total Production Cost Including Net Family Living	5.04	4.50	5.93
55	Total Adjusted Cost/Unit of Prod.	5.05	4.64	5.75
56	Cash Variable Cost/Unit of Prod.	3.15	2.73	3.92
57	Return Over Listed Costs Per Unit	1.24	2.05	-0.19
58	Breakeven Yield/Unit of Prod.	19.1	18.6	19.9

CROP DATA FOR OATS, 1990

		Average of 133 Fields Per Acre	High 26 Fields Per Acre	Low 26 Fields Per Acre
3	Acres	37.7	31.9	42.8
4	Yield per Acre	73.3	102.6	51.1
5	Value per Unit	1.11	1.19	0.93
6	Crop Product Return	81.03	121.79	47.50
7	Other Crop Income	2.92	5.61	0.91
8	**Total Crop Return**	**83.95**	**127.40**	**48.41**
	**** VARIABLE COSTS ****			
10	Fertilizer	11.46	11.35	13.36
11	Chemicals	4.24	2.60	9.70
12	Seed	6.95	6.55	7.45
13	Crop Drying			
14	Crop Insurance	1.56	1.38	2.08
15	Other Expenses	0.56	0.50	0.51
16	Special Hired Labor			
17	Custom Work Hired	1.64	1.00	3.79
18	Irrigation Operation			
19	Assigned Interest	0.27	0.34	0.56
20	**Total Variable Costs**	**26.68**	**23.73**	**37.45**
21	**Return Over Variable Costs**	**57.27**	**103.67**	**10.96**
	**** ALLOCATED COSTS (VARIABLE & FIXED) ****			
31	Farm Power & Machinery-Ownership	8.70	8.81	5.42
32	Farm Power & Machinery-Operation	20.90	21.22	16.50
33	Building & Fence Cost	1.96	1.63	1.66
34	Irrigation Ownership Cost			
37	Land Cost	19.72	25.35	16.91
38	Utilities & Gen. Farm Expense	3.66	3.79	3.62
39	Hired Labor	1.99	2.01	2.03
41	Actual Non-R.E.Int. Allocated	3.47	3.26	3.79
42	**Total Allocated Costs**	**60.40**	**66.07**	**49.93**
43	**Total Listed Costs**	**87.08**	**89.81**	**87.38**
44	**Return Over Listed Costs**	**-3.13**	**37.59**	**-38.97**
	**** SUPPLEMENTARY MANAGEMENT INFORMATION ****			
50	Land Opportunity Own.Cost	24.82	31.32	21.63
51	Total Cost Adj.to a Min 7% Int.	93.50	97.55	92.45
52	Work Units Assigned/Acre	0.30	0.30	0.30
53	Power Cost Allocation Factor	1.00	1.00	0.99
54	Total Listed Cost/Unit of Prod.	1.19	0.88	1.71
54A	Total Production Cost Including Net Family Living	1.37	1.03	1.90
55	Total Adjusted Cost/Unit of Prod.	1.28	0.95	1.81
56	Cash Variable Cost/Unit of Prod.	0.77	0.53	1.24
57	Return Over Listed Costs Per Unit	-0.04	0.37	-0.76
58	Breakeven Yield/Unit of Prod.	78.5	75.5	94.0

CROP DATA FOR SPRING WHEAT, 1990

		Average of 862 Fields Per Acre	High 172 Fields Per Acre	Low 172 Fields Per Acre
3	Acres	154.0	140.6	119.5
4	Yield per Acre	52.9	64.0	42.1
5	Value per Unit	2.46	2.52	2.41
6	Crop Product Return	129.86	161.18	101.46
7	Other Crop Income	40.61	50.41	22.78
8	Total Crop Return	170.47	211.59	124.24
	** VARIABLE COSTS **			
10	Fertilizer	18.82	17.45	20.28
11	Chemicals	11.87	11.81	12.07
12	Seed	8.94	8.65	9.20
13	Crop Drying	0.07	0.09	0.01
14	Crop Insurance	4.56	4.02	4.69
15	Other Expenses	0.84	0.41	1.29
16	Special Hired Labor	0.20	0.18	0.18
17	Custom Work Hired	3.45	1.76	8.59
18	Irrigation Operation			
19	Assigned Interest	0.36	0.68	0.13
20	Total Variable Costs	49.12	45.04	56.44
21	Return Over Variable Costs	121.35	166.55	67.80
	** ALLOCATED COSTS (VARIABLE & FIXED) **			
31	Farm Power & Machinery-Ownership	8.51	9.07	6.48
32	Farm Power & Machinery-Operation	18.06	18.23	16.45
33	Building & Fence Cost	2.20	2.85	2.03
34	Irrigation Ownership Cost			
37	Land Cost	35.69	38.71	28.04
38	Utilities & Gen. Farm Expense	4.62	4.60	4.47
39	Hired Labor	2.66	2.38	2.41
41	Actual Non-R.E.Int. Allocated	5.60	6.42	5.15
42	Total Allocated Costs	77.34	82.26	65.03
43	Total Listed Costs	126.47	127.29	121.46
44	Return Over Listed Costs	44.00	84.30	2.78
	** SUPPLEMENTARY MANAGEMENT INFORMATION **			
50	Land Opportunity Own.Cost	36.04	47.61	28.71
51	Total Cost Adj.to a Min 7% Int.	125.77	134.21	121.10
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.	2.39	1.99	2.89
54A	Total Production Cost Including Net Family Living	2.64	2.22	3.12
55	Total Adjusted Cost/Unit of Prod.	2.38	2.10	2.87
56	Cash Variable Cost/Unit of Prod.	1.51	1.20	2.02
57	Return Over Listed Costs Per Unit	0.83	1.32	0.07
58	Breakeven Yield/Unit of Prod.	51.4	50.5	50.4

CROP DATA FOR WINTER WHEAT, 1990

		Average of 13 Fields Per Acre
3	Acres	58.5
4	Yield	32.6
5	Value per Unit	2.53
6	Crop Product Return	82.32
7	Other Crop Income	22.79
8	Total Crop Return	105.11
** VARIABLE COSTS **		
10	Fertilizer	14.19
11	Chemicals	1.85
12	Seed	8.46
13	Crop Drying	
14	Crop Insurance	1.97
15	Other Expenses	0.36
16	Special Hired Labor	
17	Custom Work Hired	1.44
18	Irrigation Operation	
19	Assigned Interest	1.09
20	Total Variable Costs	29.35
21	Return Over Variable Costs	75.76
** ALLOCATED COSTS (VARIABLE & FIXED) **		
31	Farm Power & Machinery-Ownership	11.23
32	Farm Power & Machinery-Operation	18.87
33	Building & Fence Cost	2.00
34	Irrigation Ownership Cost	
37	Land Cost	31.60
38	Utilities & Gen. Farm Expense	3.62
39	Hired Labor	2.07
41	Actual Non-R.E.Int. Allocated	4.56
42	Total Allocated Costs	73.95
43	Total Listed Costs	103.32
44	Return Over Listed Costs	1.79
** SUPPLEMENTARY MANAGEMENT INFORMATION **		
50	Land Opportunity Own.Cost	28.70
51	Total Cost Adj.to a Min 7% Int.	103.44
52	Work Units Assigned/Acre	0.30
53	Power Cost Allocation Factor	1.00
54	Total Listed Cost/Unit of Prod.	3.17
54A	Total Production Cost Including Net Family Living	3.58
55	Total Adjusted Cost/Unit of Prod.	3.18
56	Cash Variable Cost/Unit of Prod.	1.79
57	Return Over Listed Costs Per Unit	0.05
58	Breakeven Yield/Unit of Prod.	40.8

CROP DATA FOR EDIBLE BEANS, 1990

		Pinto Beans 13 Fields Per Acre	Navy Beans 16 Fields Per Acre
3	Acres	88.7	62.7
4	Yield, Cwt	8.8	11.4
5	Value per Unit	16.58	15.11
6	Crop Product Return	145.45	172.58
7	Other Crop Income	26.83	8.52
8	Total Crop Return	172.28	181.10
** VARIABLE COSTS **			
10	Fertilizer	8.21	15.33
11	Chemicals	16.84	18.10
12	Seed	25.31	32.28
13	Crop Drying		0.02
14	Crop Insurance	10.59	8.48
15	Other Expenses	0.97	0.11
16	Special Hired Labor	0.65	
17	Custom Work Hired	2.57	4.13
18	Irrigation Operation		
19	Assigned Interest		0.91
20	Total Variable Costs	65.14	79.36
21	Return Over Variable Costs	107.14	101.74
** ALLOCATED COSTS (VARIABLE & FIXED) **			
31	Farm Power & Machinery-Ownership	14.26	19.94
32	Farm Power & Machinery-Operation	28.09	29.76
33	Building & Fence Cost	3.86	2.22
34	Irrigation Ownership Cost		
37	Land Cost	38.00	37.11
38	Utilities & Gen. Farm Expense	8.85	8.12
39	Hired Labor	2.55	3.05
41	Actual Non-R.E.Int. Allocated	19.94	11.52
42	Total Allocated Costs	115.55	111.72
43	Total Listed Costs	180.69	191.07
44	Return Over Listed Costs	-8.41	-9.97
** SUPPLEMENTARY MANAGEMENT INFORMATION **			
50	Land Opportunity Own.Cost	39.02	45.11
51	Total Cost Adj.to a Min 7% Int.	168.75	196.60
52	Work Units Assigned/Acre	0.50	0.50
53	Power Cost Allocation Factor	1.00	1.00
54	Total Listed Cost/Unit of Prod.	20.53	16.76
54A	Total Production Cost Including Net Family Living	23.08	18.73
55	Total Adjusted Cost/Unit of Prod.	19.24	17.22
56	Cash Variable Cost/Unit of Prod.	14.16	11.56
57	Return Over Listed Costs Per Unit	-0.96	-0.87
58	Breakeven Yield/Unit of Prod.	10.9	12.6

CROP DATA FOR CORN-GRAIN, 1990

		Average of 233 Fields Per Acre	High 46 Fields Per Acre	Low 46 Fields Per Acre
3	Acres	59.9	46.9	50.8
4	Yield per Acre	74.6	98.2	52.2
5	Value per Unit	2.07	2.13	2.02
6	Crop Product Return	154.82	209.25	105.24
7	Other Crop Income	30.17	37.70	20.30
8	Total Crop Return	184.99	246.95	125.54
**	VARIABLE COSTS **			
10	Fertilizer	21.00	19.91	20.49
11	Chemicals	13.02	12.75	10.93
12	Seed	17.78	19.28	17.24
13	Crop Drying	3.91	3.50	3.60
14	Crop Insurance	3.26	2.75	4.74
15	Other Expenses	0.58	0.75	0.53
16	Special Hired Labor	0.27	0.11	0.31
17	Custom Work Hired	2.72	1.26	6.38
18	Irrigation Operation			
19	Assigned Interest	0.70	0.04	2.03
20	Total Variable Costs	63.24	60.34	66.26
21	Return Over Variable Costs	121.75	186.61	59.28
**	ALLOCATED COSTS (VARIABLE & FIXED) **			
31	Farm Power & Machinery-Ownership	16.43	19.53	12.22
32	Farm Power & Machinery-Operation	33.11	34.75	30.51
33	Building & Fence Cost	4.46	6.65	3.35
34	Irrigation Ownership Cost			
37	Land Cost	35.35	34.97	30.09
38	Utilities & Gen. Farm Expense	9.47	13.90	7.62
39	Hired Labor	4.31	5.99	3.21
41	Actual Non-R.E.Int. Allocated	11.22	11.81	11.24
42	Total Allocated Costs	114.35	127.60	98.24
43	Total Listed Costs	177.56	187.95	164.51
44	Return Over Listed Costs	7.43	59.00	-38.97
**	SUPPLEMENTARY MANAGEMENT INFORMATION **			
50	Land Opportunity Own.Cost	36.00	37.34	30.24
51	Total Cost Adj.to a Min 7% Int.	175.63	188.49	160.24
52	Work Units Assigned/Acre	0.55	0.55	0.55
53	Power Cost Allocation Factor	0.99	0.98	0.97
54	Total Listed Cost/Unit of Prod.	2.38	1.91	3.15
54A	Total Production Cost Including Net Family Living	2.71	2.19	3.48
55	Total Adjusted Cost/Unit of Prod.	2.35	1.92	3.07
56	Cash Variable Cost/Unit of Prod.	1.63	1.29	2.28
57	Return Over Listed Costs Per Unit	0.10	0.60	-0.75
58	Breakeven Yield/Unit of Prod.	85.8	88.2	81.4

CROP DATA FOR SEED POTATOES, 1990

		Average of 29 Fields Per Acre	High 14 Fields Per Acre	Low 14 Fields Per Acre
3	Acres	38.8	48.1	27.8
4	Yield, per Acre, Cwt.	120.4	139.7	83.9
5	Value per Unit	7.00	7.45	5.96
6	Crop Product Return	842.45	1040.79	499.89
7	Other Crop Income	26.65	3.72	70.65
8	Total Crop Return	869.10	1044.51	570.54
** VARIABLE COSTS **				
10	Fertilizer	42.71	46.32	34.14
11	Chemicals	39.28	44.16	33.38
12	Seed	153.35	162.00	129.24
13	Crop Drying	2.29	0.35	6.01
14	Crop Insurance	2.53	2.54	2.95
15	Other Expenses	7.84	10.44	4.50
16	Special Hired Labor	21.06	18.73	28.45
17	Custom Work Hired	4.69	1.41	6.69
18	Irrigation Operation			
19	Assigned Interest			
20	Total Variable Costs	273.74	285.95	245.36
21	Return Over Variable Costs	595.36	758.56	325.18
** ALLOCATED COSTS (VARIABLE & FIXED) **				
31	Farm Power & Machinery-Ownership	25.70	18.09	29.64
32	Farm Power & Machinery-Operation	106.29	109.27	103.31
33	Building & Fence Cost	25.80	27.40	23.38
34	Irrigation Ownership Cost			
37	Land Cost	41.02	34.30	49.68
38	Utilities & Gen. Farm Expense	26.57	32.14	17.73
39	Hired Labor	41.55	52.83	23.71
41	Actual Non-R.E.Int. Allocated	17.50	20.33	11.19
42	Total Allocated Costs	284.43	294.36	258.64
43	Total Listed Costs	558.17	580.31	503.99
44	Return Over Listed Costs	310.93	464.20	66.55
******************** SUPPLEMENTARY MANAGEMENT INFORMATION ********************				
50	Land Opportunity Own.Cost	37.43	34.55	43.10
51	Total Cost Adj.to a Min 7% Int.	558.71	577.30	509.28
52	Work Units Assigned/Acre	3.00	3.00	3.00
53	Power Cost Allocation Factor	0.97	0.97	0.97
54	Total Listed Cost/Unit of Prod.	4.64	4.15	6.01
54A	Total Production Cost Including Net Family Living	5.76	5.22	7.14
55	Total Adjusted Cost/Unit of Prod.	4.64	4.13	6.07
56	Cash Variable Cost/Unit of Prod.	3.87	3.58	4.78
57	Return Over Listed Costs Per Unit	2.58	3.32	0.79
58	Breakeven Yield/Unit of Prod.	79.7	77.9	84.6

CROP DATA FOR SOYBEANS, 1990

		Average of 194 Fields Per Acre	High 38 Fields Per Acre	Low 38 Fields Per Acre
3	Acres	76.6	78.8	50.8
4	Yield	27.2	36.1	17.2
5	Value per Unit	5.56	5.56	5.50
6	Crop Product Return	151.40	200.80	94.69
7	Other Crop Income	2.23	3.07	4.86
8	Total Crop Return	153.63	203.87	99.55
** VARIABLE COSTS **				
10	Fertilizer	4.69	3.32	9.25
11	Chemicals	16.48	15.74	16.34
12	Seed	10.44	9.20	10.85
13	Crop Drying			
14	Crop Insurance	5.77	4.89	6.73
15	Other Expenses	0.51	0.29	0.93
16	Special Hired Labor	0.27		0.18
17	Custom Work Hired	2.30	0.70	4.25
18	Irrigation Operation			
19	Assigned Interest	0.87		0.61
20	Total Variable Costs	41.33	34.14	49.13
21	Return Over Variable Costs	112.30	169.73	50.42
** ALLOCATED COSTS (VARIABLE & FIXED) **				
31	Farm Power & Machinery-Ownership	10.31	10.43	11.34
32	Farm Power & Machinery-Operation	23.05	24.70	23.70
33	Building & Fence Cost	2.72	2.40	3.35
34	Irrigation Ownership Cost			
37	Land Cost	46.62	54.73	38.00
38	Utilities & Gen. Farm Expense	8.15	8.95	6.38
39	Hired Labor	4.11	4.40	3.64
41	Actual Non-R.E.Int. Allocated	8.97	10.85	7.70
42	Total Allocated Costs	103.93	116.46	94.11
43	Total Listed Costs	145.26	150.60	143.23
44	Return Over Listed Costs	8.37	53.27	-43.68
** SUPPLEMENTARY MANAGEMENT INFORMATION **				
50	Land Opportunity Own.Cost	44.82	51.50	44.34
51	Total Cost Adj.to a Min 7% Int.	141.36	146.19	147.70
52	Work Units Assigned/Acre	0.45	0.45	0.45
53	Power Cost Allocation Factor	0.95	0.97	0.95
54	Total Listed Cost/Unit of Prod.	5.34	4.17	8.33
54A	Total Production Cost Including Net Family Living	6.08	4.79	9.16
55	Total Adjusted Cost/Unit of Prod.	5.19	4.05	8.58
56	Cash Variable Cost/Unit of Prod.	3.15	2.30	5.26
57	Return Over Listed Costs Per Unit	0.31	1.48	-2.54
58	Breakeven Yield/Unit of Prod.	26.1	27.1	26.0

CROP DATA FOR SUNFLOWERS - OIL, 1990

		Average of 347 Fields Per Acre	High 15 Fields Per Acre	Low 15 Fields Per Acre
3	Acres	91.3	108.9	66.0
4	Yield, Cwt	16.6	22.6	9.3
5	Value per Unit	10.59	10.80	10.24
6	Crop Product Return	176.23	244.04	95.74
7	Other Crop Income	8.66	9.36	11.08
8	Total Crop Return	184.89	253.40	106.82
** VARIABLE COSTS **				
10	Fertilizer	13.95	9.23	14.45
11	Chemicals	9.33	10.05	8.74
12	Seed	12.64	11.40	12.58
13	Crop Drying	0.49	0.12	0.30
14	Crop Insurance	3.75	3.55	4.38
15	Other Expenses	1.24	2.83	0.68
16	Special Hired Labor	0.26		
17	Custom Work Hired	1.37	2.58	0.38
18	Irrigation Operation			
19	Assigned Interest	0.80	0.63	
20	Total Variable Costs	43.83	40.39	41.52
21	Return Over Variable Costs	141.06	213.01	65.30
** ALLOCATED COSTS (VARIABLE & FIXED) **				
31	Farm Power & Machinery-Ownership	10.48	11.01	11.24
32	Farm Power & Machinery-Operation	22.29	21.51	26.44
33	Building & Fence Cost	2.79	3.56	1.20
34	Irrigation Ownership Cost			
37	Land Cost	32.52	35.25	37.91
38	Utilities & Gen. Farm Expense	5.26	4.55	4.71
39	Hired Labor	2.80	3.55	3.03
41	Actual Non-R.E.Int. Allocated	6.90	6.44	8.09
42	Total Allocated Costs	83.04	85.87	92.62
43	Total Listed Costs	126.88	126.26	134.14
44	Return Over Listed Costs	58.01	127.14	-27.32
** SUPPLEMENTARY MANAGEMENT INFORMATION **				
50	Land Opportunity Own.Cost	30.36	41.42	44.50
51	Total Cost Adj.to a Min 7% Int.	125.60	131.71	138.35
52	Work Units Assigned/Acre	0.40	0.40	0.40
53	Power Cost Allocation Factor	0.99	0.97	1.00
54	Total Listed Cost/Unit of Prod.	7.64	5.59	14.42
54A	Total Production Cost Including Net Family Living	8.72	6.48	15.78
55	Total Adjusted Cost/Unit of Prod.	7.54	5.83	14.80
56	Cash Variable Cost/Unit of Prod.	4.88	3.38	9.01
57	Return Over Listed Costs Per Unit	3.49	5.63	-2.94
58	Breakeven Yield/Unit of Prod.	12.0	11.7	13.1

CROP DATA FOR SUNFLOWERS-CONFECTIONERY, 1990

		Average of 28 Fields Per Acre	High 14 Fields Per Acre	Low 14 Fields Per Acre
3	Acres	142.8	223.8	80.5
4	Yield, Cwt.	16.4	17.8	12.7
5	Value per Unit	13.37	13.77	11.84
6	Crop Product Return	219.65	245.54	150.91
7	Other Crop Income	1.46		5.18
8	Total Crop Return	221.11	245.54	156.09
** VARIABLE COSTS **				
10	Fertilizer	9.50	6.68	19.32
11	Chemicals	11.90	13.17	10.06
12	Seed	16.15	16.44	16.20
13	Crop Drying	1.51	1.88	0.43
14	Crop Insurance	2.54	2.08	3.60
15	Other Expenses	0.55	0.70	0.39
16	Special Hired Labor	0.49		1.73
17	Custom Work Hired	3.54	5.55	1.90
18	Irrigation Operation			
19	Assigned Interest	0.19		0.88
20	Total Variable Costs	46.36	46.50	54.51
21	Return Over Variable Costs	174.75	199.04	101.58
** ALLOCATED COSTS (VARIABLE & FIXED) **				
31	Farm Power & Machinery-Ownership	10.13	10.10	11.14
32	Farm Power & Machinery-Operation	21.30	21.32	24.52
33	Building & Fence Cost	4.80	5.90	1.54
34	Irrigation Ownership Cost			
37	Land Cost	34.16	31.39	38.65
38	Utilities & Gen. Farm Expense	5.83	6.11	5.65
39	Hired Labor	2.65	3.52	1.06
41	Actual Non-R.E.Int. Allocated	5.02	5.30	3.68
42	Total Allocated Costs	83.89	83.64	86.24
43	Total Listed Costs	130.25	130.13	140.75
44	Return Over Listed Costs	90.86	115.41	15.34
** SUPPLEMENTARY MANAGEMENT INFORMATION **				
50	Land Opportunity Own.Cost	87.05	76.29	73.71
51	Total Cost Adj.to a Min 7% Int.	186.12	178.47	177.89
52	Work Units Assigned/Acre	0.40	0.40	0.40
53	Power Cost Allocation Factor	1.00	1.00	1.00
54	Total Listed Cost/Unit of Prod.	7.94	7.31	11.08
54A	Total Production Cost Including Net Family Living	9.03	8.43	12.07
55	Total Adjusted Cost/Unit of Prod.	11.33	10.01	13.96
56	Cash Variable Cost/Unit of Prod.	4.95	4.65	7.04
57	Return Over Listed Costs Per Unit	5.54	6.48	1.21
58	Breakeven Yield/Unit of Prod.	9.7	9.5	11.9

CROP DATA FOR SUGAR BEETS, 1990

		Average of 140 Fields Per Acre	High 28 Fields Per Acre	Low 28 Fields Per Acre
3	Acres	128.5	115.1	64.6
4	Yield, Tons	14.4	17.8	10.0
5	Value per Unit	47.13	50.02	45.11
6	Crop Product Return	679.32	889.67	451.75
7	Other Crop Income	31.95	36.92	23.81
8	Total Crop Return	711.27	926.59	475.56
** VARIABLE COSTS **				
10	Fertilizer	16.27	16.84	14.27
11	Chemicals	52.07	57.54	50.09
12	Seed	32.78	27.17	34.60
13	Contract Interest	61.98	57.25	60.62
14	Crop Insurance	14.09	13.93	10.23
15	Other Expenses	2.59	2.42	2.04
16	Special Hired Labor	32.27	23.88	31.92
17	Custom Work Hired	15.53	14.78	20.54
18	Irrigation Operation			
19	Assigned Interest	1.94	1.86	
20	Total Variable Costs	229.53	215.66	224.32
21	Return Over Variable Costs	481.74	710.93	251.24
** ALLOCATED COSTS (VARIABLE & FIXED) **				
31	Farm Power & Machinery-Ownership	34.96	33.16	30.71
32	Farm Power & Machinery-Operation	85.94	88.61	73.56
33	Building & Fence Cost	8.08	8.47	7.69
34	Irrigation Ownership Cost			
37	Land Cost	61.64	48.65	55.75
38	Utilities & Gen. Farm Expense	25.07	19.32	24.89
39	Hired Labor	19.96	19.65	15.54
41	Actual Non-R.E.Int. Allocated	32.27	34.40	40.76
42	Total Allocated Costs	267.92	252.26	248.90
43	Total Listed Costs	497.45	467.93	473.24
44	Return Over Listed Costs	213.82	458.66	2.32
** SUPPLEMENTARY MANAGEMENT INFORMATION **				
50	Land Opportunity Own.Cost	57.13	46.89	78.61
51	Total Cost Adj.to a Min 7% Int.	484.01	452.92	475.82
52	Work Units Assigned/Acre	2.00	2.00	2.00
53	Power Cost Allocation Factor	0.82	0.81	0.83
54	Total Listed Cost/Unit of Prod.	34.55	26.29	47.32
54A	Total Production Cost Including Net Family Living	40.78	31.91	53.64
55	Total Adjusted Cost/Unit of Prod.	33.58	25.47	47.51
56	Cash Variable Cost/Unit of Prod.	27.28	21.22	37.91
57	Return Over Listed Costs Per Unit	14.85	25.77	0.23
58	Breakeven Yield/Unit of Prod.	10.6	9.4	10.5

CROP DATA FOR ALFALFA HAY, 1990

		Average of 288 Fields Per Acre	High 57 Fields Per Acre	Low 57 Fields Per Acre
3	Acres	58.3	50.0	61.5
4	Yield, Tons	2.0	3.4	1.3
5	Value per Unit	59.02	66.16	47.58
6	Crop Product Return	120.46	224.94	61.12
7	Other Crop Income	0.05	0.12	0.11
8	Total Crop Return	120.51	225.06	61.23
**	VARIABLE COSTS **			
10	Fertilizer	10.03	7.60	14.75
11	Chemicals	0.36	0.32	0.59
12	Seed	2.40	1.68	3.89
13	Crop Drying			
14	Crop Insurance			
15	Other Expenses	1.32	1.82	0.83
16	Special Hired Labor	0.05	0.02	0.05
17	Custom Work Hired	1.29	0.48	2.55
18	Irrigation Operation			
19	Assigned Interest	0.72	0.04	0.73
20	Total Variable Costs	16.17	11.96	23.38
21	Return Over Variable Costs	104.34	213.10	37.85
**	ALLOCATED COSTS (VARIABLE & FIXED) **			
31	Farm Power & Machinery-Ownership	13.70	16.00	12.75
32	Farm Power & Machinery-Operation	34.79	37.18	32.31
33	Building & Fence Cost	4.44	7.12	3.77
34	Irrigation Ownership Cost			
37	Land Cost	24.19	32.17	17.78
38	Utilities & Gen. Farm Expense	7.50	7.48	7.35
39	Hired Labor	4.39	6.78	2.81
41	Actual Non-R.E.Int. Allocated	8.15	11.60	8.57
42	Total Allocated Costs	97.16	118.33	85.34
43	Total Listed Costs	113.33	130.28	108.72
44	Return Over Listed Costs	7.18	94.78	-47.49
**	SUPPLEMENTARY MANAGEMENT INFORMATION **			
50	Land Opportunity Own.Cost	27.82	25.61	24.86
51	Total Cost Adj.to a Min 7% Int.	119.54	132.06	116.26
52	Work Units Assigned/Acre	0.60	0.60	0.60
53	Power Cost Allocation Factor	0.81	0.73	0.83
54	Total Listed Cost/Unit of Prod.	56.67	38.32	83.63
54A	Total Production Cost Including Net Family Living	70.13	47.15	98.21
55	Total Adjusted Cost/Unit of Prod.	58.56	38.84	90.5
56	Cash Variable Cost/Unit of Prod.	35.50	22.06	57.2
57	Return Over Listed Costs Per Unit	3.59	27.88	-36.5
58	Breakeven Yield/Unit of Prod.	1.9	2.0	2.

FOR ALFALFA ESTABLISHMENT, 1990

	Average of 40 Fields Per Acre	High 13 Fields Per Acre	Low 13 Fields Per Acre
cres	55.9	74.7	46.2
ield per Acre, Tons	1.4	2.1	0.5
alue per Unit	55.32	58.68	56.96
rop Product Return	77.19	120.96	29.59
ther Crop Income	4.45	0.59	9.46
Total Crop Return	81.64	121.55	39.05
BLE COSTS **			
ertilizer	10.34	8.49	13.55
hemicals	1.61	0.37	4.78
eed	18.16	6.13	35.00
rop Drying			
rop Insurance			
ther Expenses	1.22	1.62	0.82
pecial Hired Labor			
ustom Work Hired	1.43		2.94
rrigation Operation			
ssigned Interest			
Total Variable Costs	32.75	16.61	57.10
Return Over Variable Costs	48.89	104.94	-18.05
ATED COSTS (VARIABLE & FIXED) **			
arm Power & Machinery-Ownership	6.28	6.51	5.26
arm Power & Machinery-Operation	12.61	13.37	11.93
uilding & Fence Cost	1.40	1.50	1.28
rrigation Ownership Cost			
and Cost	22.20	18.13	24.72
ilities & Gen. Farm Expense	2.72	2.85	2.86
red Labor	1.25	1.47	0.87
tual Non-R.E.Int. Allocated	3.35	3.00	4.07
Total Allocated Costs	49.81	46.83	50.99
Total Listed Costs	82.56	63.45	108.07
Return Over Listed Costs	-0.92	58.10	-69.02
EMENTARY MANAGEMENT INFORMATION **			
nd Opportunity Own.Cost	22.93	14.74	28.20
tal Cost Adj.to a Min 7% Int.	83.58	65.05	110.13
rk Units Assigned/Acre	0.20	0.20	0.20
wer Cost Allocation Factor	0.80	0.75	0.85
tal Listed Cost/Unit of Prod.	58.97	30.21	216.14
tal Production Cost Including Net Family Living	65.38	34.97	228.78
tal Adjusted Cost/Unit of Prod.	59.90	31.55	212.00
sh Variable Cost/Unit of Prod.	37.63	17.76	153.66
turn Over Listed Costs Per Unit	-0.66	27.67	-138.04
eakeven Yield/Unit of Prod.	1.5	1.1	1.9

CROP DATA FOR OTHER LEGUME HAY, 1990

		Average of 47 Fields Per Acre	High 15 Fields Per Acre	Low 15 Fields Per Acre
3	Acres	82.7	70.0	139.7
4	Yield, Tons	1.4	2.1	1.0
5	Value per Unit	40.88	47.19	34.78
6	Crop Product Return	56.35	97.07	33.86
7	Other Crop Income	0.16	0.59	
8	Total Crop Return	56.51	97.66	33.86
** VARIABLE COSTS **				
10	Fertilizer	4.27	2.54	5.55
11	Chemicals	0.52	0.30	0.81
12	Seed	2.07	1.46	1.15
13	Crop Drying			
14	Crop Insurance			
15	Other Expenses	0.96	1.50	0.89
16	Special Hired Labor	0.04	0.11	
17	Custom Work Hired	0.08		
18	Irrigation Operation	0.25		
19	Assigned Interest			
20	Total Variable Costs	8.19	5.91	8.39
21	Return Over Variable Costs	48.32	91.75	25.47
** ALLOCATED COSTS (VARIABLE & FIXED) **				
31	Farm Power & Machinery-Ownership	11.10	18.51	7.36
32	Farm Power & Machinery-Operation	27.82	33.54	21.54
33	Building & Fence Cost	4.06	5.44	3.66
34	Irrigation Ownership Cost	0.13		
37	Land Cost	11.38	14.99	6.88
38	Utilities & Gen. Farm Expense	5.43	6.67	3.84
39	Hired Labor	1.85	4.07	0.83
41	Actual Non-R.E.Int. Allocated	4.93	6.06	4.41
42	Total Allocated Costs	66.70	89.28	48.52
43	Total Listed Costs	74.90	95.20	56.92
44	Return Over Listed Costs	-18.39	2.46	-23.06
** SUPPLEMENTARY MANAGEMENT INFORMATION **				
50	Land Opportunity Own.Cost	23.61	27.25	22.49
51	Total Cost Adj.to a Min 7% Int.	88.17	110.76	72.34
52	Work Units Assigned/Acre	0.40	0.40	0.40
53	Power Cost Allocation Factor	0.98	0.95	1.00
54	Total Listed Cost/Unit of Prod.	53.50	45.33	56.92
54A	Total Production Cost Including Net Family Living	66.32	54.86	69.56
55	Total Adjusted Cost/Unit of Prod.	63.96	53.84	74.31
56	Cash Variable Cost/Unit of Prod.	34.44	26.79	39.01
57	Return Over Listed Costs Per Unit	-13.14	1.17	-23.06
58	Breakeven Yield/Unit of Prod.	1.8	2.0	1.6

CROP DATA FOR CORN SILAGE, 1990

		Average of 143 Fields Per Acre	High 28 Fields Per Acre	Low 28 Fields Per Acre
3	Acres	40.0	37.6	34.8
4	Yield per Acre, Tons	9.8	13.7	6.4
5	Value per Unit	16.71	18.45	15.74
6	Crop Product Return	163.80	252.18	100.40
7	Other Crop Income	20.00	23.24	11.44
8	Total Crop Return	183.80	275.42	111.84
** VARIABLE COSTS **				
10	Fertilizer	17.05	18.19	19.66
11	Chemicals	9.03	10.32	7.36
12	Seed	13.90	14.79	14.02
13	Crop Drying			
14	Crop Insurance	2.65	3.30	3.16
15	Other Expenses	0.28	0.13	.06
16	Special Hired Labor	0.13	0.16	
17	Custom Work Hired	2.15	0.53	3.94
18	Irrigation Operation			
19	Assigned Interest	0.35	0.13	0.63
20	Total Variable Costs	45.53	47.55	48.82
21	Return Over Variable Costs	138.27	227.87	63.02
** ALLOCATED COSTS (VARIABLE & FIXED) **				
31	Farm Power & Machinery-Ownership	20.18	16.70	13.74
32	Farm Power & Machinery-Operation	46.25	43.62	43.97
33	Building & Fence Cost	5.55	5.19	4.11
34	Irrigation Ownership Cost			
37	Land Cost	23.66	30.06	21.99
38	Utilities & Gen. Farm Expense	7.20	7.85	7.30
39	Hired Labor	5.73	8.24	8.16
41	Actual Non-R.E.Int. Allocated	9.45	12.07	8.71
42	Total Allocated Costs	118.02	123.73	107.98
43	Total Listed Costs	163.53	171.28	156.78
44	Return Over Listed Costs	20.27	104.14	-44.94
** SUPPLEMENTARY MANAGEMENT INFORMATION **				
50	Land Opportunity Own.Cost	28.36	31.83	28.21
51	Total Cost Adj.to a Min 7% Int.	171.00	171.04	163.82
52	Work Units Assigned/Acre	0.60	0.60	0.60
53	Power Cost Allocation Factor	1.00	1.00	0.99
54	Total Listed Cost/Unit of Prod.	16.69	12.50	24.50
54A	Total Production Cost Including Net Family Living	19.44	14.69	27.46
55	Total Adjusted Cost/Unit of Prod.	17.45	12.51	25.68
56	Cash Variable Cost/Unit of Prod.	11.65	8.71	18.28
57	Return Over Listed Costs Per Unit	2.07	7.60	-7.02
58	Breakeven Yield/Unit of Prod.	9.8	9.3	10.0

CROP DATA FOR GRASS SEED, 1990

		Bluegrass Seed 9 Fields	Timothy Seed 24 Fields
3	Acres	62.0	54.7
4	Yield per Acre, lbs.	145.0	300.5
5	Value per Unit	0.29	0.21
6	Crop Product Return	41.37	61.70
7	Other Crop Income	1.82	3.11
8	**Total Crop Return**	**43.19**	**64.81**
	**** VARIABLE COSTS ****		
10	Fertilizer	25.68	18.54
11	Chemicals	5.08	5.30
12	Seed		
13	Crop Drying		
14	Crop Insurance		
15	Other Expenses	0.08	0.20
16	Special Hired Labor		
17	Custom Work Hired	1.90	6.16
18	Irrigation Operation		
19	Assigned Interest		
20	**Total Variable Costs**	**32.74**	**30.20**
21	**Return Over Variable Costs**	**10.45**	**34.61**
	**** ALLOCATED COSTS (VARIABLE & FIXED) ****		
31	Farm Power & Machinery-Ownership	3.21	3.75
32	Farm Power & Machinery-Operation	11.39	11.30
33	Building & Fence Cost	0.87	1.13
34	Irrigation Ownership Cost		
37	Land Cost	18.20	22.53
38	Utilities & Gen. Farm Expense	4.19	5.80
39	Hired Labor	1.94	1.66
41	Actual Non-R.E.Int. Allocated	2.65	6.29
42	**Total Allocated Costs**	**42.45**	**52.46**
43	**Total Listed Costs**	**75.19**	**82.65**
44	**Return Over Listed Costs**	**-32.00**	**-17.84**
	**** SUPPLEMENTARY MANAGEMENT INFORMATION ****		
50	Land Opportunity Own.Cost	22.89	28.05
51	Total Cost Adj.to a Min 7% Int.	82.34	87.11
52	Work Units Assigned/Acre	0.40	0.30
53	Power Cost Allocation Factor	0.50	0.52
54	Total Listed Cost/Unit of Prod.	0.52	0.28
54A	Total Production Cost Including Net Family Living	0.64	0.32
55	Total Adjusted Cost/Unit of Prod.	0.57	0.29
56	Cash Variable Cost/Unit of Prod.	0.36	0.18
57	Return Over Listed Costs Per Unit	-0.22	-0.06
58	Breakeven Yield/Unit of Prod.	259.3	393.6

CROP DATA FOR CRP - IDLE, 1990

		Average of 61 Fields Per Acre	High 12 Fields Per Acre	Low 12 Fields Per Acre
3	Acres	251.8	177.7	358.0
4	Yield	41.5	52.9	33.9
5	Value per Unit	1.00	1.00	1.00
6	Crop Product Return	41.54	52.95	33.89
7	Other Crop Income			
8	Total Crop Return	41.54	52.95	33.89
** VARIABLE COSTS **				
10	Fertilizer	0.06		
11	Chemicals	0.23	0.61	
12	Seed	0.16		
13	Crop Drying			
14	Crop Insurance			
15	Other Expenses	0.28		1.01
16	Special Hired Labor			
17	Custom Work Hired	0.12		0.39
18	Irrigation Operation			
19	Assigned Interest			
20	Total Variable Costs	0.85	0.61	1.41
21	Return Over Variable Costs	40.69	52.34	32.48
** ALLOCATED COSTS (VARIABLE & FIXED) **				
31	Farm Power & Machinery-Ownership	1.60	1.79	0.98
32	Farm Power & Machinery-Operation	3.69	3.17	3.63
33	Building & Fence Cost	0.49	0.72	0.32
34	Irrigation Ownership Cost			
37	Land Cost	17.81	31.94	22.05
38	Utilities & Gen. Farm Expense	1.13	0.93	1.40
39	Hired Labor	0.21	0.48	0.16
41	Actual Non-R.E.Int. Allocated	0.87	0.82	0.60
42	Total Allocated Costs	25.80	39.85	29.14
43	Total Listed Costs	26.66	40.46	30.54
44	Return Over Listed Costs	14.88	12.49	3.35
** SUPPLEMENTARY MANAGEMENT INFORMATION **				
50	Land Opportunity Own.Cost	19.67	27.72	21.23
51	Total Cost Adj.to a Min 7% Int.	28.77	40.42	31.33
52	Work Units Assigned/Acre	0.05	0.05	0.05
53	Power Cost Allocation Factor	1.00	1.00	1.00

CROP DATA FOR SET ASIDE - TILLED, 1990

		Average of 303 Fields Per Acre	High 60 Fields Per Acre	Low 60 Fields Per Acre
3	Acres	34.0	31.4	31.5
4	Yield	0.5	2.4	0.2
5	Value per Unit	2.59	2.18	3.14
6	Crop Product Return	1.29	5.13	0.70
7	Other Crop Income	1.79	9.36	
8	**Total Crop Return**	**3.08**	**14.49**	**0.70**
	**** VARIABLE COSTS ****			
10	Fertilizer	0.32	0.29	1.56
11	Chemicals	0.47	0.06	1.78
12	Seed	1.97	1.62	5.33
13	Crop Drying			
14	Crop Insurance			
15	Other Expenses	0.29	0.86	0.57
16	Special Hired Labor	0.03		0.10
17	Custom Work Hired	1.03	0.10	4.83
18	Irrigation Operation			
19	Assigned Interest	0.32	0.06	1.46
20	**Total Variable Costs**	**4.44**	**2.99**	**15.62**
21	**Return Over Variable Costs**	**-1.36**	**11.50**	**-14.92**
	**** ALLOCATED COSTS (VARIABLE & FIXED) ****			
31	Farm Power & Machinery-Ownership	5.50	6.88	4.25
32	Farm Power & Machinery-Operation	11.76	12.32	10.41
33	Building & Fence Cost	1.26	1.27	1.33
34	Irrigation Ownership Cost			
37	Land Cost	32.75	26.66	31.02
38	Utilities & Gen. Farm Expense	3.12	2.87	4.00
39	Hired Labor	1.94	1.02	1.37
41	Actual Non-R.E.Int. Allocated	3.21	2.10	2.73
42	**Total Allocated Costs**	**59.54**	**53.12**	**55.11**
43	**Total Listed Costs**	**63.97**	**56.11**	**70.73**
44	**Return Over Listed Costs**	**-60.89**	**-41.62**	**-70.03**
	**** SUPPLEMENTARY MANAGEMENT INFORMATION ****			
50	Land Opportunity Own.Cost	33.43	44.67	32.67
51	Total Cost Adj.to a Min 7% Int.	64.29	75.10	71.24
52	Work Units Assigned/Acre	0.20	0.20	0.20
53	Power Cost Allocation Factor	1.00	1.01	0.99

CROP DATA FOR SUMMER FALLOW - AVG. TILLAGE, 1990

		Average of 41 Fields Per Acre	High 13 Fields Per Acre	Low 13 Fields Per Acre
3	Acres	38.6	47.0	32.7
4	Yield			
5	Value per Unit			
6	Crop Product Return			
7	Other Crop Income			
8	**Total Crop Return**			
	**** VARIABLE COSTS ****			
10	Fertilizer	1.79		6.67
11	Chemicals	0.28		1.04
12	Seed	0.62		2.02
13	Crop Drying			
14	Crop Insurance			
15	Other Expenses			0.03
16	Special Hired Labor			
17	Custom Work Hired	0.13		0.46
18	Irrigation Operation			
19	Assigned Interest	0.98		3.64
20	**Total Variable Costs**	**3.81**		**13.85**
21	**Return Over Variable Costs**	**-3.81**		**-13.85**
	**** ALLOCATED COSTS (VARIABLE & FIXED) ****			
31	Farm Power & Machinery-Ownership	4.04	3.94	4.40
32	Farm Power & Machinery-Operation	7.75	8.81	7.22
33	Building & Fence Cost	1.22	1.11	1.38
34	Irrigation Ownership Cost			
37	Land Cost	21.63	18.73	26.55
38	Utilities & Gen. Farm Expense	1.58	1.91	0.98
39	Hired Labor	0.41	0.53	0.18
41	Actual Non-R.E.Int. Allocated	1.66	2.04	1.01
42	**Total Allocated Costs**	**38.29**	**37.07**	**41.72**
43	**Total Listed Costs**	**42.10**	**37.06**	**55.57**
44	**Return Over Listed Costs**	**-42.10**	**-37.06**	**-55.57**
	**** SUPPLEMENTARY MANAGEMENT INFORMATION ****			
50	Land Opportunity Own.Cost	22.34	17.44	36.09
51	Total Cost Adj.to a Min 7% Int.	42.64	37.21	63.58
52	Work Units Assigned/Acre	0.11	0.10	0.15
53	Power Cost Allocation Factor	1.00	1.00	1.00

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 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 total income.

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

Since feed is the largest single item of cost for all classes of livestock, return over feed costs has been used to classify farm livestock enterprises into high, low and average groups. Other cash costs relatively easy to identify and assign from the farm records are listed in each of the tables as other direct costs.

Allocated costs include interest charges to the enterprise, proportional costs of hired labor, utilities, power, machinery, livestock equipment, building and fence costs. These costs are divided out to each livestock enterprise by computer formula to make the proper allocations.

Supplementary management information. This information can provide clues indicating the strengths and weaknesses of each enterprise.

AVERAGE PRICE OF FEED AND PRODUCE USED, 1990

Oats	1.22 Bu.	Alfalfa Hay	62.70 Ton
Barley, Feed	1.77 Bu.	Wild Hay	28.50 Ton
Wheat	2.59 Bu.	Mixed Legume	41.50 Ton
Oats Mixture	1.78 Bu.	Haylage (55% Moisture)	28.10 Ton
Corn	2.23 Bu.	Corn Silage	15.90 Ton
		Straw	.75 Bale

Milk for Feed

Whole Milk - Grade A $12.07 Cwt.

HOGS, WEANING PIG PRODUCTION, 1990

Item		Average of 11 Farms Per Pig	Per Litter
1 Production: 106 litters, 45,837 lbs.		759	
2 Net Increase In Value: Hogs		53.19	380.89
3 Other Miscellaneous Income			
4 **Total Value Produced**		**53.19**	**380.89**
**** FEED FED: QUANTITY & COST ****	**LBS/LITTER**		
6 Corn	220.01	1.30	9.30
7 Other Grain	866.57	4.63	33.14
8 Complete Ration	1194.68	15.51	111.07
9 Prot., Salt, Min.	280.60	5.18	37.08
10 Total Grain Mix	2561.86	26.62	190.59
11 Forages	3.97	0.10	0.71
12 Pasture			
13 **Total Feed Cost**		**26.72**	**191.30**
14 **Return Over Feed Costs**		**26.47**	**189.59**
**** OTHER DIRECT COSTS ****			
16 Veterinary		0.87	6.20
18 Miscellaneous		1.06	7.57
19 Custom Work & Lease		0.56	4.04
21 Assigned Interest		0.17	1.21
22 **Total Other Direct Costs**		**2.66**	**19.02**
23 **Total Direct Costs Incl.Feed**		**29.38**	**210.32**
24 **Return Over All Direct Costs**		**23.81**	**170.57**
**** ALLOCATED COSTS ****			
27 Act.Int.P.Less Int.Assigned-L21		3.26	23.33
28 General Hired Labor		0.73	5.25
29 Utilities & Miscellaneous		2.93	21.00
30 Power & Machinery	-PCAF 1.00	2.10	15.02
31 Livestock Equipment	-ECAF 1.00	1.71	12.26
32 Buildings & Fences	-BCAF 1.00	1.60	11.45
33 **Total Allocated Costs**		**12.33**	**88.31**
34 **Total Actual Listed Costs**		**41.71**	**298.63**
35 **Return Over Actual Listed Costs**		**11.48**	**82.26**

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

36 Total Costs Adj.to 7% Min.Int.	40.83		292.39
38 Return/Listed 7% Opportunity Interest	12.36		88.50
40 Return /$100 Feed Fed		199.11	
41 Ave Wt./Pig Sold or Transfer		46	
42 Price Rec'd/Pig Sold		49.31	
43 Litters/Sow/Year		1.3	
44 No. Pigs Born/Litter		10	
45 No. Pigs Wean/Litter		8.6	
46 Pigs Produced/Sow/Year		9.3	
47 Litters/Crate/Year		6.2	
48 Pigs Weaned/Crate/Year		53.4	
49 FDR Pig Deaths: AS % of Total Loss		99.2	
50 Breeding Deaths: As % of Total Loss		0.8	
51 Price/CWT. Grain Mix Fed		7.44	
52 Price/CWT. Prot., Salt, Min.		13.21	

HOGS, FINISHING, 1990

Items		LBS/CWT	Average of 5 Farms Per Cwt.		Average of 5 Farms Per Hd Prod
1	PRODUCTION - Pounds: 23677 lbs.				124.6
2	Net Increase In Value: Hogs		44.40		84.10
3	Other Miscellaneous Income				
4	Total Value Produced		44.40		84.10
** FEED FED: QUANTITY & COST **		LBS/CWT			
6	Corn	166.9	6.37		12.07
7	Other Grain	27.4	1.04		1.97
8	Complete Ration	110.7	11.07		20.97
9	Prot., Salt, Min.	58.0	7.39		14.00
10	Total Grain Mix	363.0	25.87		49.01
13	Total Feed Cost		25.87		49.01
14	Return Over Feed Costs		18.53		35.09
** OTHER DIRECT COSTS **					
16	Veterinary		0.29		0.55
17	Miscellaneous		0.49		0.94
18	Custom Work & Lease Expense		0.35		0.66
21	Total Other Direct Costs		1.13		2.15
22	Total Direct Costs Incl Feed		27.00		51.16
23	Return Over All Direct Costs		17.40		32.94
** ALLOCATED COSTS **					
26	Act.Int.Pd.Less Int.Assigned-L20		1.61		3.06
27	General Hired Labor		1.02		1.93
28	Utilities & Miscellaneous		0.85		1.62
29	Power & Machinery		0.60		1.14
30	Livestock Equipment		0.32		0.60
31	Buildings & Fences		0.66		1.25
32	Total Allocated Costs		5.06		9.60
33	Total Actual Listed Costs		32.06		60.76
34	Return Over Actual Listed Costs		12.34		23.34
*************** SUPPLEMENTARY MANAGEMENT INFORMATION*************					
35	Total Costs Adj.to 7% Min.Int.		32.43		61.43
36	Return Over Listed & 7% Opportunity		11.97		22.67
39	Return/$100. Feed Fed			171.61	
40	Ave Wt./Mkt. Hog Sold			241.30	
41	Price Rec'd/CWT. Mkt. Hogs			51.39	
42	Ave. Weight/Pig Purchased			43.65	
43	Ave. Price/Pig Purchased			44.2	
44	No. Pigs Purchased			148	
45	No. Pigs Transferred Out/In			12	
46	Pounds of Pork Purchased			6460	
47	Ave. No. of Pigs on Hand			50.4	
48	Percent Death Loss			2.01	
49	Effective Daily Gain			1.29	
50	Price/CWT. Grain Mix Fed			7.13	
51	Price/CWT. Prot., Salt,Min.			12.74	
52	Number of Pigs Produced			125	

DAIRY COWS, COMMERCIAL, 1990

		Lbs/Cow	Average of 113 Farms Per Cow	High 23 Farms Per Cow	Low 23 Farms Per Cow
1	Average Number of Cows:		47.4	49.8	45.0
2	Pounds of Milk		15898	18746	12726
3	Pounds of Butterfat		565	643	457
4	Percent of Butterfat in Milk		3.55	3.43	3.59
5	Value of Produce				
6	Dairy Products Sold		2111.43	2486.93	1620.29
7	Dairy Products Used in Home		7.34	5.48	9.24
8	Milk Fed to Livestock		15.68	18.61	21.33
9	Net Increase in Value		-78.95	11.20	-113.73
10	Other Miscellaneous Income				
11	**Total Value Produced**		**2055.50**	**2522.22**	**1537.13**
12	Feed Fed: Qty. & Cost	Lbs/Cow			
13	Corn	2596	101.49	131.18	77.73
14	Small Grain	786	30.92	49.12	24.69
15	Complete Ration	2734	116.86	43.61	113.71
16	Prot., Salt, Min.	1645	186.10	183.78	194.89
17	**Total Grain Mix**	**7761**	**435.37**	**407.69**	**411.02**
18	Legume Hay	7723	236.71	207.51	270.11
19	Other Dry Hay & Roughage	795	11.17	1.83	6.69
20	Haylage	1106	16.77	34.62	16.09
21	Silage	7797	64.44	55.82	67.31
22	Pasture		4.09	4.12	12.31
23	**Total Feed Costs**		**768.55**	**711.59**	**783.53**
24	**Return Over Feed Cost**		**1286.95**	**1810.63**	**753.60**
**	**OTHER DIRECT COSTS ****				
26	Veterinary		42.52	59.76	32.07
27	Breeding		22.49	34.24	10.11
28	Miscellaneous		114.55	133.71	90.67
29	Custom Work		79.73	85.92	70.33
30	Special Hired Labor		7.30	5.06	25.09
31	Assigned Interest		15.51	6.71	21.38
32	**Total Other Direct Costs**		**282.10**	**325.40**	**249.65**
33	**Total Direct Costs Incl Feed**		**1050.65**	**1036.99**	**1033.18**
34	**Return Over All Direct Costs**		**1004.85**	**1485.23**	**503.95**
**	**ALLOCATED COSTS ****				
37	Act Int Pd Less Int Assigned-L31		77.67	58.43	58.33
38	General Hired Labor		56.96	137.31	30.56
39	Utilities & Miscellaneous		82.81	93.92	76.38
40	Power & Machinery PCAF 1.00		74.79	74.71	87.90
41	Livestock Equipment ECAF 1.02		51.33	77.46	31.52
42	Buildings & Fences BCAF 1.02		62.68	74.20	61.16
43	**Total Allocated Costs**		**406.24**	**516.30**	**345.85**
44	**Total Actual Listed Costs**		**1456.89**	**1553.02**	**1379.03**
45	**Return/Actual Listed Costs**		**598.61**	**969.20**	**158.10**

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

46	Total Costs Adj.to 7% Min.Int.	1469.34	1606.44	1392.74
47	Return Over Listed & 7% Opp.Int.	586.16	915.78	144.39
50	Return/$100 Feed Fed	267.45	354.45	196.18
51	Pounds of Milk/Pound Grain Mix	2.05	2.70	2.01
52	Average Price/CWT. Sold	13.44	13.41	12.99
53	Dairy Cow Turnover Percentage	39.83	46.18	37.78
54	Approximate Dry Matter Consumed/Cow	47	42	46
58	**Total Cost/Cwt. of Milk**	**9.18**	**8.28**	**10.83**

OTHER DAIRY CATTLE, 1990

		LBS/HEAD	Average of 114 Farms Per Head	High 23 Farms Per Head	Low 23 Farms Per Head
1	Average Number of Head		58.7	56.2	52.5
2	Net Increase in Value		388.40	519.38	281.1
3	Other Miscellaneous Income				
4	**Total Value Produced**		**388.40**	**519.38**	**281.01**
	**** FEED FED: QTY & COST ****	**LBS/HEAD**			
6	Corn	355	14.48	10.94	18.38
7	Small Grain	211	7.80	2.26	13.60
8	Complete Ration	434	17.75	26.35	14.42
9	Prot.,Salt, Min.	276	29.71	23.91	43.49
10	Total Grain Mix	1276	69.74	63.46	89.89
11	Legume Hay	2327	66.88	40.59	101.68
12	Other Dry Hay & Rough.	388	7.75	6.39	6.27
13	Haylage	95	1.41		0.97
14	Silage	3932	32.08	26.96	39.68
15	Milk	100	11.99	6.99	14.02
16	Pasture		2.16	1.16	7.87
17	**Total Feed Cost**		**192.01**	**145.55**	**260.38**
18	**Return Over Feed Cost**		**196.39**	**373.83**	**20.63**
	**** OTHER DIRECT COSTS ****				
20	Veterinary		2.50	5.27	1.22
21	Breeding		0.48	0.28	0.76
22	Miscellaneous		3.73	4.93	1.83
23	Custom Work & Lease Expense		4.00	2.47	5.87
24	Special Hired Labor		0.87	0.52	
25	Assigned Interest		1.36	1.53	
26	**Total Other Direct Costs**		**12.94**	**15.00**	**9.68**
27	**Total Direct Costs Incl Feed**		**204.95**	**160.55**	**270.06**
28	**Return Over All Direct Costs**		**183.45**	**358.83**	**10.95**
	**** ALLOCATED COSTS ****				
31	Actual Interest Paid Less Interest Assigned-L25		14.97	18.49	9.64
32	General Hired Labor		10.78	11.83	10.99
33	Utilities & Miscellaneous		14.50	14.64	14.48
34	Power & Machinery		12.65	13.27	13.74
35	Livestock Equipment		9.35	7.88	9.74
36	Buildings & Fences		10.67	10.05	9.50
37	**Total Allocated Costs**		**72.92**	**76.16**	**68.09**
38	**Total Actual Listed Costs**		**277.87**	**236.71**	**338.15**
39	**Return Over Act.Listed Costs**		**110.53**	**282.67**	**-57.14**

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

		Average of 114 Farms Per Head	High 23 Farms Per Head	Low 23 Farms Per Head
40	Total Costs Adj to 7% Int.	309.29	262.46	372.59
42	Ret/Listed 7% Opporty Int.	79.11	256.92	-91.58
44	Return/$100 Feed Fed	202.26	356.83	107.93
45	Percent Calf Death Loss	12.96	10.71	15.95

ALL DAIRY CATTLE, 1990

	Items		Average of 108 Farms Per Cow	High 22 Farms Per Cow	Low 22 Farms Per Cow
1	Average Number of Cows		47.8	57.1	48.2
2	Pounds of Milk		15925.10	18812.73	13017.41
3	Pounds of Butterfat		565.44	654.71	466.90
4	Percent of Butterfat in Milk		3.55	3.48	3.59
5	Value of Produce				
6	Dairy Products Sold		$ 2115.79	$ 2528.77	$ 1669.21
7	Dairy Products Used in Home		7.51	8.18	8.88
8	Milk Fed to Livestock		15.54	14.34	22.22
9	Net Increase in Value		406.19	601.51	262.88
10	Other Miscellaneous Income				
**	**TOTAL VALUE PRODUCED ****		**2545.03**	**3152.80**	**1963.19**
12	Feed Fed: Qty. & Cost	**LBS/COW**			
13	Corn	3058	120.48	171.23	60.87
14	Small Grain	1068	41.42	42.61	36.39
15	Complete Ration	3316	136.40	96.69	175.60
16	Prot., Salt, Min.	1965	236.44	234.96	231.56
17	**Total Grain Mix**	9407	**534.74**	**545.49**	**504.42**
18	Legume Hay	10878	326.21	359.30	340.12
19	Other Dry Hay & Roughage	1195	17.87	10.23	11.78
20	Haylage	1197	18.28	19.95	21.41
21	Silage	12690	104.31	88.41	99.83
22	Pasture		6.78	3.01	16.20
23	**Total Feed Costs**		**1008.19**	**1026.39**	**993.76**
24	**Return Over Feed Cost**		**1536.84**	**2126.41**	**969.43**
**	**OTHER DIRECT COSTS****				
26	Veterinary		44.10	58.69	31.24
27	Breeding		22.74	32.38	12.14
28	Miscellaneous		118.18	142.17	104.40
29	Custom Work & Lease Expense		85.90	82.99	78.05
30	Special Hired Labor		6.17	5.17	16.10
31	Assigned Interest		15.79	6.11	21.47
32	**Total Other Direct Costs**		**292.88**	**327.51**	**263.40**
33	**Total Direct Costs Incl Feed**		**1301.07**	**1353.90**	**1257.16**
34	**Return Over All Direct Costs**		**1243.96**	**1798.90**	**706.03**
**	**ALLOCATED COSTS ****				
37	Act Int Pd Less Int Assigned-L31		95.00	74.73	80.60
38	General Hired Labor		69.96	148.56	34.79
39	Utilities & Miscellaneous		99.85	117.23	91.24
40	Power & Machinery		90.99	92.65	100.21
41	Livestock Equipment		63.17	98.87	43.09
42	Buildings & Fences		74.34	92.15	67.58
43	**Total Allocated Costs**		**493.31**	**624.19**	**417.51**
44	**Total Actual Listed Costs**		**1794.38**	**1978.09**	**1674.67**
**	**RETURN OVER ACTUAL LISTED COSTS**		**750.65**	**1174.71**	**288.52**
	***************SUPPLEMENTARY MANAGEMENT INFORMATION***************				
46	Tot.Costs Adj.to 7% Int.		1846.09	1659.39	1706.10
47	Return/Listed & 7% Opport. Int.		698.94	1493.41	257.09
50	Return/$100 Feed Fed		252	307	198
51	Pounds of Milk/Pound Grain Mix		1.69	2.23	0.86
52	Average Price/CWT. Sold		13.45	13.57	13.09
53	Dairy Cow Turnover Percentage		39.75	45.53	35.27
54	Approx. Dry Matter Consumed/Cow		64	59	76
55	Percent Calf Death Loss		12.28	7.77	17.13
56	**Total Investment/Cow**		**8271.88**	**9871.79**	**5143.78**
57	**Total Debt/Cow**		**3571.90**	**2033.05**	**3437.61**

BEEF COWS, COMMERCIAL, 1990

		LBS/COW	Average of 65 Farms Per Cow	High 13 Farms Per Cow	Low 13 Farms Per Cow
1	Average Number of Beef Cows		62.8	69.3	50.3
2	Average Number of Other Beef/Bulls		54.8	69.4	35.8
3	Pounds of Beef Produced		36258	46489	21923
4	Net Increase in Value		513.84	644.01	353.24
5	Other Miscellaneous Income		2.10	9.49	
6	**Total Value Produced**		**515.94**	**653.50**	**353.24**
	**** FEED FED:QUANTITY & COST ****	LBS/COW			
8	Grain	849.8	33.71	37.27	21.51
9	Prot., Salt, Min.	306.3	15.27	11.28	10.22
10	Legume Hay	5465.5	106.19	66.09	146.98
11	Other Dry Hay & Roughage	2380.5	34.16	21.34	36.72
12	Silage	3605.1	29.59	12.93	37.75
13	Haylage	73.5	0.92		5.35
14	Pasture		15.40	7.16	38.27
15	**Total Feed Costs**		**235.24**	**156.07**	**296.80**
16	**Return Over Feed Costs**		**280.70**	**497.43**	**56.44**
	**** OTHER DIRECT COSTS ****				
18	Veterinary		8.81	8.34	7.34
19	Breeding		0.05		
20	Miscellaneous		15.27	39.68	8.43
21	Custom Work & Lease Expense		6.96	5.24	2.70
22	Special Hired Labor		0.13	0.01	
23	Assigned Interest		7.42	12.80	6.82
24	Total Other Direct Costs		38.64	66.07	25.29
25	**Total Direct Costs Incl,Feed**		**273.88**	**222.14**	**322.09**
26	**Return Over All Direct Costs**		**242.06**	**431.36**	**31.15**
	**** ALLOCATED COSTS ****				
29	Actual Int. Pd Less Int Assigned-L23		29.36	31.77	26.80
30	General Hired Labor		6.07	4.56	7.79
31	Utilities & Miscellaneous		22.71	21.67	18.25
32	Power & Machinery		18.21	14.35	14.96
33	Livestock Equipment		4.01	3.14	2.79
34	Buildings & Fences		12.63	7.96	16.81
35	Total Allocated Costs		92.99	83.45	87.40
36	**Total Actual Listed Costs**		**366.87**	**305.59**	**409.49**
37	**Return Over Actual Listed Costs**		**149.07**	**347.91**	**-56.25**

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

		Average of 65 Farms Per Cow	High 13 Farms Per Cow	Low 13 Farms Per Cow
38	Total Costs Adj.To 7% Min.Int.	405.70	341.41	438.07
40	Return/Listed 7% Opport. Int.	110.24	312.09	-84.83
42	Return/$100 Feed Fed	219.33	418.71	119.02
43	$/CWT Breeding Animals Sold	63.68	76.30	58.26
44	Ave Weight of Animals Sold	712.57	775.04	664.28
45	Number of Head Bought	8	7	7
46	Percent Death Loss	2.96	2.13	4.69
47	Price/CWT Calf Sold/Transfer	87.41	88.20	88.84
48	Ave Weight Calf Sold/Transfer	582	660	463
49	Percent Calf Crop Born	96.83	98.59	94.23
50	Percent Calf Crop Weaned	92.06	94.37	86.54
51	Percent Calf Death Loss	6.56	4.29	10.20
52	Bull Income/Breeding Cow	122.60	240.07	154.95
53	Hay Equivalent/Cow	4.52	3.44	5.59
54	Corn Equivalent/Cow	15.18	18.36	11.40

BEEF FEEDERS - 1990

		LBS/CWT	Average of 29 Farms Per CWT	Per Head
1	Average Number of Animals		108.9	
2	Pounds of Animal Produced		82285	
3	Net Increase in Value:Animals		64.15	484.70
4	Other Miscellaneous Income		0.50	3.76
5	**Total Value Produced**		**64.65**	**488.46**
**	**FEED FED:QTY & COST ****	**LBS/CWT**		
7	Corn	395.3	7.82	59.09
8	Small Grains	93.2	3.47	26.23
9	Complete Rations	78.0	1.91	14.40
10	Prot., Salt, Min.	67.8	7.32	55.32
11	Legume Hay	109.6	2.75	20.79
12	Other Dry Hay & Rouage	53.0	0.92	6.98
13	Silage	600.5	4.71	35.59
14	Haylage	13.4	0.17	1.27
15	Pasture		0.12	0.94
16	**Total Feed Cost**		**29.19**	**220.61**
17	**Return Over Feed Costs**		**35.46**	**267.85**
**	**OTHER DIRECT COSTS ****			
19	Veterinary		1.99	15.01
20	Miscellaneous		3.20	24.21
21	Custom Work & Lease Expense		1.62	12.22
22	Special Hired Labor			
23	Assigned Interest		0.11	0.86
24	**Total Other Direct Costs**		**6.92**	**52.30**
25	**Total Direct Costs Incl Feed**		**36.11**	**272.91**
26	**Return Over All Direct Costs**		**28.54**	**215.55**
**	**ALLOCATED COSTS ****			
29	Act Int Pd Less Int Assigned-L23		4.46	33.67
30	General Hired Labor		1.37	10.36
31	Utilities & Miscellaneous		1.51	11.39
32	Power & Machinery		1.31	9.91
33	Livestock Equipment		0.74	5.56
34	Buildings & Fences		1.30	9.81
35	**Total Allocated Costs**		**10.69**	**80.70**
36	**Total Actual Listed Costs**		**46.80**	**353.61**
37	**Return Over Actual Listed Costs**		**17.85**	**134.85**

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

		Per CWT	Per Head
38	Total Cost Adj to 7% Min Int.	49.86	376.75
39	Return/Listed 7% Opport. Int.	14.79	111.71
42	Return/$100 Feed Fed		221.43
43	Price/CWT Sold		78.90
44	Average Weight All Cattle Sold		879
45	Price/CWT Bought		95.61
46	Average Weight Cattle Bought		485
47	Number of Head Bought		193
48	Percent Death Loss		1.00
49	Effective Daily Gain-Pound/Head/Day		2.07
50	Price to cover purch price & listed		155.55
51	Hay Equivalent/CWT		0.18
52	Corn Equivalent/CWT		8.72

FARM SIZE AND PRODUCTION - 1990

Measures of Farm Size

		Average of 387 Farms	High 77 Farms	Low 77 Farms
3	ACRES: Operated			
4	- Total	978.5	1561.6	865.6
5	- Tillable	880.2	1503.5	740.2
	** UNITS OF WORK ACCOMPLISHED **			
8	- Crops	372.6	798.8	258.4
9	- Livestock	150.7	96.8	99.6
10	- Other	2.9	5.7	0.9
11	- Total	526.2	901.3	358.9
	** WORKERS (YEAR EQUIVALENTS) **			
14	- Operators	1.15	1.39	1.02
15	- Hired Labor	0.42	0.95	0.28
16	- Custom Labor	0.03	0.04	0.02
17	- Unpaid Labor	0.01		
18	- Total	1.61	2.38	1.32
	** OPERATOR INVESTMENTS **			
21	- Per Worker	247246	291299	295834
22	- Per Work Unit	756	769	1088

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

Item	No. of Work Units	Item	No. of Work Units
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

FINANCIAL - TREND ANALYSIS

		1987	1988	1989	1990
	RESOURSES OF BUSINESS				
1	Total Acres	951	991	970	979
2	Total Tillable Acres	857	898	881	880
3	Work Units on Crops	345	349	358	372
4	Work Units on Livestock	132	144	147	151
5	Total Work Units	485	498	507	526
6	Total Farm Capital Ending	354731	385748	402423	422371
	PROFIT & LOSS ANALYSIS				
1	Cash Operating Income	181890	183253	193777	191435
2	Cash Operating Expense	141224	139184	157250	151899
3	Net Cash Operating Income	40666	44069	36527	39536
4	Return-Operator's Labor & Mgmt.	34175	27989	24655	28590
5	Return-Capital & Family Labor	42116	38958	34788	40838
6	Total Family Income	52839	49774	46703	53590
7	Cash Living Expense	19364	19866	22156	24090
8	Total Non-Farm Living Expense	26352	28252	33848	35652
9	Ratio: Total Exp-Total Rcpts	.84	.81	.88	.87
10	Ratio: Cash Oper Exp-Total Farm Oper Inc	.77	.76	.81	.78
11	Ratio: Cap Turnover:Avg Capital Rcpts	---	---	1.85	1.86
12	Interest Paid/Work Unit	33.36	29.28	33.42	30.19
13	Interest Paid/Dollar Farm Oper.Income	.09	.08	.08	.08
	BALANCE SHEET ANALYSIS (Year End)				
1	Total Assets	401372	462557	487419	486972
2	Total Liabilities	207460	208112	214568	200182
3	Equity	193912	254445	272851	286790
4	Current Ratio (%)	---	37%	45%	41%
5	Working Ratio (%)	---	42%	41%	39%
6	Net Capital Ratio (%)	48%	45%	44%	41%
7	Current Debt (%)	---	18%	23%	25%
8	Total Farm Assets/Work Unit	731	775	833	803
9	Total Farm Liability/Work Unit	420	411	413	371
	MEASURES-FARM MECHANIZATION EFFICIENCY				
1	Power, Mach, Equip, Bldg Exp/Work Units	150	77	81	80
2	Tractor, Crop Mach Exp/Work Unit	103	52	55	55
3	Tractor, Crop Mach Exp/Acre	30	29	32	33
4	Fuel & Lubricants Used/Acre	11.26	9.93	10.25	10.43
5	Repair & Maintenance Cost/Acre	17.79	15.97	16.76	16.47
6	Total Operator's Depreciation	---	14909	13740	12681
	MEASURES-FARM ORGANIZAITON & MGMT EFFIC				
1	Crop Yield Index	100	100	100	100
2	Ret Over All Listed Costs/Tillable Acres	---	24	36	40
3	Gross Return/Tillable Acres	178	156	187	184
4	Index of Return/$100 Feed Fed	100	100	100	100
5	Livestock Units/100 Acres	5.6	5.2	5.7	5.3
6	Work Units/Worker	292	313	313	327

CROP - TREND ANALYSIS

	BARLEY	1987	1988	1989	1990
	Number of Records	414	146	398	484
1	Acres	106	91	98	101
2	Crop Yield/Acre	55	36	59	70
3	Value/Unit	1.51	3.07	2.71	2.06
4	Total Variable Costs/Acre	37	40	43	44
5	Total Listed Costs/Acre	108	115	119	121
6	Return Over Listed Costs/Acre	28	22	44	32
7	Total Listed Cost/Unit of Production	1.99	3.19	2.03	1.74

	SPRING WHEAT				
	Number of Records	527	385	410	862
1	Acres	151	119	141	154
2	Crop Yield/Acre	41	23	42	53
3	Value/Unit	2.45	3.74	3.67	2.46
4	Total Variable Costs/Acre	43	42	48	49
5	Total Listed Costs/Acre	116	119	123	126
6	Return Over Listed Costs/Acre	60	18	42	44
7	Total Listed Cost/Unit of Production	2.82	5.28	2.97	2.39

	SUNFLOWERS, OIL				
	Number of Records	51	20	52	77
1	Acres	68	86	62	91
	Crop Yield/Acre	16.7	10.6	13.0	16.6
	Value/Unit	7.09	10.63	10.50	10.59
4	Total Variable Costs/Acre	43	35	41	44
5	Total Listed Costs/Acre	120	126	118	127
6	Return Over Listed Costs/Acre	.26	0	21	58
7	Total Listed Cost/Unit of Production	7.17	11.92	9.08	7.64

	SUGAR BEETS				
	Number of Records	94	72	109	140
1	Acres	132	111	139	129
2	Crop Yield/Acre	---	---	15.8	14.4
3	Value/Unit	---	---	34.89	47.13
4	Total Variable Costs/Acre	170	190	203	230
5	Total Listed Costs/Acre	422	421	469	497
6	Return Over Listed Costs/Acre	351	111	94	214
7	Total Listed Cost/Unit of Production	---	---	29.68	34.55

	ALFALFA HAY				
	Number of Records	199	136	267	288
1	Acres	67	76	66	58
2	Crop Yield/Acre	2.9	1.6	2.0	2.0
3	Value/Unit	43.26	61.14	57.36	59.02
4	Total Variable Costs/Acre	17	16	17	16
	Total Listed Costs/Acre	98	115	110	113
	Return Over Listed Costs/Acre	28	12	9	7
7	Total Listed Cost/Unit of Production	33.67	71.78	54.98	56.67

LIVESTOCK - TREND ANALYSIS

	1987*	1988	1989	1990
PRODUCING WEANING PIGS				
Number of Records	17	9	8	1
1 Numbers of Litter Produced	109	93	65	106
2 Price Rec'd/Pig Sold	46	41	56	49
3 Total Listed Cost/Litter	215	335	326	298
4 Return Over Listed Cost/Litter	135	-12	-5	82
5 Return/$100 Feed Fed	2769	2194	2766	199
6 Pounds of Feed/Litter	7.5	7.6	7.7	8.6
7 Number of Pigs Weaned/Litter				
DAIRY COWS				
Number of Records	80	97	100	113
1 Pounds of Milk Produced/Cow	15276	15629	15480	15898
2 Price Received/Cwt Milk Sold	11.72	11.45	12.85	13.44
3 Total Listed Cost/Cow	1054	1394	1398	1457
4 Return Over Listed Cost/Cow	672	313	507	599
5 Return/$100 Feed Fed	278	246	266	267
6 Total Feed Cost/Cow	619	693	717	769
7 Total List Cost/Cwt Milk	6.90	8.91	9.03	9.18
ALL DAIRY				
Number of Records	79	98	100	108
1 Average Number of Cows	47	47	47	48
2 Feed Cost/Cow	848	939	962	1008
3 Return Over All Listed Costs/Cow	797	379	618	75
4 Dairy Cow Turnover (%)	---	40	40	40
5 Total Dry Matter/Cow	---	59	65	64
6 Total Investment/Cow	---	6335	7902	8272
7 Total Debt/Cow	---	3668	3925	3572
BEEF COW/CALF				
Number of Records	55	50	57	65
1 Average Number of Beef Cows	65	70	72	63
2 Price Rec'd/Cwt Calf Sold or Trans	75.27	84.68	83.17	87.41
3 Total Listed Costs/Head	281	363	343	367
4 Return Over Listed Costs	236	100	143	149
5 Return/$100 Feed Fed	229	209	219	219
6 Average Weight of Calves Sold or Trans	564	520	597	582
7 % Calf Crop Weaned	---	90	92	92
BEEF FEEDERS				
Number of Records	25	25	22	29
1 Pounds of Beef Produced	59985	39129	58229	82285
2 Price/Cwt Sold	68.04	74.28	72.22	78.90
3 Total Listed Cost/Cwt	39.26	50.13	59.25	46.80
4 Return Over Listed Costs/Cwt	26.88	13.24	-.49	17.85
5 Return/$100 Feed Fed	244	200	140	221
6 Feed Cost/Cwt Produced	27.07	31.70	42.05	29.
7 Average Weight All Cattle Sold	808	862	961	87

* Costs for utilities, hired labor, interest and general farm expenses were not allocated to enterprises in 1987.

PROGRAM INFORMATION

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

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

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

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

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

This analysis allocates all specific and general farm expenses to each enterprise by formula. Some of the overhead costs allocated are machinery expense, building expenses, interest, utilities, insurance, general farm expense, and hired labor. The return over listed costs for each of the enterprises may be used for family living, debt repayment, capital purchases or savings. This makes the farm business analysis a valuable tool to be used for long range planning and cash flow projections.

SCHOOLS/COLLEGES PARTICIPATING

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

School/College	Instructors
Ada	Peter Revier
Agassiz Valley Voc.(Fertile)	Ron Salber
Barnesville	Tom Risdal
Baudette	Gerald Ausmus
Detroit Lakes TC	Duane Lemmon
Fergus Falls	Dan Miller
Fosston	Doug Fjerstad
Frazee	Ron Monson
Goodridge	Wayne Ditmer
Hawley	Dennis Olsen
Henning	Lynn Carlson
Karlstad-Greenbush	Carol Kleppe
Kittson County (Lancaster)	Mark Prosser
Mahnomen, Ulen	Mike Lockhart
Moorhead TC	Rick Morgan
	Greg Tullis
Red Lake Falls	Mark Berg
Roseau	Duane Jaenicke
Thief River Falls TC	Ron Dvergsten
	Don Johnsen
	Danie Packard

The analysis of records and preparation of this report is done under the direction of Verne Spengler, Area Ag. Coordinator at Thief River Falls Technical College. Directing in a supervisory capacity are Dr. Orley Gunderson, President, Thief River Falls TC, John Murray, Program Manager, Minnesota Technical College Systems and Dr. Edgar Persons, Chairman, Ag. Education Division, University of Minnesota. Data processing was done by Specialized Data Systems, Madison, Wisconsin. Three hundred eighty-seven farms are included in the averages.

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

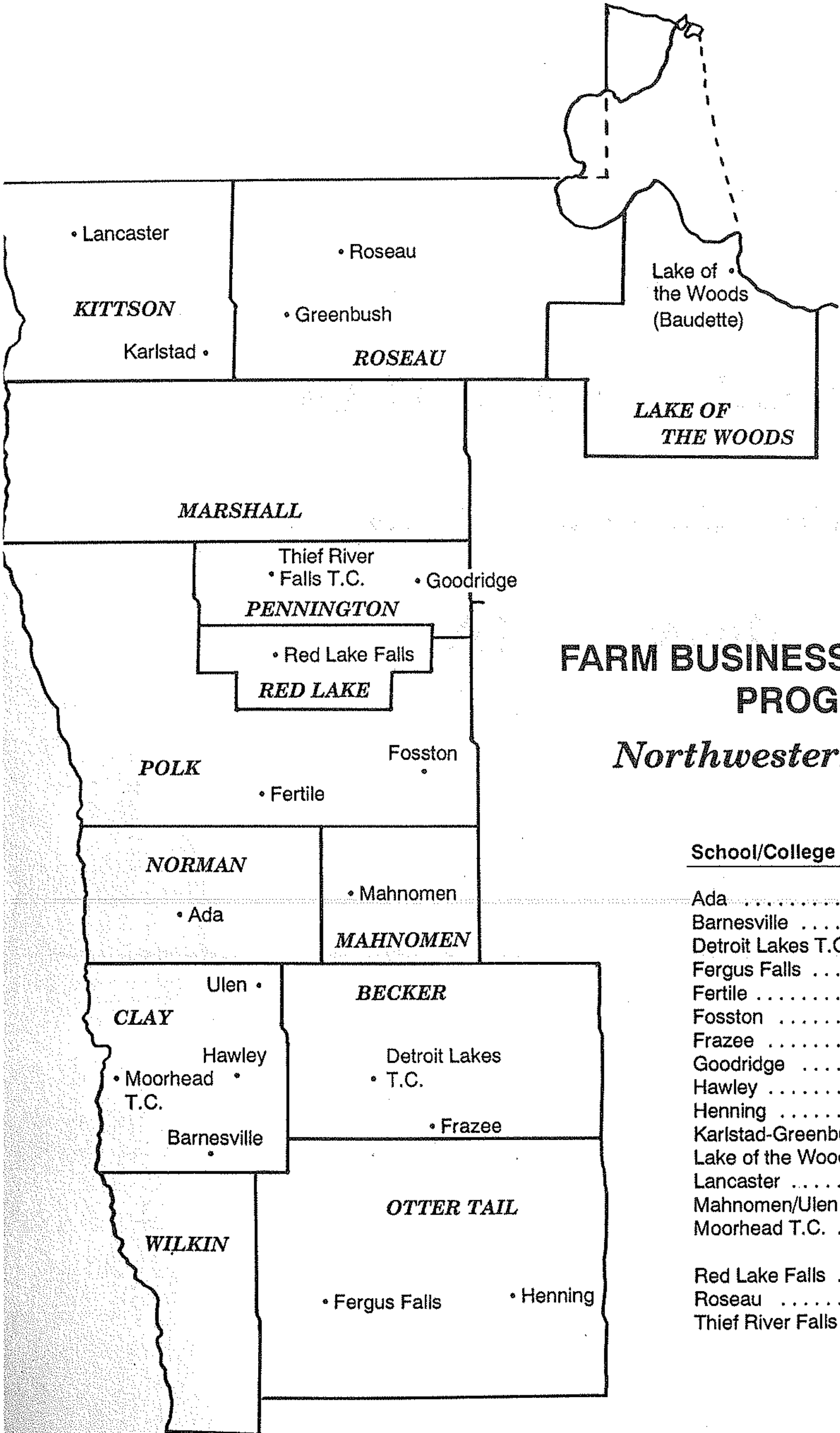
Esther Mattson and Roxane Sorvig, secretaries, oversee the general operation of the office, including correspondence, billing and organization.

LOOK TO

TECHNICAL EDUCATION

FOR YOUR FUTURE IN

MINNESOTA



FARM BUSINESS MANAGEMENT PROGRAMS

Northwestern Minnesota

School/College	Instructor
Ada	Peter Revier
Barnesville	Tom Risdal
Detroit Lakes T.C.	Duane Lemmon
Fergus Falls	Dan Miller
Fertile	Ron Salber
Fosston	Doug Fjerstad
Frazee	Ron Monson
Goodridge	Wayne Ditmer
Hawley	Dennis Olsen
Henning	Lynn Carlson
Karlstad-Greenbush	Carol Kleppe
Lake of the Woods	Gerald Ausmus
Lancaster	Mark Prosser
Mahnomen/Ulen	Mike Lockhart
Moorhead T.C.	Rick Morgan
	Greg Tullis
Red Lake Falls	Mark Berg
Roseau	Duane Jaenicke
Thief River Falls T.C.	Don Johnsen
	Danie Packard
	Ron Dvergsten