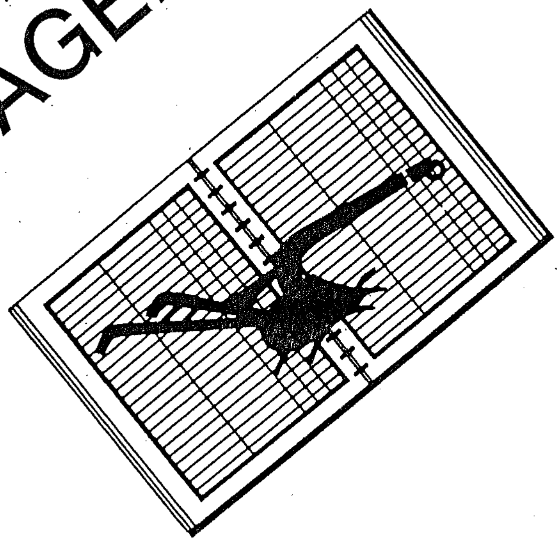
FARM
BUSINESS
MANAGEMENT



1990 Annual Report
Southwestern Minnesota
March, 1991

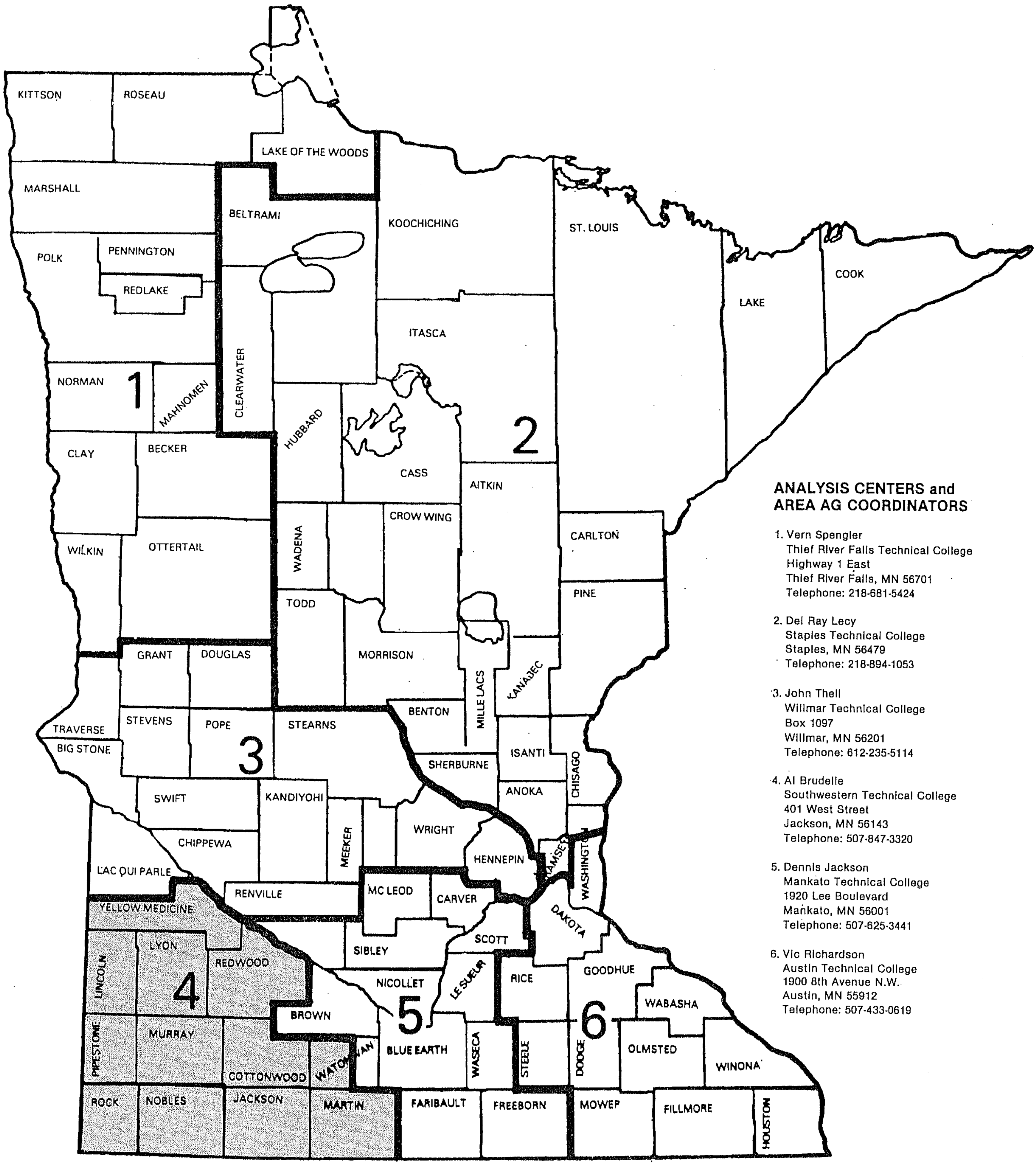
AN ADULT
EDUCATIONAL
PROGRAM

In cooperation with: State Board, Minnesota Technical College System
Division of Agricultural Education — University of Minnesota

SOUTHWESTERN TECHNICAL COLLEGE

Price $5.00

FARM BUSINESS MANAGEMENT COORDINATOR AREAS



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SOUTHWEST MINNESOTA FARM BUSINESS MANAGEMENT PROGRAMS

SOUTHWESTERN TECHNICAL COLLEGE
CANBY CAMPUS
Instructors:
Dennis Schentzel
Dale Schoberg

SOUTHWESTERN TECHNICAL COLLEGE
GRANITE FALLS CAMPUS
Instructors:
Neale Deters
Mike Resvick

MARSHALL HIGH SCHOOL
Instructors:
Jim Molenaar
Dennis Schroeder

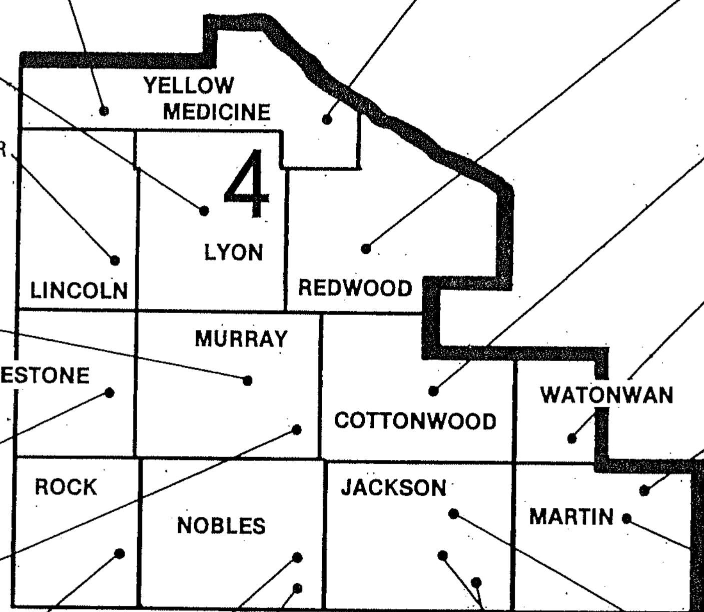
LAMBERTON HIGH SCHOOL
Instructor:
John Clark

TYLER HIGHLAND VOCATIONAL CENTER
Instructor:
Paul Bartz

MT. LAKE HIGH SCHOOL
Instructor:
Leland Thiesen

SLAYTON HIGH SCHOOL
Instructor:
Dwayne Eisfeld

ST. JAMES HIGH SCHOOL
Instructor:
Richard Spitzner



SOUTHWESTERN TECHNICAL COLLEGE
PIPESTONE CAMPUS
Instructors:
Dwayne Eisfeld
Dave Larson

TRUMAN HIGH SCHOOL
Instructor:
Cliff Vrieze

WELCOME HIGH SCHOOL
Instructors:
Robert Roesler
Charles Worm

FULDA HIGH SCHOOL
Instructor:
Mel Faltinson

HERON LAKE-OKABENA HIGH SCHOOL
Instructor:
Richard Amendt

LUVERNE HIGH SCHOOL
Instructor:
Jim Ouverson

LAKEFIELD HIGH SCHOOL
Instructor:
Harry Gerdes

BREWSTER HIGH SCHOOL
Instructor:
Gerald McConkey

SOUTHWESTERN TECHNICAL COLLEGE
JACKSON CAMPUS
Instructors:
Charles Asman
Doug O'Neil
Ag Coordinator:
Al Brudelie

WORTHINGTON HIGH SCHOOL
Instructors:
Paul Karelis
Rolf Mahlberg

1990 ANNUAL AGRICULTURE FARM BUSINESS MANAGEMENT EDUCATION PROGRAM REPORT OF SOUTHWESTERN MINNESOTA

AL BRUDELIE
AREA PROGRAM COORDINATOR

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INTRODUCTION

Farm Business Management Education has been a part of agriculture education programs in Minnesota schools since 1952. From the early cooperative efforts of the State Department of Education and the Department of Agriculture Education (University of Minnesota), the program has expanded to serve over 6,000 farm families each year in six Farm Management areas. Programs are now administered and managed by the State Board of Vocational Technical Education through the Technical Colleges and local school districts.

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. This purpose has not changed over the years.

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

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

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

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

Below is a Listing of the Schools Involved and the Instructors Responsible for these Programs.

* * * * * * * * * * * * * * * * *

CLASS LOCATION	INSTRUCTOR
Brewster	Gerald McConkey
Canby	Dennis Schentzel
	Dale Schoberg
Fulda	Mel Faltinson
Heron Lake/Okabena	Richard Amendt
Jackson	Charles Asman
	Douglas O'Neil
Granite Falls	Neale Deters
	Mike Resvick
Lakefield	Harry Gerdes
Lamberton	John Clark
Luverne	Jim Ouverson
Marshall	Dennis Schroeder
	Jim Molenaar
Mt. Lake	Leland Thiesen
Pipestone	Dwayne Eisfeld
	Dave Larson
Slayton	Dwayne Eisfeld
St. James	Richard Spitzner
Truman	Cliff Vrieze
Tyler H.V.C.	Paul Bartz
Welcome	Robert Roesler
	Charles Worm
Worthington	Paul Karelis
	Rolf Mahlberg

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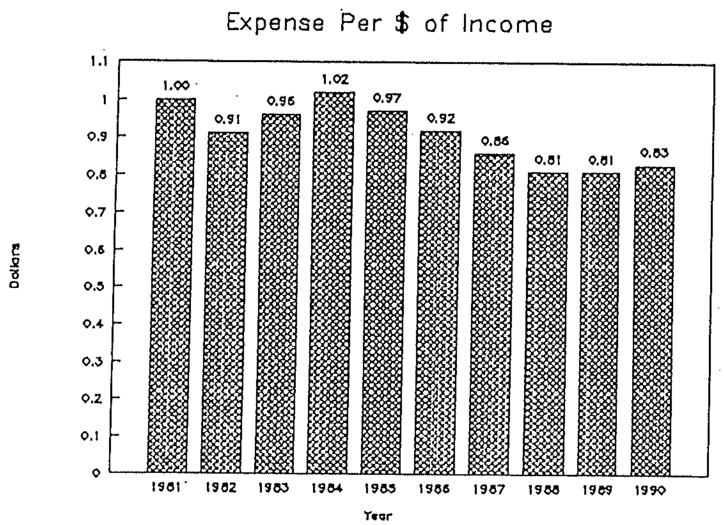
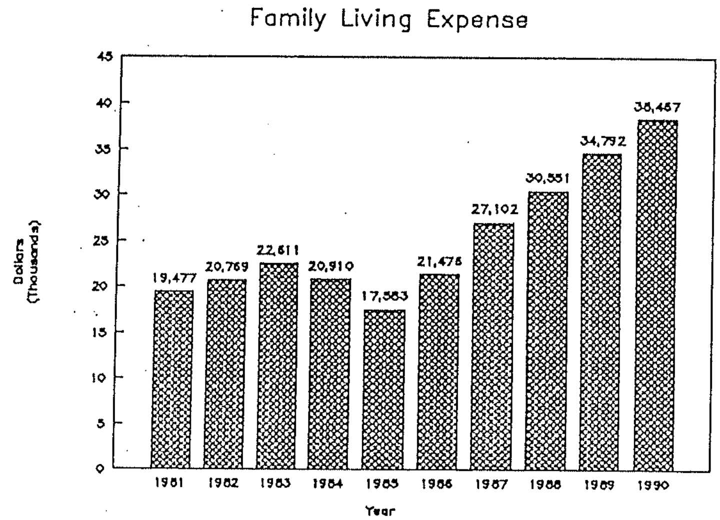
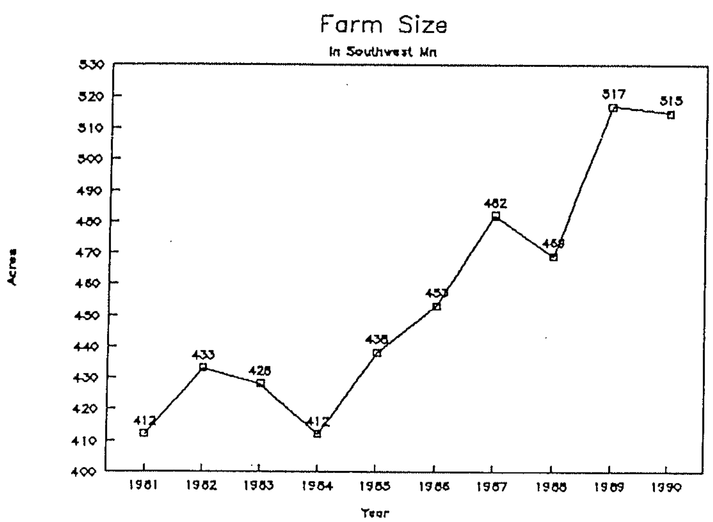
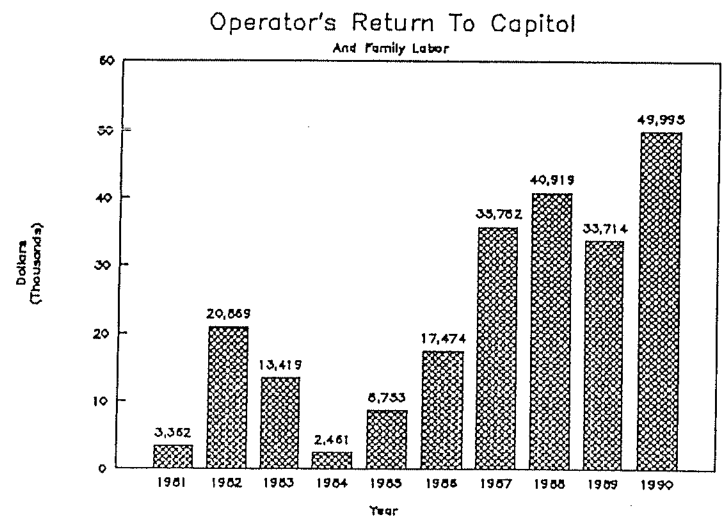
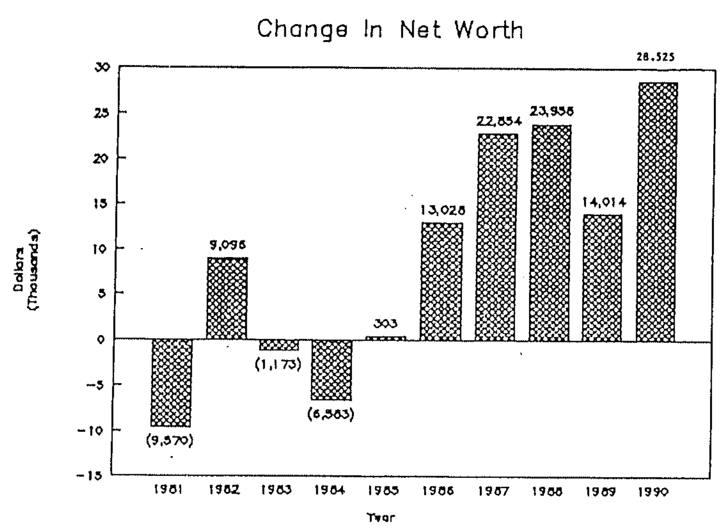
The Analysis of the records and preparation of the report for the Southwest area is done under the direction of Al Brudelie, Area Ag Coordinator, at Southwestern Technical College - Jackson Campus. Directing in a supervisory capacity are Marlin Wacholz, President, Southwestern Technical College; Dennis Finstad, Campus President; John Murray, Education Specialist, Minnesota Technical College System; and Dr. Edgar Persons, Chairman of the University of Minnesota Agricultural Education Division. Data processing was done by Specialized Data Systems, Inc., Madison, Wisconsin. Special acknowledgments to Suzanne Lovell for her part in the preparation of this report.











THE FIVE GRAPHS ABOVE SHOW US WHAT HAPPENED TO AGRICULTURE IN SOUTHWESTERN MINNESOTA IN THE PAST DECADE.

SUMMARY MANAGEMENT INFORMATION - 1990

Items	AVERAGE 531	HIGH 106	LOW 106
Farm Size			
2. Total Acres Operated	514.6	733.2	444.8
2A. Total Acres Owned	159.9	140.9	158.0
3. Tillable Acres Operated	481.0	691.5	419.6
3A. Tillable Acres Owned	142.5	126.7	141.8
4. Total Work Units	448.0	800.0	278.8
5. Total Full Time Equivalent Workers	1.31	1.73	1.10
Profit and Loss Analysis			
11. Return to Operator's Labor & Management	38,451	90,200	3,280
12. Full Time Operator Equivalent	1.05	1.16	1.01
13. Return to Capital, Farm Labor, & Management			
14. Operator's Share	49,995	107,034	13,852
15. Ratio: Total Expense to Total Receipts (O.S.)	0.83	0.80	0.98
16. Ratio: Cash Operating Exp. to Total Farm Op. Inc.	0.79	0.80	0.82
17. Ratio: Cash Operating Expense to Total Expenses	0.78	0.80	0.73
18. Ratio: Capital Turnover: Ave. Capital to Receipts: W.F.	2.18	1.45	3.89
19. Ratio: Capital Turnover: Ave. Capital to Recepits: O.S.	1.53	1.24	2.17
20. Net Cash Operating Income	39,118	72,394	22,932
21. Interest Payable Per Work Unit	31.58	29.62	38.99
22. Interest Payable Per Dollar of Farm Operating Income	0.07	0.06	0.09
Balance Sheet Analysis			
31. Change in Total Assets	41,128	91,606	17,024
32. Change in Total Liabilities	12,603	21,480	14,983
33. Change in Equity	28,525	70,126	2,041
34. Current Ratio: End of Year	3.14	2.87	3.04
35. Working Ratio: End of Year	2.59	2.69	2.28
36. Fixed Ratio: End of Year	2.28	2.30	2.65
37. Net Capital Ratio: End of Year	2.44	2.52	2.46
38. Total Farm Assets/Work Unit	855.90	773.96	1,141.24
39. Total Farm Liabilities/Work Unit	380.96	321.64	513.50
Family Information			
41. Total Non-Farm Income	10,272	9,487	12,244
42. Total Cash & Non-Cash Family Living Expense	38,467	56,072	30,797
43. Total Dollars Available to Save or Reduce Debt	26,766	72,558	-1,993

CASH FARM OPERATING INCOME - 1990

Items		AVERAGE 531	HIGH 106	LOW 106
1.	Sale of Livestock & Livestock Products			
2.	Dairy Cows			
3.	Dairy Products	11,279	19,210	3,238
4.	Other Dairy Cattle	1,653	3,829	495
5.	Beef Breeding Cattle	867	316	949
6.	Beef Feeder Cattle	19,866	41,707	12,459
7.	Hogs Complete & Mixed	32,485	83,428	8,078
8.	Hogs Finishing	24,061	60,544	11,313
9.	Hogs Producing Feeder Pigs	3,582	7,384	1,635
10.	Sheep, Goats, Wool	1,288	82	948
11.	Eggs, Poultry, All Fowl	455		929
12.	Custom, Contract Livestock Feeding	24		121
13.	Other Misc. Livestock Income	77	200	36
14.				
15.	Total Sales of Productive Lvsk.	95,637	216,700	40,201
16.	Sale of Crops			
17.	Wheat	731	584	764
18.	Oats	299	296	302
19.	Other Small Grain	8	13	25
20.	Corn	34,796	52,493	31,162
21.	Soybeans	35,471	54,822	29,156
22.	Grain Sorghum & Other Row Crops	1,513	958	159
23.	Legumes & Other Roughage	679	489	294
24.	Nursery, Timer & Other	183	106	341
25.	Sale: Crops/Supply Purch for Resale	5,330	8,445	4,022
26.				
27.	Total Sales From Crops/Supplies	79,010	118,206	66,225
	Other Farm Income			
28.	Government Payments-Set Aside Acres	10,159	17,217	8,053
29.	Income From Work Off Farm	1,402	1,277	1,116
30.	Custom Work Enterprise Income	1,452	1,022	3,021
31.	Patronage Refunds (Cash)	549	702	405
32.	Miscellaneous Farm Income	2,329	2,886	1,529
33.	Farm Capital Lease Income	1,320	1,768	3,029
34.	Total Other Farm Income	17,211	24,872	17,153
37.	(A) Cash Operating Income	191,858	359,778	123,579

CASH FARM OPERATING EXPENSES - 1990

Items	AVERAGE 531	HIGH 106	LOW 106
1. Livestock Expenses			
2. Dairy Cows	14		71
3. Other Dairy Cattle	264	683	136
4. Beef Breeding Cattle	23		18
5. Beef Feeder Cattle	12,598	26,895	7,347
6. Hogs Complete & Mixed	448	1,123	
7. Hogs Finishing	5,314	8,306	4,579
8. Hogs Producing Feeder Pigs	72	236	7
9. Sheep, Goats, Wool, Feeders	602	5	32
10. Poultry, All Fowl	55		
11. Vet, Breeding & Misc Livestock Exp	4,902	10,663	1,991
12. Feed Bought	26,892	64,008	11,622
13. Total Livestock Expenses	53,184	111,923	25,803
14. Crop Expenses			
16. Fertilizer	9,025	14,193	7,699
17. Chemicals	7,714	11,617	6,639
18. Seed	7,205	10,989	5,815
19. Drying	1,260	1,953	1,177
20. Irrigation Operation	21	0	27
21. Other Crop Expenses	4,047	6,757	2,524
22. Purchase for Resale	4,598	9,121	3,666
23. Total Crop Expenses	33,870	54,630	27,547
24. Operating Expenses			
25. Fuel & Lubricants	5,933	8,980	5,032
26. Repair: Lvsk. Equipment	1,790	4,049	583
27. Repair: Farm Real Estate	1,580	2,845	1,178
28. Repair: Machinery & Vehicles	8,985	12,777	7,957
29. Total Fuel/Repair Expenses	18,288	28,651	14,750
30. Misc. Farm Expenses			
31. Custom Work Hired	2,501	3,302	1,600
32. Custom Ent. Operator Costs	699	383	1,836
33. Hired Labor	4,047	9,700	1,369
34. Personal Property & R.E. Taxes	1,606	2,728	1,452
35. General Farm Expenses	4,535	7,324	3,323
36. Utilities	2,378	4,153	1,534
37. Capital Lease Payment	19,524	40,893	10,560
38. Interest Actually Paid	14,108	23,696	10,873
39. Total Misc. Expenses	49,398	92,180	32,547
40. (B) Cash Operating Expense	152,740	287,384	100,647
41. (C) Net Cash Income (A-B)	39,118	72,394	22,932

ACCRUAL STATEMENT OF OPERATOR'S FARM PROFIT OR LOSS - 1990

Items	AVERAGE 531	HIGH 106	LOW 106
1. (C) Net Cash Income	39,118	72,394	22,932
2. INVENTORY CHANGES	Inventory Change	Inventory Change	Inventory Change
3. Market Livestock	4,202	10,635	-930
4. Supplies, Prepaids, & Fuel	1,877	3,712	913
5. Crop, seed & Feed	10,604	28,284	936
Stocks & Co-op Equities	1,312	1,490	880
6. Accounts Receivable	59	-313	-175
7. (E) Net Inventory Change	18,054	43,808	1,624
8. (F) Net Operating Income (C+E)	57,172	116,202	24,556
9. DEPRECIATION AND CAPITAL ADJUSTMENTS			
10. Breeding Stock			
11. Vehicles, Machinery & Equipment			
12. Vehicles	-1,054	-1,513	-1,067
13. Power & Machinery	-6,348	-8,865	-6,602
14. Livestock Equipment	-882	-1,866	-436
15. Custom Equipment	-108	-116	-44
16. Irrigation Equipment	25	114	0
17. Real Estate			
18. Buildings & Fences	-2,700	-5,709	-1,782
19. Land Improvements & Tile	-271	-582	-167
20. Bare Land	54	0	-2,449
21. (G) Totals			
22. (H) Total Depreciation & Capital Adj.	-7,649	-10,953	-11,102
23. Change in Farm Capital	37,198	83,975	15,660
24. OTHER ADJUSTMENTS			
25. Accounts Payable	-28	1,053	123
26. Delq. Rent, R.E. Taxes	-10		
27. Delinquent Int.	-40		3
28. (J) Total Other Adjustments	-78	1,053	126
29. (K) Net Farm Profit or Loss (F+H+J)	49,445	106,302	13,580

MEASURES OF FARM PROFITABILITY, LIQUIDITY, SOLVENCY - 1990 AVERAGE OF 531 FARMS

	Items			
1.	********PROFITABILITY********			
2.	(K) Net Farm Profit or Loss		49,445	
3.	(L) Family Liv. from the Farm		260	
4.	(M) Wages Paid to Spouse		290	
5.	(N) Board Furnished Hired Labor			
6.	(O) Return: Cap, Fam. Lbr, Mgt.	(K+L+M-N)		49,995
7.	Capital Cost Calculation:			
8.	(I) Avg. Total Farm Capital		360,594	
9.	(P) Opportunity Cost on Capital	(I*7%)	25,242	
10.	(Q) Interest Actually Paid		14,108	
11.	(R) Interest on Operator Equity	(P-Q)	11,134	
12.	(S) Value of Unpaid Family Labor		120	
13.	Net Return: Operator Labor & Mgmt.	(O-R-S-M)		38,451
14.	Number of Oper., Fulltime Equiv.		1.05	
15.	Net Return to Labor & Mgmt/Fulltime Equiv.		36,620	
16.	(T) Value of Operator Labor & Mgmt.		13,053	
17.	(U) Return to Farm Capital	(O+Q-T)	51,050	
18.	Rate of Return to Avg. Capital	(U/I)		14.2
19.	(V) Operator Average Equity		240,543	
20.	(W) Return to Operator Equity	(O-T)	36,942	
21.	Rate of Return to Equity	(W/V)		15.4
22.	(X) Value of Farm Production	(A+E)	209,912	
23.	Net Profit Margin	(U/X)		24.3
24.	Asset Turnover Rate	(X/I)		58.2
25.	********LIQUIDITY********		CASH	ACCRUAL
26.	(C) Net Cash Farm Income		39,118	39,118
27.	(E) Net Change in Inventory		XXX	18,054
28.	(F) Net Operating Income	(C+E)	39,118	57,172
29.	(Y) Non Farm & Spouse Income		10,028	10,028
30.	(Z) Total Spendable Income	(F+Y)	49,146	67,200
31.	(AA) Family Living & Taxes Paid	(T4 L38)	38,203	38,203
32.	(AB) Scheduled R.E. Principal Pymts.		2,893	2,893
33.	(AC) Avail for Non Real Estate Debt	(Z-AA-AB)	8,050	26,104
34.	(AD) Average Non Real Estate Debt		84,605	84,605
35.	Years to Turnover Non R.E. Debt	(AD/AC)	10.5	3.2
36.	********SOLVENCY********		BEGIN	END
37.	Total Assets		390,654	431,782
38.	Total Liabilities		164,374	176,977
39.	Operator Equity		226,280	254,805
40.	Change in Equity		XXX	28,525
41.	Percent in Debt:			
42.	Farm, Current		31.5	30.2
43.	Farm, Intermediate		60.0	58.2
44.	Farm, Working	(Curr + Intermed.)	43.6	42.0
45.	Farm, Fixed		49.1	48.2
46.	Non Farm		6.3	7.4
47.	Total	(Farm & Non Farm)	42.1	41.0
48.	Current Portion of Total Debt		34,766	39,220
49.	Total Money Borrowed this Year		XXX	97,621
50.	Total Principal Paid this Year		XXX	86,254

MEASURES OF FARM PROFITABILITY, LIQUIDITY, SOLVENCY - 1990

	Items		HIGH 106		LOW 106	
1.	********PROFITABILITY********					
2.	(K) Net Farm Profit or Loss		106,302		13,580	
3.	(L) Family Liv. from the Farm		380		152	
4.	(M) Wages Paid to Spouse		352		123	
5.	(N) Board Furnished Hired Labor				3	
6.	(O) Return: Cap, Fam.Lbr, Mgt.	(K+L+M-N)		107,034		13,852
7.	Capital Cost Calculation:					
8.	(I) Avg. Total Farm Capital		571,768		301,054	
9.	(P) Opportunity Cost on Capital	(I*7%)	40,024		21,074	
10.	(Q) Interest Actually Paid		23,696		10,873	
11.	(R) Interest on Operator Equity	(P-Q)	16,328		10,201	
12.	(S) Value of Unpaid Family Labor		154		248	
13.	Net Return: Operator Labor & Mgmt.	(O-R-S-M)		90,200		3,280
14.	Number of Oper., Fulltime Equiv.		1.16		1.01	
15.	Net Return to Labor & Mgmt/Fulltime Equiv.		77,759		3,248	
16.	(T) Value of Operator Labor & Mgmt.		17,266		9,047	
17.	(U) Return to Farm Capital	(O+Q-T)	113,464		15,678	
18.	Rate of Return to Avg. Capital	(U/I)		19.8		5.2
19.	(V) Operator Average Equity		372,141		214,126	
20.	(W) Return to Operator Equity	(O-T)	89,768		4,805	
21.	Rate of Return to Equity	(W/V)		24.1		2.2
22.	(X) Value of Farm Production	(A+E)	403,586		125,203	
23.	Net Profit Margin	(U/X)		28.1		12.5
24.	Asset Turnover Rate	(X/I)		70.6		41.6
25.	********LIQUIDITY********		CASH	ACCRUAL	CASH	ACCRUAL
26.	(C) Net Cash Farm Income		72,394	72,394	22,932	22,932
27.	(E) Net Change in Inventory		XXX	43,808	XXX	1,624
28.	(F) Net Operating Income	(C+E)	72,394	116,202	22,932	24,556
29.	(Y) Non Farm & Spouse Income		9,140	9,140	14,095	14,095
30.	(Z) Total Spendable Income	(F+Y)	81,534	125,342	37,027	38,651
31.	(AA) Family Living & Taxes Paid	(T4 L38)	55,684	55,684	30,609	30,609
32.	(AB) Scheduled R.E. Principal Pymts.		6,117	6,117	1,908	1,908
33.	(AC) Avail for Non Real Estate Debt	(Z-AA-AB)	19,733	63,541	4,510	6,134
34.	(AD) Average Non Real Estate Debt		133,672	133,672	68,830	68,830
35.	Years to Turnover Non R.E. Debt	(AD/AC)	6.8	2.1	15.3	11.2
36.	********SOLVENCY********		BEGIN	END	BEGIN	END
37.	Total Assets		584,005	675,611	345,757	362,781
38.	Total Liabilities		246,927	268,407	132,652	147,635
39.	Operator Equity		337,078	407,204	213,105	215,146
40.	Change in Equity		XXX	70,126	XXX	2,041
41.	Percent in Debt:					
42.	Farm, Current		39.3	33.1	27.1	32.2
43.	Farm, Intermediate		49.6	48.1	70.3	71.0
44.	Farm, Working (Curr + Intermed.)		43.4	39.0	45.1	49.7
45.	Farm, Fixed		48.2	46.7	39.8	41.7
46.	Non Farm		6.6	11.9	6.0	4.9
47.	Total (Farm & Non Farm)		42.3	39.7	38.4	40.7
48.	Current Portion of Total Debt		72,023	77,387	23,700	27,270
49.	Total Money Borrowed this Year		XXX	170,334	XXX	83,080
50.	Total Principal Paid this Year			151,668		68,262

HOUSEHOLD AND PERSONAL INCOME AND EXPENSES - 1990

Items		AVERAGE 324	106 HIGH FARMS	106 LOW FARMS
4.	Number of Persons - Family	4	4	4
5.	Number of Adult Equivalents - Family	3.0	3.2	3.0
6.	Non Farm Income			
7.	Outside Investment Income	1,530	1,101	1,620
8.	Other Personal Income & Income Tax Refund	7,891	7,057	9,514
9.	Sale of Dwelling, Auto, & Truck (Pers. Share)	334	883	298
10.	Net Cash from Non Farm Business	517	446	812
11.	Total Non Farm Income	10,272	9,487	12,244
	Household Expense			
13.	Family Draw (Alternative to Detail)			
14.	Church & Charity	1,081	1,564	491
15.	Medical Care & Health Insurance	3,537	4,251	2,935
16.	Food & Meals Bought	5,304	5,496	5,129
17.	Operating Expense & Supplies	2,296	2,915	1,557
18.	Furnishings & Equipment	1,192	1,187	1,256
19.	Clothing & Clothing Materials	1,614	1,858	1,345
20.	Personal Care, Personal Spending	3,215	3,800	3,044
21.	Education	700	1,184	315
22.	Recreation	1,502	2,380	1,037
23.	Gifts & Special Events	1,027	1,214	888
24.	Personal Interest	278	376	123
25.	Total Cash Household Detail Exp. (L14-L24)	21,747	26,224	18,119
26.	Truck & Auto Expense: Personal	1,687	2,278	1,422
27.	Upkeep on Dwelling: Personal	427	615	370
28.	Cash Rent: Personal	59	38	59
29.	Telephone & Electricity Expense: Personal	985	1,091	981
30.	General Farm Expense: Personal	45	88	26
31.	Total Cash Living & Operating Expense	24,951	30,335	20,978
32.	New Truck & Auto: Personal	1,451	2,652	713
33.	New Dwelling, Buildings, Land Bought: Personal	1,100	1,225	2,108
34.	Taxes & Other Deductions	5,678	10,841	3,629
35.	Life Insurance	1,313	1,369	1,152
36.	Paid on Personal Debt (Principal)	952	1,612	503
37.	Savings & Investments (Excluding Life Ins.)	2,759	7,648	1,526
38.	Total Non Farm Cash Expense	38,203	55,684	30,609
39.	Total Non Farm Exp. Minus Non Farm Inc.	27,932	46,196	18,365
40.	Total Family Living From Farm	264	389	188
41.	Total Cash & Non Cash Expense	38,467	56,072	30,797
	********************SUPPLEMENTARY INFORMATION********************			
43.	Family Living from the Farm			
44.	Milk & Cream (Quarts)	71		45
45.	Beef & Buffalo (Pounds)	241	310	184
46.	Pork (Pounds)	166	338	68
47.	Lamb, Mutton, Goat, (Pounds)	9		
48.	Poultry, All Fowl (Pounds)			
49.	Eggs (Dozen)	1		4
50.	Vegetables, Fruits, Spuds, Other Produce & Wood			
51.	Total Family Living From the Farm			
52.	Calculated Living Expense			
53.	Total Family Income	61,522	119,370	26,775
54.	Minus Change In Net Worth	28,525	70,126	2,041
55.	Apparent Family Living	32,997	49,244	24,734
56.	Total Family Living Per Work Unit: Calculated	85.27	69.61	109.79
57.	Net Family Living Per Work Unit	62.35	57.75	65.87

STATEMENT OF OPERATOR'S FINANCIAL POSITION - 1990 AVERAGE OF 531 FARMS

		Jan 1	Dec 31
	Current Assets:		
4.	Cash, Checking & Saving Account Balance: Pers.	1,109	896
5.	Cash, Checking & Saving Account Balance: Farm	4,005	2,917
6.	Hedging Account Equity	288	346
7.	Notes & Accounts Receivables: Personal	357	494
8.	Notes & Accounts Receivables: Farm	2,362	2,401
9.	Crops Held for Sale	51,634	60,651
10.	Livestock Feed	13,296	15,037
11.	Supplies/Prepaids	5,907	7,683
12.	Feeder Cattle & Market Other Dairy	12,810	14,330
13.	Market Hogs	15,172	17,902
14.	Feeder Lambs & Goats	259	306
15.	Poultry - All Types	53	56
16.	Other Livestock	81	81
17.	Total Current Assets	107,332	123,101
	Intermediate Assets:		
19.	Dairy Cows	4,651	4,828
20.	Other Dairy	1,328	1,383
21.	Beef Breeding Cattle	2,234	2,379
22.	Breeding Hogs	6,325	6,917
23.	Breeding Sheep/Goats	451	416
24.	Other Productive Livestock	26	31
25.	Auto & Truck: Personal Share	4,088	4,591
26.	Auto & Truck: Farm Share	5,118	5,772
27.	Power, Machinery, & Equipment	45,938	52,219
28.	Livestock Equipment	5,903	6,771
29.	Custom Work Equipment	601	922
30.	Irrigation Equipment	4	30
31.	Stocks & Bonds & Co-Op Equity - Farm	6,055	7,258
32.	Stocks & Bonds & Co-op Equity - Personal	2,497	3,420
35.	Other Household Personal	9,536	10,001
36.	Retirement Accounts & Life Insurance	6,599	7,639
37.	Total Intermediate Assets	101,354	114,577
	Long Term Assets:		
39.	Building & Fences	30,688	33,065
40.	Land & Land Improvements	131,689	139,744
41.	Dwelling	16,543	17,669
42.	Real Estate Personal	3,047	3,626
43.	Total Long Term Assets	181,968	194,105
44.	Total Assets	390,654	431,782
45.	Total Personal Assets (Incl. Cash)	43,777	48,337
46.	Total Farm Assets (Incl. Cash)	346,877	383,445

STATEMENT OF OPERATOR'S FINANCIAL POSITION - 1990

Items		106 HIGH PROFIT FARMS		106 LOW PROFIT FARMS	
	Current Assets:	JAN 1	DEC 31	JAN 1	DEC 1
4.	Cash, Checking & Saving Account Balance: Pers.	1,523	974	1,531	976
5.	Cash, Checking & Saving Account Balance: Farm	4,849	4,254	5,836	2,632
6.	Hedging Account Equity	786	882	265	195
7.	Notes & Accounts Receivables: Personal		156	27	29
8.	Notes & Accounts Receivables: Farm	3,606	3,089	1,952	1,778
9.	Crops Held for Sale	76,188	99,697	47,347	48,603
10.	Livestock Feed	20,657	26,022	8,290	7,795
11.	Supplies/Prepaids	10,185	13,992	4,440	5,407
12.	Feeder Cattle & Market Other Dairy	24,572	27,210	9,444	9,207
13.	Market Hogs	37,521	45,644	6,815	6,050
14.	Feeder Lambs & Goats			105	94
15.	Poultry - All Types			4	8
16.	Other Livestock	266	300		
17.	Total Current Assets	180,152	222,219	86,056	82,775
	Intermediate Assets:				
19.	Dairy Cows	6,506	7,004	1,385	1,382
20.	Other Dairy	3,365	3,257	677	744
21.	Beef Breeding Cattle	2,397	2,750	1,712	1,678
22.	Breeding Hogs	15,659	18,007	1,694	1,864
23.	Breeding Sheep/Goats	118	109	881	794
24.	Other Productive Livestock				
25.	Auto & Truck: Personal Share	4,565	5,400	4,187	4,520
26.	Auto & Truck: Farm Share	7,091	8,621	4,558	4,999
27.	Power, Machinery, & Equipment	67,623	82,197	40,685	45,273
28.	Livestock Equipment	11,403	13,793	2,598	2,783
29.	Custom Work Equipment		366	392	415
30.	Irrigation Equipment		119		
31.	Stocks & Bonds & Co-Op Equity - Farm	6,921	8,267	6,643	7,559
32.	Stocks & Bonds & Co-op Equity - Personal	4,155	6,855	393	512
35.	Other Household Personal	9,224	9,257	9,349	9,619
36.	Retirement Accounts & Life Insurance	9,342	10,268	6,147	6,563
37.	Total Intermediate Assets	148,369	176,270	81,302	88,704
	Long Term Assets:				
39.	Building & Fences	59,156	64,701	21,874	23,346
40.	Land & Land Improvements	174,093	188,886	137,960	145,573
41.	Dwelling	19,809	20,897	16,448	17,820
42.	Real Estate Personal	2,426	2,638	2,117	4,563
43.	Total Long Term Assets	255,484	277,122	178,398	191,302
44.	Total Assets	584,005	675,611	345,757	362,781
45.	Total Personal Assets (Incl. Cash)	51,044	56,445	40,198	44,601
46.	Total Farm Assets (Incl. Cash)	532,961	619,166	305,559	318,180

STATEMENT OF OPERATOR'S FINANCIAL POSITION (CONTINUED) - 1990

Items		AVERAGE OF 531 FARMS	
		JAN 1	DEC 31
	Current Liabilities:		
4.	Accounts Payable: Personal	132	820
5.	Accounts Payable: Farm	2,069	2,112
5.A	Current Portion: Real Estate	2,948	2,819
6.	Current Portion: Intermediate Debt	7,406	8,693
6A.	Current Portion: Notes & Line of Credit	22,072	24,576
7.	Delinquent Interest	115	165
8.	Rents & Lease Payments Due From Past Year	24	35
9.	Total Current Liabilities	34,766	39,220
	*Intermediate Liabilities:		
11.	Notes Payable: Personal	371	332
12.	Notes Payable: Farm	9,945	11,283
13.	Chattel Mortgages: Personal	606	931
14.	Chattel Mortgages: Farm	36,731	39,971
16.	Total Intermediate Liabilities	47,652	52,517
	*Long Term Liabilities:		
18.	Real Estate Mortgages & Contracts: Personal	1,582	1,402
19.	Real Estate Mortgages & Contracts: Farm	80,374	83,837
21.	Total Long Term Liabilities	81,956	85,239
22.	Total Liabilities	164,374	176,977
23.	Equity	226,280	254,805
24.	Change In Equity		28,525

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	FORMULA	DESCRIPTION	RATIOS BEG. YR.	END YR.	%
32.	Current (T5.1, L17)/(T5.2, L9) (Current Assets)/(Current Liabilities)	Debt	3.09	3.14	31.86
33.	Intermediate (T5.1, L37)/(T5.2, L16) (Intermediate Assets)/(Intermed. Liab.)	Debt	2.13	2.18	45.84
34.	Working (T5.1, L17 + L37) / (T5.2, L9 + L16) (C. Assets + I. Assets) / (C. Liab. + I. Liab.)	Debt	2.53	2.59	38.60
35.	Fixed Debt (T5.1, L43)/(T5.2, L21) (Long Term Assets)/(Long Term Liab.)	Debt	2.22	2.28	43.91
36.	Net Capital Debt (T5.1, L44)/(T5.22) (Total Assets)/(Total Liabilities)	Debt	2.38	2.44	40.99
37.	Equity Assets (T5.2, L23)/(T5.1, L44) (Total Equity)/(Total Assets)	Eqty.	0.58	0.59	59.01
38.	Debt/Equity (T5.2, L22)/(T5.2, L23) (Total Liabilities)/(Total Equity)	Debt	0.73	0.69	69.46
39.	Current Debt (T5.2, L9)/(T5.2, L22) (Current Liabilities)/(Total Liab.)	Curr.	0.21	0.22	22.16

51.	Return to Capital, Family Labor & Management	51,250
52.	Total Income From Non-Farm Source	10,272
53.	Total Family Income	61,522
54.	Total Family Cash & Non-Cash Expense	38,467
55.	Total Money Borrowed	98,526
56.	Total Paid on Debt	86,718

Items		106 High Return Farms		106 Low Return Farms	
		Jan 1	Dec 31	Jan 1	Dec 31
	Current Liabilities:				
4.	Accounts Payable: Personal	394	2,825	70	48
5.	Accounts Payable: Farm	5,618	4,603	1,005	950
5.A	Current Portion: Real Estate	6,285	4,488	1,983	2,360
6.	Current Portion: Intermediate Debt	8,230	10,959	10,578	12,256
6A.	Current Portion: Notes & Line of Credit	51,374	54,390	9,902	11,455
7.	Delinquent Interest			162	201
8.	Rents & Lease Payments Due From Past Year	122	122		
9.	Total Current Liabilities	72,023	77,387	23,700	27,270
	*Intermediate Liabilities:				
11.	Notes Payable: Personal	350	374	411	331
12.	Notes Payable: Farm	10,023	9,592	14,218	16,682
13.	Chattel Mortgages: Personal	593	2,204	376	375
14.	Chattel Mortgages: Farm	48,873	58,532	28,366	30,698
16.	Total Intermediate Liabilities	59,838	70,703	43,371	48,086
	*Long Term Liabilities:				
18.	Real Estate Mortgages & Contracts: Personal	1,954	1,200	1,495	1,357
19.	Real Estate Mortgages & Contracts: Farm	113,112	119,118	64,085	70,921
21.	Total Long Term Liabilities	115,066	120,318	65,581	72,279
22.	Total Liabilities	246,927	268,407	132,652	147,635
23.	Equity	337,078	407,204	213,105	215,146
24.	Change In Equity		70,126		2,041

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RATIOS

	FORMULA		END YR.	% IN DEBT	END YR.	% IN DEBT
32.	Current (T5.1, L17)/(T5.2, L9) (Current Assets)/(Current Liabilities)	Debt	2.87	34.82	3.04	32.94
33.	Intermediate (T5.1, L37)/(T5.2, L16) (Intermediate Assets)/(Intermed. Liab.)	Debt	2.49	40.11	1.84	54.21
34.	Working (T5.1, L17 + L37) / (T5.2, L9 + L16) (C. Assets + I. Assets) / (C. Liab. + I. Liab.)	Debt	2.69	37.16	2.28	43.94
35.	Fixed Debt (T5.1, L43)/(T5.2, L21) (Long Term Assets)/(Long Term Liab.)	Debt	2.30	43.42	2.65	37.78
36.	Net Capital Debt (T5.1, L44)/(T5.2, L22) (Total Assets)/(Total Liabilities)	Debt	2.52	39.73	2.46	40.70
37.	Equity Assets (T5.2, L23)/(T5.1, L44) (Total Equity)/(Total Assets)	Eqty.	0.60	60.27	0.59	59.30
38.	Debt/Equity (T5.2, L22)/(T5.2, L23) (Total Liabilities)/(Total Equity)	Debt	0.66	65.91	0.69	68.62
39.	Current Debt (T5.2, L9)/(T5.2, L22) (Current Liabilities)/(Total Liab.)	Curr.	0.29	28.83	0.18	18.47
51.	Return to Capital, Family Labor & Management		109,883		14,531	
52.	Total Income From Non-Farm Source		9,487		12,244	
53.	Total Family Income		119,370		26,775	
54.	Total Family Cash & Non-Cash Expense		56,072		30,797	
55.	Total Money Borrowed		174,174		84,601	
56.	Total Paid on Debt		154,117		69,596	

EXPLANATION OF RATIO'S

FOR THE STATEMENT OF OPERATOR'S FINANCIAL POSITION

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.

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. This ratio is calculated by dividing intermediate assets by intermediate liabilities.

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.

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.

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.

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

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 and 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.

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

MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

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

1. Return to Labor and Management - A measure of the relative financial return for the operators labor, taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. This is based on the whole farm business and is found also in Table 2 and Table 3.

2. Crop Yield Index - A measure of the crop yield level for all crops produced expressed as a percentage of the average; the average being 100%.

3. Return over all Listed Cost Per Tillable Acre (Excluding pasture) This is the net return per tillable crop acre after all variable and allocated costs have been paid.

4. Gross Return per Acre - An additional measure of crop selection based on total production times an average price for the crops, plus other crop income.

5. Return per $100 Feed Fed to Productive Livestock - Measures the general level of efficiency for all livestock. It is expressed as a percentage of the average and combines the individual livestock indexes into one figure.

6. Livestock Units per 100 Acres - A measure of livestock density or population. Unit values are assigned to the various classes of livestock. Unit values are found in Table 7.

7. Size of Business - Work Units - A measure of the total work load. A Work Unit represents the average accomplishment of a worker in one 10 hour day. Work Unit values are assigned to each class of livestock, each crop, and to other tasks utilizing farm labor.

8. Work Units per Worker - Measures labor efficiency. It is the total work units divided by the number of workers on the farm including the operator, hired labor and family labor.

9. Power, Machinery, Equipment and Building Expense per Work Unit - A measure of expense control. It is the total of items 31 through 36 in Table 3 divided by the number of Work Units.

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

Measures of Farm Organization and Management Efficiency - 1990

Items		Average 531	High 106	Low 106
1. Return to Operators Labor & Management	$	38,451	90,200	3,280
2. Crop Yield Index		100.0	107.1	95.2
3. Total Operator's Depreciation		11,250	18,292	10,005
4. Gross Return per Tillable Acre	$	262.47	260.38	234.95
5. Return per $100 Feed Fed Productive Livestock Index		100.0	104.7	87.9
6. *Livestock Units per 100 Acres		19.40	32.12	7.64
7. Size of Business - Work Units		448.0	800.0	278.8
8. Work Units per Worker		341.98	462.43	253.45
9. Power, Machinery, Equipment, Building Expense per Work Unit	$	78.58	73.03	100.68
10. Farm Capital Investment per Worker	$	275,263	330.501	273,685

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30. Number of Animal Units		94.27	224.10	32.18
31. Work Units				
32. Crops		231.3	334.6	197.4
33. Productive Livestock		205.4	458.1	74.0
34. Other Productive Livestock		11.3	7.4	7.4
35. Expenses Per Work Unit				
36. Tractor & Crop Machinery Expenses	$	44.44	35.77	64.53
37. Farm Share of Auto & Truck	$	9.80	7.82	13.26
38. Farm Share of Electric Expense	$	4.49	4.78	4.14
39. Livestock Equipment Expense	$	7.28	9.90	3.86
40. Building, Fence & Tiling Expense	$	11.66	14.11	13.52
40A. Other exp/Work Units (Inc. Custom Ent.)				
40B. General Farm Telephone/Other Utilities Except Electricity	$	11.08	9.89	13.28
40C. Hired Labor	$	9.05	12.16	4.91
41.** Tractor & Crop Machinery Expense per Crop Acre	$	41.06	41.21	42.73
42. Farm Power & Machinery Cost Allocation to Livestock	$	2,267.50	4,809.54	1,269.87
43. Bldg., Fence & Tiling Cost Allocated to Crops BCAF	$	3,278.75	6,222.40	2,947.63

44. * Acres Include all Tillable Land, Non-Tillable Hay & Pasture
45. ** Acres Include all Tillable Land plus Acres in Non-Tillable Hay

CROP ACRE DISTRIBUTION AND SELECTED EXPENSES PER ACRE - 1990

Crop	ACRES Average of 531 Farms	106 Most Profitable Farms	106 Least Profitable Farms
Total Small Grain + Canning Peas	18.8 *	18.4 *	17.5 *
Total Row Crop	416.8 *	615.6 *	361.1 *
Total Legumes, Including Seed	13.4 *	16.2 *	8.6 *
Total Other Hay	0.5 *	0.3 *	1.1 *
Total Silage + Fodder	5.7 *	7.9 *	4.5 *
Total Tillable Pasture	0.2 *	0.4 *	0.3 *
Total Fallow + Idle Land	29.1 *	38.1 *	27.6 *
Total Tillable Land	484.4 *	696.8 *	420.8 *
Total Non-Tillable Hay/Pasture	1.5 *	0.8 *	0.2 *
Wild Hay Not Harvested (Non-Tillable)	0.5	1.3	0.8
Pasture Not Harvested	1.4	10.0	9.1
Roads + Waste	11.1	15.9	8.8
Farmstead	11.6	14.4	9.5
TOTAL LAND NOT HARVESTED	35.1 *	42.7 *	28.6 *
TOTAL NON-TILLABLE LAND	36.5 *	43.6 *	28.8 *
TOTAL ACRES CROPPED	455.1 *	658.4 *	392.8 *
TOTAL LAND IN FARM OR RANCH	520.5 *	740.2 *	449.1 *

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SUPPLEMENTARY MANAGEMENT INFORMATION

	531 Average All Farms	106 High Earning Farms	106 Low Earning Farms
Percent Land Tillable	92.9	94.1	93.6
* Fertilizer Cost per Acre	19.76	21.29	19.76
* Crop Chemicals per Acre	17.59	17.85	17.68
* Seed and Other Costs per Acre	26.27	27.36	24.69
* Gas, Diesel + Lubricants per Acre	12.59	12.93	12.47
* Repair and Maintenance Cost per Acre	21.53	21.02	21.94

* Tillable Land minus Tillable Pasture, Fallow and Idle Land.

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***************************************MEASURES OF FARM SIZE**

		Operated Average	Operated High	Operated Low
1.	ACRES:			
2.	- Total	514.6	733.2	444.8
3.	- Tillable	481.0	691.0	419.6
4.	Units of Work Accomplished:			
5.	- Crops	231.3	334.6	197.4
6.	- Livestock	205.4	458.1	74.0
7.	- Other	11.3	7.4	7.4
8.	- Total	448.0	800.1	278.8
9.	Workers (Year Equivalents):			
10.	- Operators (s)	1.05	1.16	1.01
11.	- Hired Labor	0.21	0.53	0.09
12.	- Custom Labor	0.02	0.02	0.00
13.	- Unpaid Labor	0.03	0.02	0.00
14.	- Total	1.31	1.73	1.10
15.	Operator Investments:			
16.	- Per Worker	275,263	330,501	273,685
17.	- Per Work Unit	805	715	1,080
18.				

*************************************ENTERPRISE PRODUCTION SUMMARY**************************************

19.	Crop Production	Cost/Unit	Cost/Unit	Cost/Unit
20.	Oats	1.50	1.13	2.01
21.	Wheat	3.06	2.62	3.81
22.	Corn	1.94	1.68	2.17
23.	Soybeans	4.16	3.63	4.87
24.	Alfalfa Hay	44.02	30.11	87.90
25.	Corn Silage	14.24	10.11	20.67
26.	Livestock Production:			
27.	Hogs/Farrow/Finish/General	39.86	40.68	41.13
28.	Hogs/Finishing	30.60	30.08	33.43
29.	Hogs/Feeder Pig Production	40.73	38.14	46.45
30.	Dairy Cows/Comm./General	9.46	8.56	11.60
31.	Other Dairy/Comm. Replac.	314.05	292.74	348.66
32.	All Dairy/Dual Purp. Cattle	12.27	11.30	13.55
33.	Beef Farm/Whole Herd/Comm.	324.68	332.16	330.32
34.	Beef Feedlot	52.54	45.42	62.88
35.	Sheep/Farm Commercial	110.71	100.69	115.84

INDIVIDUAL CROP ENTERPRISE ANALYSIS

The individual crop analysis table shows acres, yield, value per unit, (usually the value per unit at harvest time) and gross return per acre for each crop raised by a particular farmer the last crop year.

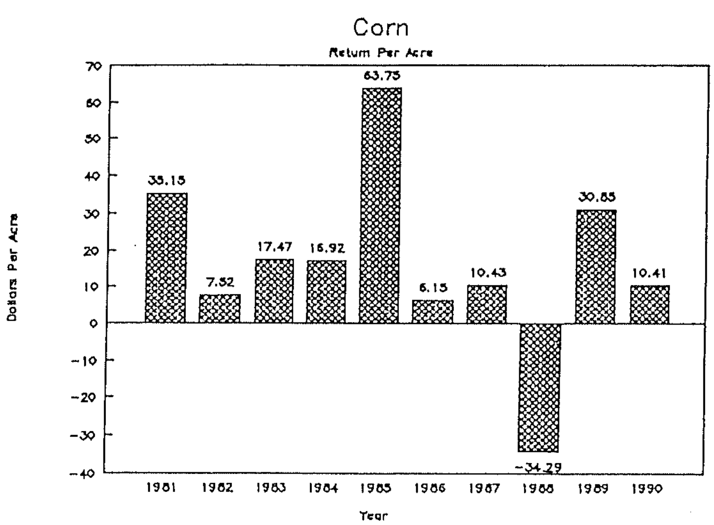
Cost such as fertilizer, chemicals, seed, crop drying expenses, special hired labor, and custom work are costs that are assigned to each individual crop in the account book or computer record system. These costs are shown in table 10 under <u>variable costs.</u>

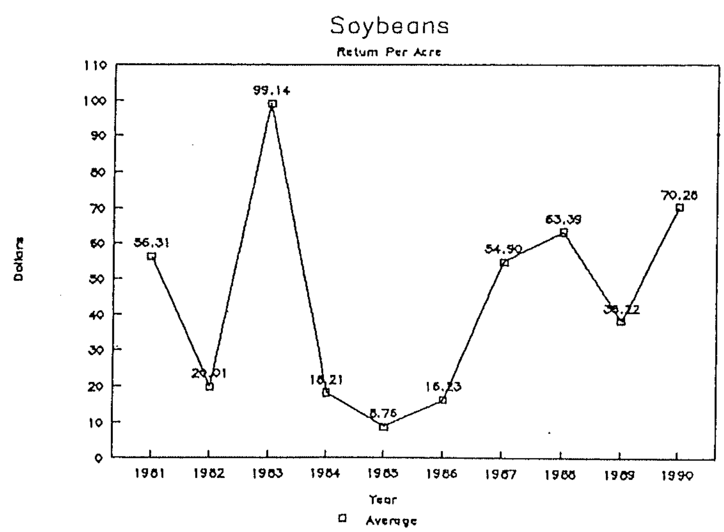
Other costs, called <u>allocated costs,</u> are calculated from the actual costs incurred. They are allocated by formula. The power and crop machinery expense is divided into ownership and operation costs for each crop. Allocated cost calculation are assigned to each productive enterprise. Rented land cost is a reported cost from the farmer's records.

The total crop return minus the variable and allocated costs equals the return over listed costs which is line 44.

Each crop produced on a farm is listed as a separate enterprise. This allows the operator to compare the return over listed costs for each crop produced.

Land cost on owned land is calculated by taking the sum of interest paid on real estate and the real estate taxes paid, and dividing this by the acres owned.





TEN YEAR RETURN ON SELECTED CROPS.

CROP DATA FOR OATS - 1990

		AVERAGE 195	HIGH 39	LOW 39
		ALL VALUES PER ACRE		
1.	*** Total Value Produced $ ***	2,175	3,955	1,285
2.	*** Total Production ***	1,497	2,299	1,102
3.	*** Total Acres ***	19.5	24.1	18.6
4.	Yield Per Acre	76.8	95.4	59.2
5.	Value Per Unit	1.13	1.17	1.10
6.	Crop Production Return	87.08	111.87	65.11
7.	Other Crop Income	24.46	52.24	3.98
8.	Total Crop Return	111.54	164.11	69.09
	Variable Costs			
10.	Fertilizer	8.10	4.73	12.69
11.	Chemicals	1.85	1.95	2.26
12.	Seed Expense	8.15	8.09	9.41
13.	Crop Drying			
14.	Crop Insurance	0.72	0.75	0.86
15.	Other Expense	1.03	0.29	1.34
16.	Special Hired Labor	0.26	0.25	0.22
17.	Custom Work Hired Expense	4.15	1.37	7.69
18.	Irrigation Operation			
19.	Assigned Interest			
20.	Total Variable Costs	24.28	17.43	34.46
21.	Return Over Variable Costs	87.28	146.68	34.63
	Allocated Costs (Variable and Fixed)			
31.	Farm Power & Machinery - Ownerships	8.05	8.80	5.27
32.	Farm Power & Machinery - Operation	19.08	18.34	20.27
33.	Building & Fence Cost	3.18	1.91	1.24
34.	Irrigation Ownership Cost			
37.	Actual Land Ownership Cost	47.65	46.70	45.64
38.	Utilities & General Farm Expense	4.72	5.39	4.41
39.	Hired Labor	1.85	3.03	2.58
41.	Actual Non-Real Estate Int. Allocated	6.46	6.14	5.16
42.	Total Allocated Costs	90.99	90.31	84.57
43.	Total Listed Costs	115.23	107.76	119.03
44.	Return Over Listed Costs	-3.69	56.35	-49.94
	SUPPLEMENTARY MANAGEMENT INFORMATION			
50.	Land Opportunity Ownership Cost	58.79	57.66	65.41
51.	Total Cost Adj. to a Min. 7% Interest	126.00	119.13	139.19
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 Production	1.50	1.13	2.01
54A.	Total Production Cost Including Net Family Living	1.74	1.31	2.34
55.	Total Adjusted Cost/Unit of Production	1.64	1.25	2.35
56.	Cash Variable Cost/Unit of Production	0.73	0.53	1.13
57.	Return Over Listed Costs Per Unit	-0.05	0.59	-0.84
58.	Breakeven Yield/Unit of Production	102.0	92.1	108.2
59.	Total Acre Inches Water Applied			
60.	Cost of Irrigation Excluding Interest			
61.	Average Price Received/Unit Sold	1.25	1.27	1.45
62.	Quantity Sold (O.S.)	490	719	153

CROP DATA FOR SPRING WHEAT - 1990

		AVERAGE 144	HIGH 28	LOW 28
		ALL VALUES PER ACRE		
1.	*** Total Value Produced $ ***	4,499	5,299	2,586
2.	*** Total Production ***	1,663	1,680	1,083
3.	*** Total Acres ***	41.3	35.1	31.7
4.	Yield Per Acre	40.3	47.9	34.2
5.	Value Per Unit	2.56	2.78	2.36
6.	Crop Production Return	103.12	132.99	80.63
7.	Other Crop Income	5.81	17.98	0.95
8.	Total Crop Return	108.93	150.97	81.58
	Variable Costs			
10.	Fertilizer	17.24	16.75	20.28
11.	Chemicals	5.30	3.96	8.08
12.	Seed Expense	10.24	10.88	11.70
13.	Crop Drying			
14.	Crop Insurance	1.86	0.71	3.03
15.	Other Expense	1.36	0.26	1.96
16.	Special Hired Labor	0.51	0.09	0.13
17.	Custom Work Hired Expense	2.23	2.19	3.91
18.	Irrigation Operation			
19.	Assigned Interest	0.10		0.25
20.	Total Variable Costs	38.84	34.84	49.34
21.	Return Over Variable Costs	70.09	116.13	32.24
	Allocated Costs (Variable and Fixed)			
31.	Farm Power & Machinery - Ownerships	7.63	10.54	9.50
32.	Farm Power & Machinery - Operation	17.17	15.27	15.99
33.	Building & Fence Cost	1.74	2.34	2.27
34.	Irrigation Ownership Cost			
37.	Actual Land Ownership Cost	45.04	53.75	36.29
38.	Utilities & General Farm Expense	5.93	3.76	8.58
39.	Hired Labor	0.94	0.85	0.47
41.	Actual Non-Real Estate Int. Allocated	6.08	4.33	8.01
42.	Total Allocated Costs	84.53	90.84	81.11
43.	Total Listed Costs	123.37	125.70	130.44
44.	Return Over Listed Costs	-14.44	25.27	-48.86
	************************************SUPPLEMENTARY MANAGEMENT INFORMATION************************************			
50.	Land Opportunity Ownership Cost	48.03	62.45	41.62
51.	Total Cost Adj. to a Min. 7% Interest	125.28	134.67	132.59
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 Production	3.06	2.62	3.81
54A.	Total Production Cost Including Net Family Living	3.52	2.98	4.39
55.	Total Adjusted Cost/Unit of Production	3.11	2.81	3.88
56.	Cash Variable Cost/Unit of Production	1.71	1.23	2.41
57.	Return Over Listed Costs Per Unit	-0.36	0.53	-1.43
58.	Breakeven Yield/Unit of Production	48.2	45.2	55.3
59.	Total Acre Inches Water Applied			
60.	Cost of Irrigation Excluding Interest			
61.	Average Price Received/Unit Sold	2.56	2.77	2.23
62.	Quantity Sold (O.S.)	1,054	611	989

CROP DATA FOR CORN FOR GRAIN - 1990

		AVERAGE 1,126	HIGH 221	LOW 221
		ALL VALUES PER ACRE		
1.	*** Total Value Produced $ ***	26,362	28,859	16,598
2.	*** Total Production ***	13,000	14,011	8,211
3.	*** Total Acres ***	103.7	100.0	80.9
4.	Yield Per Acre	125.4	140.1	101.5
5.	Value Per Unit	2.02	2.06	2.01
6.	Crop Production Return	253.75	288.13	204.35
7.	Other Crop Income	0.46	0.46	0.82
8.	Total Crop Return	254.21	288.59	205.17
	Variable Costs			
10.	Fertilizer	36.63	35.30	36.27
11.	Chemicals	19.47	16.49	22.20
12.	Seed Expense	22.17	22.48	21.24
13.	Crop Drying	6.44	5.11	6.04
14.	Crop Insurance	5.18	3.66	5.53
15.	Other Expense	1.35	0.84	1.74
16.	Special Hired Labor	0.31	0.15	1.09
17.	Custom Work Hired Expense	2.77	0.96	5.48
18.	Irrigation Operation			
19.	Assigned Interest	0.02		0.06
20.	Total Variable Costs	94.34	84.99	99.64
21.	Return Over Variable Costs	159.87	203.60	105.53
	Allocated Costs (Variable and Fixed)			
31.	Farm Power & Machinery - Ownerships	15.27	18.27	13.26
32.	Farm Power & Machinery - Operation	32.75	33.67	31.66
33.	Building & Fence Cost	6.37	8.48	3.44
34.	Irrigation Ownership Cost			
37.	Actual Land Ownership Cost	67.64	61.81	48.55
38.	Utilities & General Farm Expense	9.59	9.50	9.91
39.	Hired Labor	2.92	2.70	1.68
41.	Actual Non-Real Estate Int. Allocated	14.91	15.89	11.69
42.	Total Allocated Costs	149.45	150.32	120.19
43.	Total Listed Costs	243.80	235.31	219.84
44.	Return Over Listed Costs	10.41	53.28	-14.67
	***************************************SUPPLEMENTARY MANAGEMENT INFORMATION**********************************			
50.	Land Opportunity Ownership Cost	74.86	86.73	55.27
51.	Total Cost Adj. to a Min. 7% Interest	247.90	257.84	226.12
52.	Work Units Assigned/Acre	0.55	0.55	0.55
53.	Power Cost Allocation Factor	1.00	1.00	1.00
54.	Total Listed Cost/Unit of Production	1.94	1.68	2.17
54A.	Total Production Cost Including Net Family Living	2.21	1.91	2.53
55.	Total Adjusted Cost/Unit of Production	1.98	1.84	2.23
56.	Cash Variable Cost/Unit of Production	1.23	1.05	1.52
57.	Return Over Listed Costs Per Unit	0.08	0.38	-0.14
58.	Breakeven Yield/Unit of Production	120.7	114.2	109.4
59.	Total Acre Inches Water Applied			
60.	Cost of Irrigation Excluding Interest			
61.	Average Price Received/Unit Sold	2.11	2.10	2.06
62.	Quantity Sold (O.S.)	6,164	6,058	3,674

CROP DATA FOR SOYBEANS - 1990

		AVERAGE 1,126	HIGH 214	LOW 214
		ALL VALUES PER ACRE		
1.	*** Total Value Produced $ ***	24,644	27,030	13,562
2.	*** Total Production ***	4,261	4,626	2,375
3.	*** Total Acres ***	98.4	91.4	71.7
4.	Yield Per Acre	43.3	50.6	33.1
5.	Value Per Unit	5.74	5.81	5.65
6.	Crop Production Return	248.70	293.96	187.03
7.	Other Crop Income	1.75	1.77	2.12
8.	Total Crop Return	250.45	295.73	189.15
	Variable Costs			
10.	Fertilizer	2.26	1.16	2.57
11.	Chemicals	17.32	14.89	20.28
12.	Seed Expense	10.27	8.93	11.28
13.	Crop Drying			
14.	Crop Insurance	7.56	7.79	6.72
15.	Other Expense	0.97	0.56	1.07
16.	Special Hired Labor	0.79	1.04	0.46
17.	Custom Work Hired Expense	2.07	0.67	3.19
18.	Irrigation Operation			
19.	Assigned Interest	0.03		0.07
20.	Total Variable Costs	41.27	35.03	45.65
21.	Return Over Variable Costs	209.18	260.70	143.50
	Allocated Costs (Variable and Fixed)			
31.	Farm Power & Machinery - Ownerships	12.58	15.02	10.07
32.	Farm Power & Machinery - Operation	26.98	26.72	29.16
33.	Building & Fence Cost	5.27	6.61	3.58
34.	Irrigation Ownership Cost			
37.	Actual Land Ownership Cost	71.58	76.25	50.60
38.	Utilities & General Farm Expense	7.98	8.63	8.77
39.	Hired Labor	2.52	2.32	2.01
41.	Actual Non-Real Estate Int. Allocated	11.99	13.23	11.35
42.	Total Allocated Costs	138.90	148.78	115.54
43.	Total Listed Costs	180.17	183.81	161.20
44.	Return Over Listed Costs	70.28	111.92	27.95
	SUPPLEMENTARY MANAGEMENT INFORMATION			
50.	Land Opportunity Ownership Cost	74.68	87.68	48.90
51.	Total Cost Adj. to a Min. 7% Interest	180.59	193.37	159.07
52.	Work Units Assigned/Acre	0.45	0.45	0.45
53.	Power Cost Allocation Factor	1.00	1.00	1.00
54.	Total Listed Cost/Unit of Production	4.16	3.63	4.87
54A.	Total Production Cost Including Net Family Living	4.81	4.14	5.77
55.	Total Adjusted Cost/Unit of Production	4.17	3.82	4.80
56.	Cash Variable Cost/Unit of Production	2.10	1.70	2.93
57.	Return Over Listed Costs Per Unit	1.62	2.21	0.84
58.	Breakeven Yield/Unit of Production	31.4	31.6	28.5
59.	Total Acre Inches Water Applied			
60.	Cost of Irrigation Excluding Interest			
61.	Average Price Received/Unit Sold	5.35	5.60	5.50
62.	Quantity Sold (O.S.)	2,457	2,503	1,544

CROP DATA FOR ALFALFA HAY - 1990

		AVERAGE 280	HIGH 56	LOW 56
		ALL VALUES PER ACRE		
1.	*** Total Value Produced $ ***	6,149	11,436	2,040
2.	*** Total Production ***	94	167	31
3.	*** Total Acres ***	23.8	31.7	15.0
4.	Yield Per Acre	3.9	5.3	2.1
5.	Value Per Unit	65.18	68.48	65.74
6.	Crop Production Return	257.44	360.76	135.87
7.	Other Crop Income	0.98		0.13
8.	Total Crop Return	258.36	360.76	136.00
	Variable Costs			
10.	Fertilizer	16.18	15.08	18.67
11.	Chemicals	0.63	0.03	2.13
12.	Seed Expense	6.93	4.32	21.13
13.	Crop Drying			
14.	Crop Insurance	0.04	0.16	
15.	Other Expense	2.18	1.74	2.20
16.	Special Hired Labor	0.97	0.57	0.73
17.	Custom Work Hired Expense	5.38	0.66	9.73
18.	Irrigation Operation			
19.	Assigned Interest	0.08		0.67
20.	Total Variable Costs	32.39	22.56	55.27
21.	Return Over Variable Costs	225.97	338.20	80.73
	Allocated Costs (Variable and Fixed)			
31.	Farm Power & Machinery - Ownerships	15.13	14.01	15.87
32.	Farm Power & Machinery - Operation	36.72	38.30	35.47
33.	Building & Fence Cost	4.54	6.21	6.73
34.	Irrigation Ownership Cost			
37.	Actual Land Ownership Cost	56.92	52.86	45.16
38.	Utilities & General Farm Expense	8.40	8.04	9.47
39.	Hired Labor	3.99	2.33	2.87
41.	Actual Non-Real Estate Int. Allocated	13.57	15.24	13.80
42.	Total Allocated Costs	139.27	136.99	129.37
43.	Total Listed Costs	171.68	159.56	184.60
44.	Return Over Listed Costs	86.68	201.20	-48.60
	SUPPLEMENTARY MANAGEMENT INFORMATION			
50.	Land Opportunity Ownership Cost	66.55	72.24	50.54
51.	Total Cost Adj. to a Min. 7% Interest	179.08	176.15	185.33
52.	Work Units Assigned/Acre	0.60	0.60	0.60
53.	Power Cost Allocation Factor	1.00	1.00	1.00
54.	Total Listed Cost/Unit of Production	44.02	30.11	87.90
54A.	Total Production Cost Including Net Family Living	53.61	36.65	106.72
55.	Total Adjusted Cost/Unit of Production	45.34	33.44	89.68
56.	Cash Variable Cost/Unit of Production	24.38	16.32	55.66
57.	Return Over Listed Costs Per Unit	22.23	37.96	-23.14
58.	Breakeven Yield/Unit of Production	2.6	2.3	2.8
59.	Total Acre Inches Water Applied			
60.	Cost of Irrigation Excluding Interest			
61.	Average Price Received/Unit Sold	75.00	100.90	90.40
62.	Quantity Sold (O.S.)	7	9	7

CROP DATA FOR CORN SILAGE - 1990

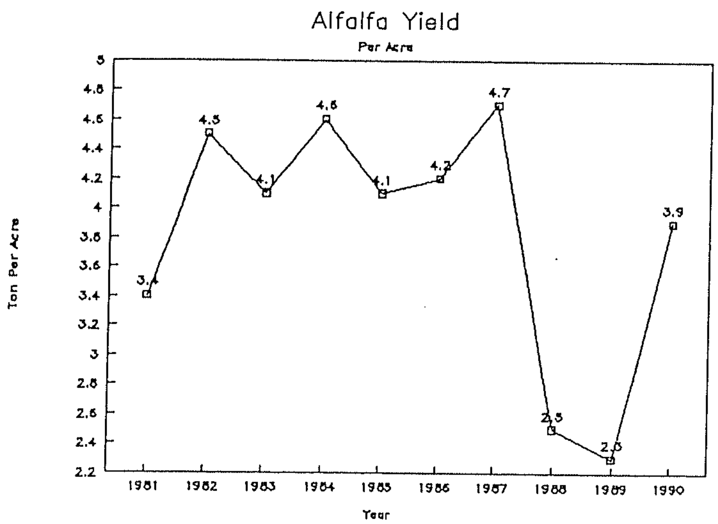
		AVERAGE 102	HIGH 20	LOW 20
		ALL VALUES PER ACRE		
1.	*** Total Value Produced $ ***	6,694	7,850	5,049
2.	*** Total Production ***	383	430	302
3.	*** Total Acres ***	23.9	20.4	26.3
4.	Yield Per Acre	16.0	21.1	11.5
5.	Value Per Unit	17.48	18.26	16.72
6.	Crop Production Return	280.08	384.80	191.98
7.	Other Crop Income			
8.	Total Crop Return	280.08	384.80	191.98
	Variable Costs			
10.	Fertilizer	33.68	30.59	39.24
11.	Chemicals	19.33	16.72	22.70
12.	Seed Expense	20.33	20.10	19.73
13.	Crop Drying			
14.	Crop Insurance	4.01	4.12	5.67
15.	Other Expense	1.55	2.01	2.51
16.	Special Hired Labor	0.25		1.03
17.	Custom Work Hired Expense	3.18	3.63	5.59
18.	Irrigation Operation			
19.	Assigned Interest	0.13		0.04
20.	Total Variable Costs	82.47	77.16	96.50
21.	Return Over Variable Costs	197.61	307.64	95.48
	Allocated Costs (Variable and Fixed)			
31.	Farm Power & Machinery - Ownerships	17.66	19.51	13.61
32.	Farm Power & Machinery - Operation	40.46	44.66	36.01
33.	Building & Fence Cost	5.77	4.12	3.61
34.	Irrigation Ownership Cost			
37.	Actual Land Ownership Cost	52.31	41.20	53.45
38.	Utilities & General Farm Expense	7.53	8.33	8.56
39.	Hired Labor	6.86	4.12	11.03
41.	Actual Non-Real Estate Int. Allocated	14.73	14.26	14.94
42.	Total Allocated Costs	145.32	136.10	141.21
43.	Total Listed Costs	227.78	213.24	237.72
44.	Return Over Listed Costs	52.30	171.56	-45.74
	SUPPLEMENTARY MANAGEMENT INFORMATION			
50.	Land Opportunity Ownership Cost	74.84	88.61	54.04
51.	Total Cost Adj. to a Min. 7% Interest	247.15	259.66	232.89
52.	Work Units Assigned/Acre	0.60	0.60	0.60
53.	Power Cost Allocation Factor	1.00	1.00	1.00
54.	Total Listed Cost/Unit of Production	14.24	10.11	20.67
54A.	Total Production Cost Including Net Family Living	16.58	11.75	24.11
55.	Total Adjusted Cost/Unit of Production	15.42	12.32	20.28
56.	Cash Variable Cost/Unit of Production	9.50	7.04	14.53
57.	Return Over Listed Costs Per Unit	3.27	8.13	-3.98
58.	Breakeven Yield/Unit of Production	13.0	11.7	14.2
59.	Total Acre Inches Water Applied			
60.	Cost of Irrigation Excluding Interest			
61.	Average Price Received/Unit Sold	7.44	8.07	
62.	Quantity Sold (O.S.)	50	133	

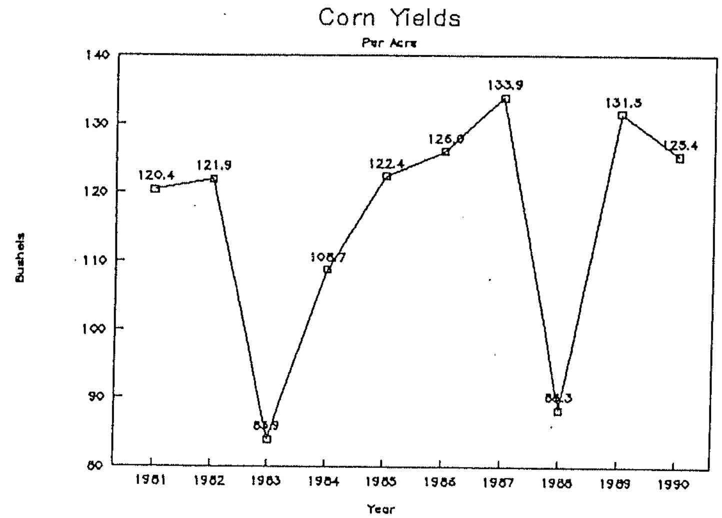
CROP DATA FOR CANNING PEAS, CANNING CORN, & SUGARBEETS - 1990

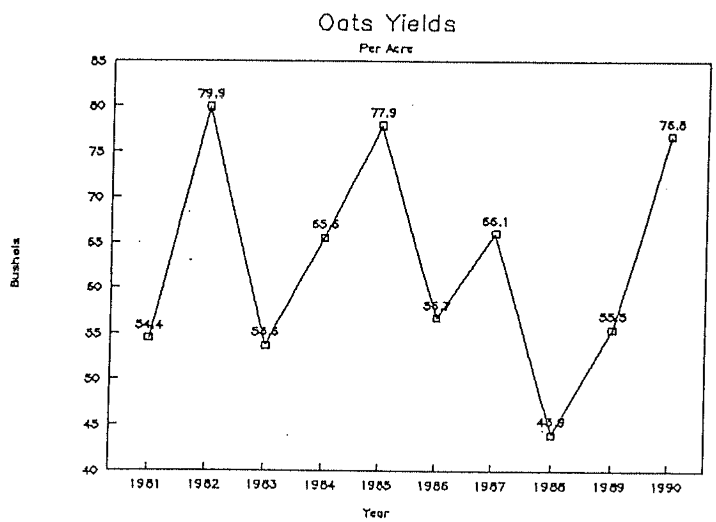
		CANNING PEAS 15	CANNING CORN 15	SUGAR BEETS 10
			ALL VALUES PER ACRE	
1.	*** Total Value Produced $ ***	4,221	8,021	68,892
2.	*** Total Production ***	3,813	7,868	1,588
3.	*** Total Acres ***	23.4	34.6	85.9
4.	Yield Per Acre	162.9	227.4	18.5
5.	Value Per Unit	1.00	1.00	43.38
6.	Crop Production Return	162.95	227.40	802.00
7.	Other Crop Income	17.44	4.42	
8.	Total Crop Return	180.39	231.82	802.00
	Variable Costs			
10.	Fertilizer	9.74	39.60	23.14
11.	Chemicals	4.91	18.32	65.20
12.	Seed Expense	0.13	2.23	46.59
13.	Crop Drying			
14.	Crop Insurance	10.34	7.285	8.06
15.	Other Expense			2.37
16.	Special Hired Labor			39.00
17.	Custom Work Hired Expense	1.88	1.53	51.64
18.	Irrigation Operation			
19.	Assigned Interest			
20.	Total Variable Costs	27.01	68.96	236.01
21.	Return Over Variable Costs	153.38	162.86	565.99
	Allocated Costs (Variable and Fixed)			
31.	Farm Power & Machinery - Ownerships	7.61	14.02	130.68
32.	Farm Power & Machinery - Operation	23.89	27.31	116.32
33.	Building & Fence Cost	4.10	3.38	18.07
34.	Irrigation Ownership Cost			8.36
37.	Actual Land Ownership Cost or Rent	67.93	81.92	83.43
38.	Utilities & General Farm Expense	9.06	7.98	29.69
39.	Hired Labor	1.45	2.60	15.74
41.	Actual Non-Real Estate Int. Allocated	8.68	9.74	55.55
42.	Total Allocated Costs	125.72	146.95	457.84
43.	Total Listed Costs	152.74	215.92	693.84
44.	Return Over Listed Costs	27.65	15.90	108.16
	SUPPLEMENTARY MANAGEMENT INFORMATION			
50.	Land Opportunity Ownership Cost	73.89	99.50	88.29
51.	Total Cost Adj. to a Min. 7% Interest	152.01	234.31	671.55
52.	Work Units Assigned/Acre	0.40	0.50	2.00
53.	Power Cost Allocation Factor	1.00	1.00	1.00
54.	Total Listed Cost/Unit of Production	0.94	0.95	37.50
54A.	Total Production Cost Including Net Family Living	1.09	1.09	44.24
55.	Total Adjusted Cost/Unit of Production	0.93	1.03	36.33
56.	Cash Variable Cost/Unit of Production	0.43	0.51	24.50
57.	Return Over Listed Costs Per Unit	0.17	0.07	5.85
58.	Breakeven Yield/Unit of Production	152.7	215.9	16.0
59.	Total Acre Inches Water Applied			
60.	Cost of Irrigation Excluding Interest			
61.	Average Price Received/Unit Sold			
62.	Quantity Sold (O.S.)			

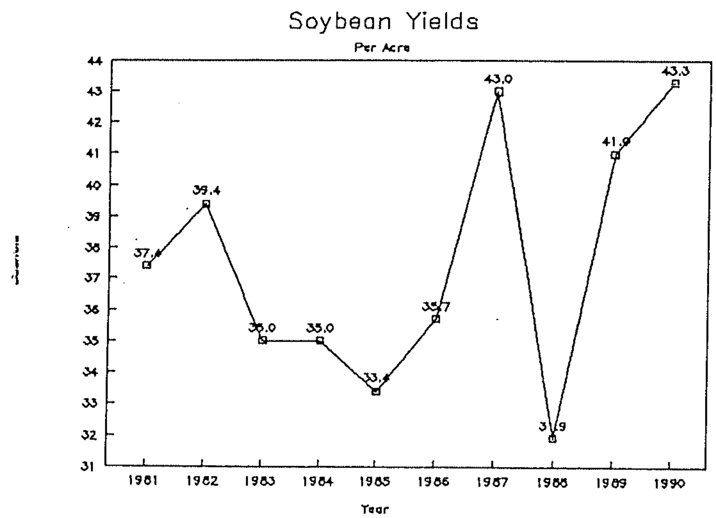
CROP DATA FOR SET ASIDE, OAT SILAGE, & CRP LAND - 1990

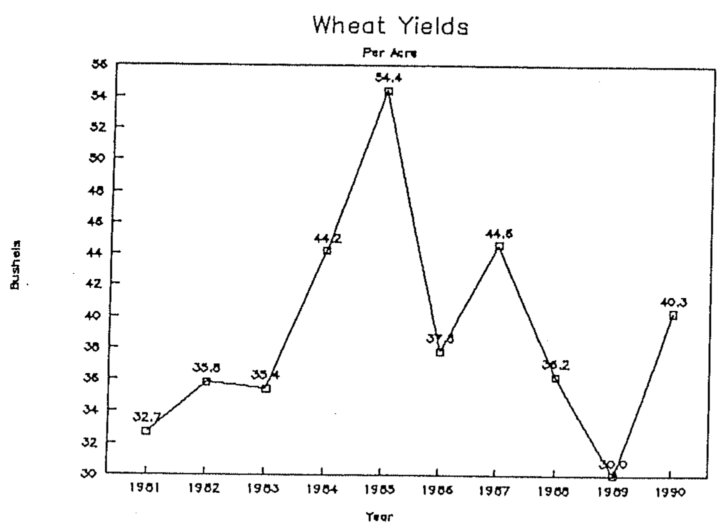
		SET ASIDE 724	OAT SILAGE 13	CRP LAND 30
			ALL VALUES PER ACRE	
1.	*** Total Value Produced $ ***	4,804	1,219	6,670
2.	*** Total Production ***	4,356	90	4,085
3.	*** Total Acres ***	15.1	16.5	95.4
4.	Yield Per Acre	288.5	6.5	42.8
5.	Value Per Unit	1.02	13.54	1.00
6.	Crop Production Return	293.31	73.88	42.82
7.	Other Crop Income	24.83		27.10
8.	Total Crop Return	318.14	73.88	69.92
	Variable Costs			
10.	Fertilizer	0.46	6.36	1.01
11.	Chemicals	2.05	1.52	0.74
12.	Seed Expense	4.44	10.42	3.25
13.	Crop Drying			
14.	Crop Insurance	0.07		
15.	Other Expense	0.46	0.48	
16.	Special Hired Labor	0.13		
17.	Custom Work Hired Expense	0.46	5.33	
18.	Irrigation Operation			
19.	Assigned Interest			
20.	Total Variable Costs	8.08	24.12	5.00
21.	Return Over Variable Costs	310.06	49.67	64.92
	Allocated Costs (Variable and Fixed)			
31.	Farm Power & Machinery - Ownerships	5.76	7.15	2.35
32.	Farm Power & Machinery - Operation	12.12	27.52	3.72
33.	Building & Fence Cost	2.32	4.48	1.01
34.	Irrigation Ownership Cost			
37.	Actual Land Ownership Cost or Rent	75.82	57.64	26.12
38.	Utilities & General Farm Expense	3.51	4.27	1.55
39.	Hired Labor	1.06	2.18	0.19
41.	Actual Non-Real Estate Int. Allocated	5.43	12.85	1.89
42.	Total Allocated Costs	106.02	116.06	36.83
43.	Total Listed Costs	114.11	140.18	41.82
44.	Return Over Listed Costs	204.03	-66.30	28.10
	**************************************SUPPLEMENTARY MANAGEMENT INFORMATION************************************			
50.	Land Opportunity Ownership Cost	76.38	74.93	62.24
51.	Total Cost Adj. to a Min. 7% Interest	113.58	150.36	78.26
52.	Work Units Assigned/Acre	0.20	0.40	0.05
53.	Power Cost Allocation Factor	1.00	1.00	1.00
54.	Total Listed Cost/Unit of Production	0.40	25.49	0.98
54A.	Total Production Cost Including Net Family Living	0.44	30.02	1.05
55.	Total Adjusted Cost/Unit of Production	0.39	27.57	1.83
56.	Cash Variable Cost/Unit of Production	0.10	12.89	0.29
57.	Return Over Listed Costs Per Unit	0.71	-12.05	0.66
58.	Breakeven Yield/Unit of Production	111.9	10.4	44.8
59.	Total Acre Inches Water Applied			
60.	Cost of Irrigation Excluding Interest			
61.	Average Price Received/Unit Sold			
62.	Quantity Sold (O.S.)			











TEN YEAR CROP YIELDS ON SELECTED CROPS.

COSTS AND RETURNS FROM LIVESTOCK ENTERPRISES

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

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

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

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

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

HOGS, FARROW, FINISH, GENERAL - 1990 AVERAGE OF 112 FARMS

		LBS/CWT	TOTAL	PER CWT.	PER LITTER
1.	Production		259,457		1,777
2.	Net Increase in Value: Hogs		146,756	56.56	1,005.18
3.	Other Miscellaneous Income				
4.	Total Value Produced		146,756	56.56	1,005.18
	Feed Fed: Quantity & Cost	LBS/CWT			
6.	Corn	261.73	26,604	10.25	182.22
7.	Other Grain	2.39	222	0.09	1.52
8.	Complete Ration	31.54	4,736	1.83	32.44
9.	Protein, Salt, Minerals	90.26	35,674	13.75	244.34
10.	Total Grain Mix	385.92	67,236	25.92	460.52
11.	Forages	0.16	22	0.01	0.15
12.	Pasture				
13.	Total Feed Cost		67,258	25.93	460.67
14.	Return Over Feed Costs		79,498	30.63	544.51
	Other Direct Costs				
16.	Veterinary		4,187	1.61	28.68
17.	Breeding		2		0.01
18.	Miscellaneous		2,690	1.04	18.42
19.	Custom Work & Lease		2,718	1.05	18.62
20.	Special Hired Labor		2,020	0.78	13.84
21.	Assigned Interest		14	0.01	0.10
22.	Total Other Direct Costs		11,631	4.49	79.67
23.	Total Direct Costs Incl. Feed		78,889	30.42	540.34
24.	Return Over All Direct Costs		67,867	26.14	464.84
	Allocated Costs				
27.	Act. Int. Paid Less Int. Assigned-L21		3,930	1.51	26.92
28.	General Hired Labor		2,572	0.99	17.62
29.	Utilities & Miscellaneous		4,410	1.70	30.21
30.	Power & Machinery		27	1.04	18.41
31.	Livestock Equipment		54	2.07	36.85
32.	Building & Fences		55	2.13	37.79
33.	Total Allocated Costs		11,048	9.44	167.80
34.	Total Actual Listed Costs		89,937	39.86	708.14
35.	Return Over Actual Listed Costs		56,819	16.70	297.04

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

		TOTAL	PER CWT.	PER LITTER
36.	Total Costs Adj. to 7% Min. Int.	106,445	41.03	729.08
38.	Return/Listed 7% Opportunity Interest	40,311	15.53	276.10
40.	Return/$100 Feed Fed	218.20		
41.	Ave. Wt./Mkt. Hog Sold	232		
42.	Price Rec'd/Cwt. Mkt. Hogs	56.53		
43.	Total No. Litters Farrowed	146		
44.	Litters/Sow/Year	1.85		
45.	No. Pigs Born/Litter	9.80		
46.	No. Pigs Wean/Litter	8.56		
47.	No. Pigs Produced/Sow/Year	14.18		
48.	Litters/Crate/Year	7.68		
49.	Pigs Weaned/Crate/Year	65.79		
50.	Pre-Weaning Death Loss Pct.	12.65		
51.	Nursery Death Loss Pct.	5.28		
52.	Mkt. Death Loss Pct.	4.39		
53.	Breeding Herd Death Loss	4.94		
54.	Total Death Loss Percent	13.87		

HOGS, FARROW, FINISH, GENERAL - 1990

			21 HIGH RETURN FARMS PER CWT.		21 LOW RETURN FARMS PER CWT.
1.	Production		412,645		176,117
2.	Net Increase in Value: Hogs		59.38		53.06
3.	Other Miscellaneous Income				
4.	Total Value Produced		59.68		53.06
	Feed Fed: Quantity & Cost	LBS/CWT		LBS/CWT	
6.	Corn	235.89	8.94	287.35	11.51
7.	Other Grain	2.05	0.07	3.65	0.14
8.	Complete Ration	12.33	0.55	23.64	1.88
9.	Protein, Salt, Mineral	88.84	12.63	106.59	16.65
10.	Total Grain Mix	339.11	22.19	421.23	30.18
11.	Forages			0.49	0.02
12.	Pasture				
13.	Total Feed Cost		22.19		30.20
14.	Return Over Feed Costs		37.19		22.86
	Other Direct Costs				
16.	Veterinary		2.06		1.31
17.	Breeding				
18.	Miscellaneous		1.03		1.00
19.	Custom Work & Lease		1.91		0.78
20.	Special Hired Labor		1.49		0.20
21.	Assigned Interest				
22.	Total Other Direct Costs		6.49		3.29
23.	Total Direct Costs Incl. Feed		28.68		33.49
24.	Return Over All Direct Costs		30.70		19.57
	Allocated Costs				
27.	Act. Int. Paid Less Int. Assigned-L21		1.56		1.91
28.	General Hired Labor		1.18		0.33
29.	Utilities & Miscellaneous		1.97		1.80
30.	Power & Machinery		1.01		0.75
31.	Livestock Equipment		3.12		1.38
32.	Building & Fences		3.16		1.47
33.	Total Allocated Costs		12.00		7.64
34.	Total Actual Listed Costs		40.68		41.13
35.	Return Over Actual Listed Costs		18.70		11.93

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

36.	Total Costs Adj. to 7% Min. Int.	42.04	41.74
38.	Return/Listed 7% Opportunity Interest	17.34	11.32
40.	Return/$100 Feed Fed	267.52	175.74
41.	Ave. Wt./Mkt. Hog Sold	229	231
42.	Price Rec'd/Cwt. Mkt. Hogs	58.82	54.06
43.	Total No. Litters Farrowed	249	97
44.	Litters/Sow/Year	1.96	1.64
45.	No. Pigs Born/Litter	10.10	9.02
46.	No. Pigs Wean/Litter	8.70	7.67
47.	No. Pigs Produced/Sow/Year	15.19	11.46
48.	Litters/Crate/Year	9.58	6.06
49.	Pigs Weaned/Crate/Year	83.35	46.50
50.	Pre-Weaning Death Loss Pct.	13.80	14.86
51.	Nursery Death Loss Pct.	6.18	5.11
52.	Mkt. Death Loss Pct.	4.03	1.84
53.	Breeding Herd Death Loss	4.96	7.18
54.	Total Death Loss Percent	13.38	15.31

HOGS, FINISHING ENTERPRISE - 1990 AVERAGE OF 106 FARMS

		LBS/CWT	TOTAL	PER CWT.	PER HEAD PRODUCED (L52)
1.	Production - Pounds		174,728		919.6
2.	Net Increase in Value: Hogs		75,518	43.22	82.08
3.	Other Miscellaneous Income		16	0.01	0.02
4.	Total Value Produced		75,534	43.23	82.10
	Feed Fed: Quantity & Cost	LBS/CWT			
6.	Corn	275.7	18,788	10.75	20.42
7.	Other Grain	1.2	71	0.04	0.08
8.	Complete Ration	9.3	1,518	0.87	1.65
9.	Protein, Salt, Minerals	73.5	19,339	11.07	21.02
10.	Total Grain Mix	359.7	39,716	22.73	43.17
11.	Forages				
12.	Pasture				
13.	Total Feed Cost		39,716	22.73	43.17
14.	Return Over Feed Costs		35,818	20.50	38.93
	Other Direct Costs				
16.	Veterinary		1,359	0.78	1.48
17.	Miscellaneous		747	0.43	0.81
18.	Custom Work & Lease Expense		1,372	0.79	1.49
19.	Special Hired Labor		404	0.23	0.44
20.	Assigned Interest		14	0.01	0.02
21.	Total Other Direct Costs		3,896	2.24	4.24
22.	Total Direct Costs Incl. Feed		43,612	24.97	47.41
23.	Return Over All Direct Costs		31,922	18.26	34.69
	Allocated Costs				
26.	Act. Int. Paid Less Int. Assigned-L20		2,915	1.67	3.17
27.	General Hired Labor		749	0.43	0.81
28.	Utilities & Miscellaneous		1,821	1.04	1.98
29.	Power & Machinery		872	0.50	0.95
30.	Livestock Equipment		1,809	1.04	1.97
31.	Buildings & Fences		1,663	0.95	1.81
32.	Total Allocated Costs		9,829	5.63	10.69
33.	Total Actual Listed Costs		53,441	30.60	58.10
34.	Return Over Actual Listed Costs		22,093	12.63	24.00
	SUPPLEMENTARY MANAGEMENT INFORMATION*************************				
35.	Total Costs Adj. to 7% Min. Int.		53,697	30.73	58.37
36.	Return/Listed 7% Opportunity Interest		21,837	12.50	23.73
39.	Return/$100 Feed Fed		190.19		
40.	Ave. Wt./Mkt. Hog Sold		239.07		
41.	Price Rec'd/Cwt. Mkt Hog		55.46		
42.	Ave. Weight/Pig Purchased		49.79		
43.	Ave. Price/Pig Purchased		55.38		
44.	No. Pigs Purchased		443		
45.	No. Pigs Transferred Out/In		405		
46.	Pounds of Pork Purchased		22,058		
47.	Ave. Number of Pigs on Hand		336.8		
48.	Percent Death Loss		2.52		
49.	Effective Daily Gain		1.42		
50.	Price/Cwt. Grain Mix Fed		6.32		
51.	Price/Cwt. Protein, Salt, Minerals		15.06		
52.	Number of Pigs Produced		920		

HOGS, FINISHING ENTERPRISE - 1990

			21 HIGH RETURN FARMS PER CWT.		21 LOW RETURN FARMS PER CWT.
1.	Production - Pounds		224,432		104,259
2.	Net Increase in Value: Hogs		50.68		36.24
3.	Other Miscellaneous Income				0.07
4.	<u>Total Value Produced</u>		50.68		36.31
	Feed Fed: Quantity & Cost	<u>LBS/CWT</u>		<u>LBS/CWT</u>	
6.	Corn	250.4	9.74	311.6	12.14
7.	Other Grain			1.8	0.07
8.	Complete Ration	20.6	1.67	19.2	1.17
9.	Protein, Salt, Minerals	<u>73.0</u>	<u>9.60</u>	<u>75.2</u>	<u>13.42</u>
10.	<u>Total Grain Mix</u>	344.0	21.01	407.8	26.80
11.	Forages				
12.	Pasture				
13.	<u>Total Feed Cost</u>		21.01		26.80
14.	Return Over Feed Costs		29.67		9.51
	<u>Other Direct Costs</u>				
16.	Veterinary		0.78		1.29
17.	Miscellaneous		0.27		0.62
18.	Custom Work & Lease Expense		0.93		0.20
19.	Special Hired Labor		0.65		0.02
20.	Assigned Interest				
21.	<u>Total Other Direct Costs</u>		2.63		2.13
22.	<u>Total Direct Costs Incl. Feed</u>		23.64		28.93
23.	Return Over All Direct Costs		27.04		7.38
	<u>Allocated Costs</u>				
26.	Act. Int. Paid Less Int. Assigned-L20		2.61		1.48
27.	General Hired Labor		0.29		0.10
28.	Utilities & Miscellaneous		1.20		1.05
29.	Power & Machinery		0.34		0.59
30.	Livestock Equipment		0.91		0.71
31.	Buildings & Fences		<u>1.09</u>		<u>0.57</u>
32.	Total Allocated Costs		<u>6.44</u>		<u>4.50</u>
33.	Total Actual Listed Costs		30.08		33.43
34.	<u>Return Over Actual Listed Costs</u>		20.60		2.88
	SUPPLEMENTARY MANAGEMENT INFORMATION*****************************				
35.	Total Costs Adj. to 7% Min. Int.		29.40		33.63
36.	Return/Listed 7% Opportunity Interest		21.28		2.68
39.	Return/$100 Feed Fed		241.36		135.50
40.	Ave. Wt./Mkt. Hog Sold		244.72		242.39
41.	Price Rec'd/Cwt. Mkt Hog		55.67		54.14
42.	Ave. Weight/Pig Purchased		55.11		50.11
43.	Ave. Price/Pig Purchased		50.91		58.38
44.	No. Pigs Purchased		169		573
45.	No. Pigs Transferred Out/In		545		
46.	Pounds of Pork Purchased		9,314		28,712
47.	Ave. Number of Pigs on Hand		414.7		207.2
48.	Percent Death Loss		0.92		4.03
49.	Effective Daily Gain		1.48		1.38
50.	Price/Cwt. Grain Mix Fed		6.10		6.57
51.	Price/Cwt. Protein, Salt, Minerals		13.15		17.85
52.	Number of Pigs Produced		1,181		549

HOGS, FEEDER PIG PRODUCTION - 1990 AVERAGE OF 50 FARMS

		LBS/LITTER	TOTAL	PER HEAD	/LITTER
1.	Production		86,381	1,571	191
2.	Net Increase in Value: Hogs		84,218	53.61	440.93
3.	Other Miscellaneous Income				
4.	Total Value Produced		84,218	53.61	440.93
	Feed Fed: Quantity & Cost	LBS/LITTER			
6.	Corn	1,259.55	9,399	5.98	49.21
7.	Other Grain	32.12	260	0.17	1.36
8.	Complete Ration	132.61	4,014	2.56	21.02
9.	Protein, Salt, Minerals	542.35	16,352	10.41	85.61
10.	Total Grain Mix	1,966.63	30,025	19.12	157.20
11.	Forages	0.72	118	0.08	0.62
12.	Pasture				
13.	Total Feed Cost		30,143	19.20	157.82
14.	Return Over Feed Costs		54,075	34.41	283.11
	Other Direct Costs				
16.	Veterinary		4,772	3.04	24.98
17.	Breeding		6		0.03
18.	Miscellaneous		3,648	2.32	19.10
19.	Custom Work & Lease		1,123	0.71	5.88
20.	Special Hired Labor		3,098	1.97	16.22
21.	Assigned Interest				
22.	Total Other Direct Costs		12,647	8.04	66.21
23.	Total Direct Costs Incl. Feed		42,790	27.24	224.03
24.	Return Over All Direct Costs		41,428	26.37	216.90
	Allocated Costs				
27.	Act. Int. Paid Less Int. Assigned-L21		4,432	2.82	23.20
28.	General Hired Labor		1,556	0.99	8.15
29.	Utilities & Miscellaneous		3,844	2.45	20.13
30.	Power & Machinery		2,487	1.58	13.02
31.	Livestock Equipment		4,275	2.72	22.38
32.	Building & Fences		4,610	2.93	24.14
33.	Total Allocated Costs		21,204	13.49	111.02
34.	Total Actual Listed Costs		63,994	40.73	335.05
35.	Return Over Actual Listed Costs		20,224	12.88	105.88

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

		TOTAL	PER HEAD	/LITTER
36.	Total Costs Adj. to 7% Min. Int.	63,750	40.58	333.77
38.	Return/Listed 7% Opportunity Interest	20,468	13.03	107.16
40.	Return/$100 Feed Fed	279.39		
41.	Ave. Wt./Pig Sold or Transfered	49		
42.	Price Rec'd/Pig Sold	50.56		
43.	Litters Farrowed/Sow	1.9		
44.	No. Pigs Born/Litter	10.0		
45.	No. Pigs Wean/Litter	8.6		
46.	No. Pigs Produced/Sow/Year	15.7		
47.	Litters/Crate/Year	9.1		
48.	Pigs Weaned/Crate/Year	78.19		
49.	Fdr Pig Deaths: As % of Total Loss	98.05		
50.	Breeding Deaths: As % of Total Loss	1.5		
51.	Price/Cwt. Grain Mix Fed	7.99		
52.	Price/Cwt. Protein, Salt, Min.	15.79		

HOGS, FEEDER PIG PRODUCTION - 1990

			16 HIGH RETURN FARMS		16 LOW RETURN FARMS
			PER HEAD		PER HEAD
1.	Production		136,044		57,239
2.	Net Increase in Value: Hogs		54.30		48.49
3.	Other Miscellaneous Income				
4.	Total Value Produced		54.30		48.49
	Feed Fed: Quantity & Cost	LBS/LITTER		LBS/LITTER	
6.	Corn	1,082.56	4.78	1435.53	7.70
7.	Other Grain	11.40	0.08	85.78	0.44
8.	Complete Ration	147.95	3.15	95.98	1.25
9.	Protein, Salt, Minerals	416.79	6.95	757.81	15.63
10.	Total Grain Mix	1,658.70	14.96	2,375.10	25.02
11.	Forages				
12.	Pasture				
13.	Total Feed Cost		14.96		25.02
14.	Return Over Feed Costs		39.34		23.47
	Other Direct Costs				
16.	Veterinary		3.10		3.40
17.	Breeding		0.01		
18.	Miscellaneous		2.16		2.75
19.	Custom Work & Lease		0.94		0.18
20.	Special Hired Labor		3.82		0.06
21.	Assigned Interest				
22.	Total Other Direct Costs		10.03		6.39
23.	Total Direct Costs Incl. Feed		24.99		31.41
24.	Return Over All Direct Costs		29.31		17.08
	Allocated Costs				
27.	Act. Int. Paid Less Int. Assigned-L21		3.02		2.52
28.	General Hired Labor		0.42		2.97
29.	Utilities & Miscellaneous		2.11		2.85
30.	Power & Machinery		1.25		1.94
31.	Livestock Equipment		3.43		1.60
32.	Building & Fences		2.92		3.16
33.	Total Allocated Costs		13.15		15.04
34.	Total Actual Listed Costs		38.14		46.45
35.	Return Over Actual Listed Costs		16.16		2.04

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

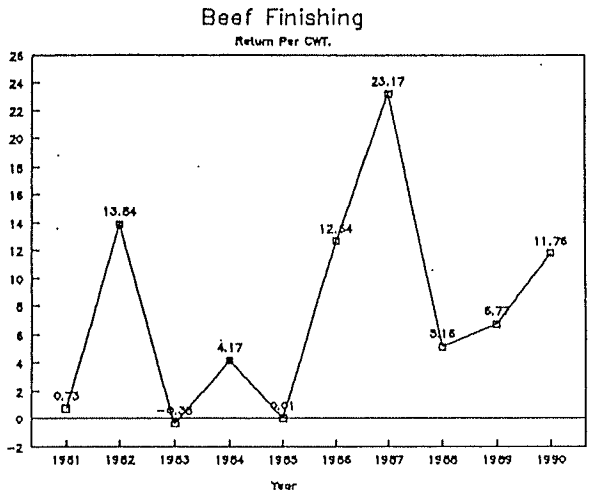
36.	Total Costs Adj. to 7% Min. Int.	37.68	46.56
38.	Return/Listed 7% Opportunity Interest	16.62	1.93
40.	Return/$100 Feed Fed	362.91	193.80
41.	Ave. Wt./Pig Sold or Transfered	48	49
42.	Price Rec'd/Pig Sold	47.15	50.07
43.	Litters Farrowed/Sow	2.0	1.8
44.	No. Pigs Born/Litter	11.0	9.0
45.	No. Pigs Wean/Litter	9.2	7.7
46.	No. Pigs Produced/Sow/Year	17.2	13.6
47.	Litters/Crate/Year	10.4	7.7
48.	Pigs Weaned/Crate/Year	95.33	59.26
49.	Fdr Pig Deaths: As % of Total Loss	98.4	98.09
50.	Breeding Deaths: As % of Total Loss	1.6	1.1
51.	Price/Cwt. Grain Mix Fed	7.94	7.73
52.	Price/Cwt. Protein, Salt, Min.	14.68	15.13

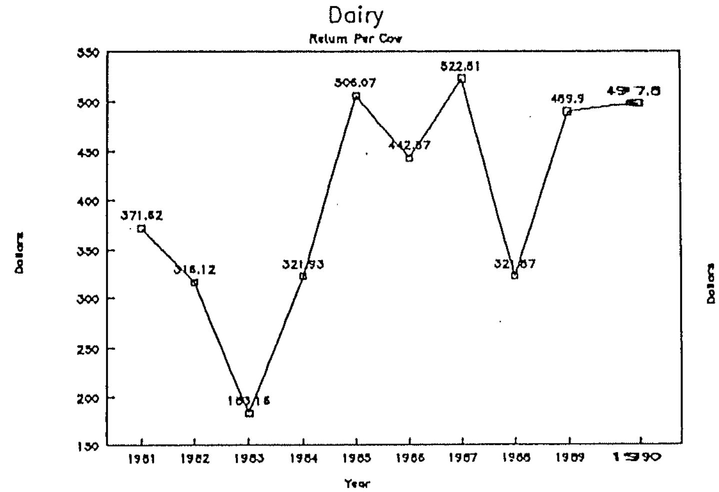
DAIRY COWS, COMMERCIAL, GENERAL - 1990

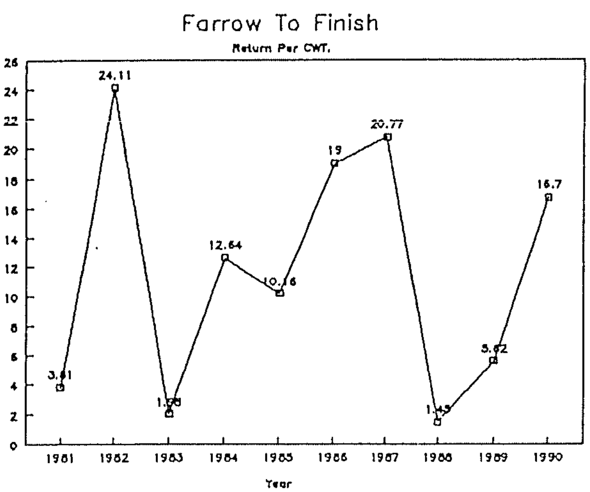
AVERAGE OF 50 FARMS

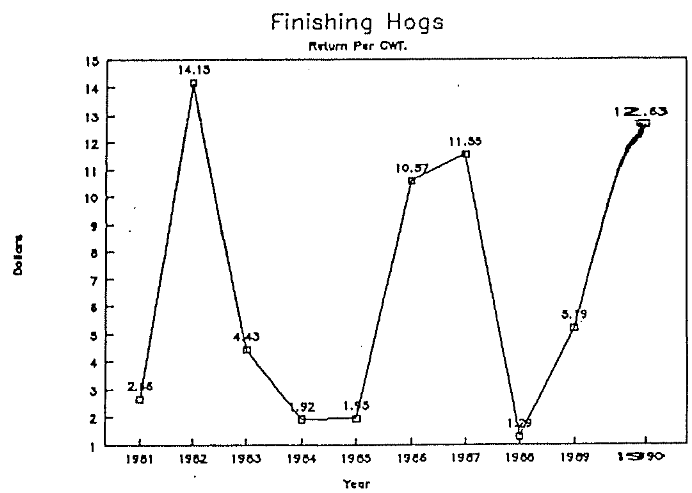
		HERD TOTAL	PER COW	PER. CWT. MILK
1.	Average Number of Cows	50.0		
2.	Pounds of Milk		15,535	
3.	Pounds of Butterfat		507	
4.	Percent of Butterfat in Milk		3.26	
5.	Value of Produce			
6.	Dairy Products Sold		2,033.92	
7.	Dairy Products Used in Home		2.32	
8.	Milk Fed to Livestock		5.52	
9.	Net Increase in Value:		-77.44	
10.	Other Miscellaneous Income			
11.	Total Value Produced	98,216	1,964.32	12.64
12.	Feed Fed: Qty. & Cost	LBS/COW		
13.	Corn	4,972	196.14	1.26
14.	Small Grain	245	11.74	0.08
15.	Complete Ration	353	26.16	0.17
16.	Protein, Salt, Minerals	1,439	255.20	1.64
17.	Total Grain Mix	7,009	489.24	3.15
18.	Legume Hay	4,952	194.60	1.25
19.	Other Dry Hay & Roughage	761	12.52	0.08
20.	Haylage	2,317	45.04	0.29
21.	Silage	8,294	73.86	0.48
22.	Pasture	HERD TOTAL	2.80	0.02
23.	Total Feed Costs	40,903	818.06	5.27
24.	Return Over Feed Cost	57,313	1,146.26	7.37
	Other Direct Costs			
26.	Veterinary		45.32	0.29
27.	Breeding		23.38	0.15
28.	Miscellaneous		108.00	0.70
29.	Custom Work & Lease Expense		60.52	0.39
30.	Special Hired Labor		5.00	0.03
31.	Assigned Interest			
32.	Total Other Direct Costs	12,111	242.22	1.56
33.	Total Direct Costs Incl. Feed	53,014	1,060.28	6.83
34.	Return Over All Direct Costs	45,202	904.04	5.81
	Allocated Costs			
37.	Int. Pd Less Int. Assigned-L31	3,465	69.30	0.45
38.	General Hired Labor	3,482	69.64	0.45
39.	Utilities & Miscellaneous	4,270	85.40	0.55
40.	Power & Machine	2,918	58.36	0.38
41.	Livestock Eqp.	2,686	53.71	0.35
42.	Bldg/Fences	3,491	69.83	0.45
43.	Total Allocated Costs	20,312	406.24	2.63
44.	Total Actual Listed Costs	73,326	1,466.52	9.46
45.	Return Over Actual Listed Costs	24,890	497.80	3.18
	************SUPPLEMENTARY MANAGEMENT INFORMATION************			
46.	Total Costs Adj. 7% Int.	74,675	1,493.51	9.61
47.	Return/Listed 7% Opportunity Int.	23,541	470.81	3.03
50.	Return/$100 Feed Fed	240.12		
51.	Lbs. of Milk/Lbs. Grain Mix	2.22		
52.	Average Price/Cwt. Sold	13.15		
53.	Dairy Cow Turnover %	38.00		
54.	Approx. Dry Matter/Cow	40		
55.	Percent Calf Death Loss	XXX		
56.	Total Investment/Cow	XXX		
57.	Total Debt/Cow	XXX		

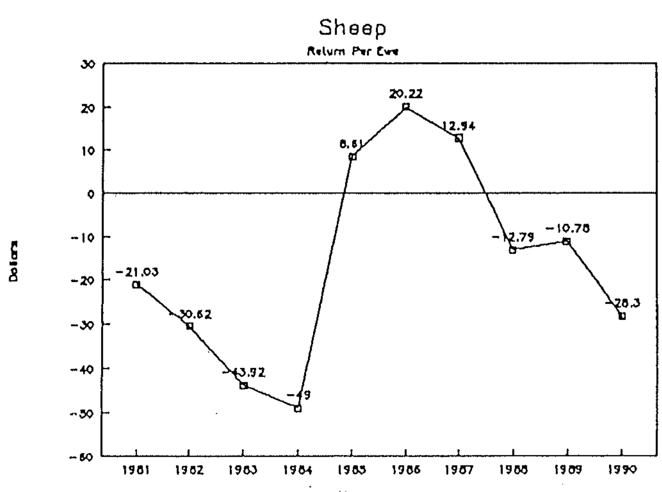
		12 HIGH RETURN FARMS PER COW		12 LOW RETURN FARMS PER COW
1. Average Number of Cows		62.0		44.0
2. Pounds of Milk		17,974		12,519
3. Pounds of Butterfat		601		421
4. Percent of Butterfat in Milk		3.34		3.36
5. Dairy Products Sold		2,427.08		1,606.82
6. Dairy Products Used in Home		1.35		1.14
7. Milk Fed to Livestock		3.35		4.25
8. Net Increase in Value:		-44.56		-91.98
9. Other Miscellaneous Income				
10. Total Value Produced		2,387.22		1,520.23
11. Feed Fed: Qty. & Cost	LBS/COW		LBS/COW	
12. Corn	4,274	169.34	5,457	215.05
13. Small Grain	35	1.24	564	37.20
14. Complete Ration	878	68.94	477	21.98
15. Protein, Salt, Minerals	1,192	265.58	1,573	274.48
16. Total Grain Mix	6,379	505.10	8,071	548.71
17. Legume Hay	3,227	122.19	6,798	277.07
18. Other Dry Hay & Roughage	111	2.37	1,879	19.57
19. Haylage	4,530	76.10	341	11.93
20. Silage	8,848	78.05	8,566	72.05
21. Pasture		4.50		2.16
22. Total Feed Costs		788.31		931.49
23. Return Over Feed Cost		1,598.91		588.74
Other Direct Costs				
25. Veterinary		60.26		36.11
26. Breeding		36.47		9.48
27. Miscellaneous		99.32		85.64
28. Custom Work & Lease Expense		49.26		82.82
29. Special Hire Labor		3.05		0.73
30. Assigned Interest				
31. Total Other Direct Costs		248.36		214.78
32. Total Direct Costs Incl. Feed		1,036.67		1,146.27
33. Return Over All Direct Costs		1,350.55		373.96
Allocated Costs				
35. Int. Pd Less Int. Assigned-L31		63.08		59.48
36. General Hired Labor		148.53		17.66
37. Utilities & Miscellaneous		83.06		72.45
38. Power & Machine		61.10		57.68
39. Livestock Eqp.		73.00		57.31
40. Bldg/Fences		74.30		37.49
41. Total Allocated Costs		503.07		302.07
42. Total Actual Listed Costs		1,539.74		1,448.34
43. Return Over Actual Listed Costs		847.48		71.89
SUPPLEMENTARY MANAGEMENT INFORMATION				
44. Total Costs Adj. 7% Int.		1,577.63		1,477.33
45. Return/Listed 7% Opportunity Int.		809.59		42.90
46. Return/$100 Feed Fed		302.83		163.21
47. Lbs. of Milk/Lbs. Grain Mix		2.82		1.55
48. Average Price/Cwt. Sold		13.53		12.89
49. Dairy Cow Turnover %		40.32		36.36
50. Approx. Dry Matter/Cow		37		48
51. Percent Calf Death Loss		XXXX		XXXX
52. Total Investment/Cow		XXXX		XXXX
53. Total Debt/Cow		XXXX		XXXX











THE FIVE GRAPHS ABOVE INDICATE THE RELATIVE PROFITABILITY OF THE LIVESTOCK INDUSTRY OVER THE PAST

TEN YEARS.

OTHER DAIRY/COMMERCIAL REPLACEMENT - 1990

		LBS/HEAD	AVERAGE OF 50 FARMS PER HEAD	10 HIGH RETURN FARMS PER HEAD	10 LOW RETURN FARMS PER HEAD
1.	Average Number of Head		65.7	59.0	71.1
2.	Net Increase in Value:		402.39	623.63	251.79
3.	Other Miscellaneous Inc				
4.	Total Value Produced		402.39	623.63	251.79
5.	Feed Fed: Qty. & Cost	LBS/HEAD			
6.	Corn	1,034	40.61	46.90	49.85
7.	Small Grain	158	7.55	11.46	6.27
8.	Complete Ration	113	10.49	3.53	5.78
9.	Protein, Salt, Minerals	274	50.37	49.88	57.37
10.	Total Grain Mix	1,579	109.02	111.77	119.27
11.	Legume Hay	1,098	43.33	34.02	39.03
12.	Other Dry Hay & Roughage	658	14.00	13.14	8.27
13.	Haylage	232	3.90	2.80	7.29
14.	Silage	4,604	44.89	27.63	73.50
15.	Milk	29	3.62	1.24	7.20
16.	Pasture		4.43	5.17	5.53
17.	Total Feed Costs		223.19	195.77	260.09
18.	Return Over Feed Cost		179.20	427.86	-8.30
	Other Direct Costs				
20.	Veterinary		7.82	8.17	7.58
21.	Breeding		0.93	0.76	1.63
22.	Miscellaneous		12.28	8.44	12.35
23.	Custom Work & Lease Exp.		2.45	2.54	4.51
24.	Special Hired Labor		1.83	10.56	
25.	Assigned Interest				
26.	Total Other Direct Costs		25.31	30.47	26.07
27.	Total Direct Costs Include Feed		248.50	226.24	286.16
28.	Return Over All Direct Costs		153.89	397.39	-34.37
	Allocated Costs				
31.	Int. Pd Less Int. Assigned-L25		12.15	14.68	15.06
32.	General Hired Labor		12.83	14.75	20.66
33.	Utilities & Misc.		13.88	12.83	17.59
34.	Power & Machine		9.51	8.43	9.09
35.	Livestock Equipment		8.09	10.49	5.87
36.	Building/Fences		9.09	5.32	7.39
37.	Total Allocated Costs		65.55	66.50	75.66
38.	Total Act. Listed Costs		314.05	292.74	361.82
39.	Return Return Over Actual Listed Costs		88.34	330.89	-110.03

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

40.	Total Costs Adj. 7% Int.			
42.	Return/Listed 7% Opportunity Int.			
44.	Return/$100 Feed Fed	180.30	318.59	96.81
45.	Percent Calf Death Loss	5.75	5.10	11.10

		HERD TOTAL	PER COW	CWT. MILK
1.	Average Number of Cows	49.9		
2.	Pounds of Milk		15,535	
3.	Pounds of Butterfat		507	
4.	Percent of Butterfat in Milk		3.26	
5.	Value of Produce			
6.	Dairy Products Sold		2,023.25	
7.	Dairy Products Used in Home		2.18	
8.	Milk Fed to Livestock		4.87	
9.	Net Increase in Value:		500.52	
10.	Other Miscellaneous Income			
11.	Total Value Produced	126,288	2,530.82	16.44
12.	Feed Fed: Qty. & Cost	LBS/COW		
13.	Corn	6,334	248.22	1.61
14.	Small Grain	440	21.76	0.14
15.	Complete Ration	641	49.32	0.32
16.	Protein, Salt, Minerals	1,779	323.47	2.10
17.	Total Grain Mix	9,194	642.77	4.17
18.	Legume Hay	6,075	237.29	1.54
19.	Other Dry Hay & Roughage	1,750	30.86	0.20
20.	Haylage	2,721	51.04	0.33
21.	Silage	14,831	137.23	0.89
22.	Pasture	HERD TOTAL	8.78	0.06
23.	Total Feed Costs	55,288	1,107.97	7.19
24.	Return Over Feed Cost	71,000	1,422.85	9.25
	Other Direct Costs			
26.	Veterinary		55.69	0.36
27.	Breeding		24.45	0.16
28.	Miscellaneous		124.19	0.81
29.	Custom Work & Lease Expense		65.69	0.43
30.	Special Hire Labor		4.53	0.03
31.	Assigned Interest			
32.	Total Other Direct Costs	13,700	274.55	1.79
33.	Total Direct Costs Incl. Feed	68,988	1,382.52	8.98
34.	Return Over All Direct Costs	57,300	1,148.30	7.46
	Allocated Costs			
37.	Int. Pd Less Int. Assigned-L31		90.32	0.59
38.	General Hired Labor		84.91	0.55
39.	Utilities & Miscellaneous		102.99	0.67
40.	Power & Machine		72.18	0.47
41.	Livestock Eqp.		64.85	0.42
42.	Bldg/Fences		90.41	0.59
43.	Total Allocated Costs	25,232	505.66	3.29
44.	Total Actual Listed Costs	94,220	1,888.18	12.27
45.	Return Over Actual Listed Costs	32,068	642.64	4.17

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

46.	Total Costs Adj. 7% Int.	
47.	Return/Listed 7% Opportunity Int.	
50.	Return/$100 Feed Fed	228
51.	Lbs. of Milk/Lbs. Grain Mix	1.67
52.	Average Price/Cwt. Sold	13.20
53.	Dairy Cow Turnover %	38.08
54.	Approx. Dry Matter/Cow	57
55.	Percent Calf Death Loss	5.67
56.	Total Investment/Cow	9,318.50
57.	Total Debt/Cow	3,153.49