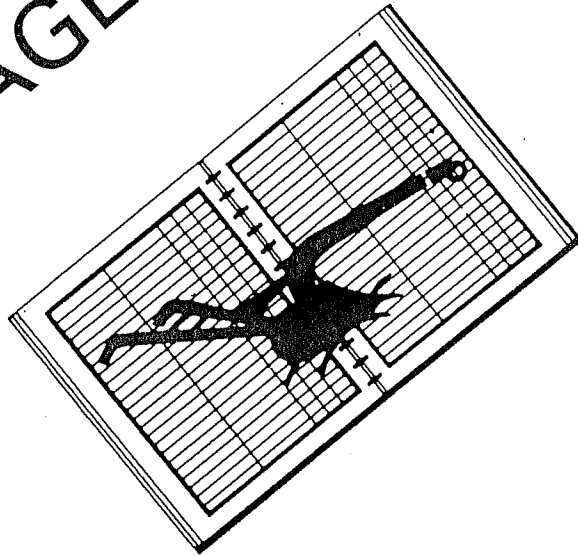


FARM BUSINESS MANAGEMENT



1986 Annual Report
Southwestern Minnesota
March, 1987

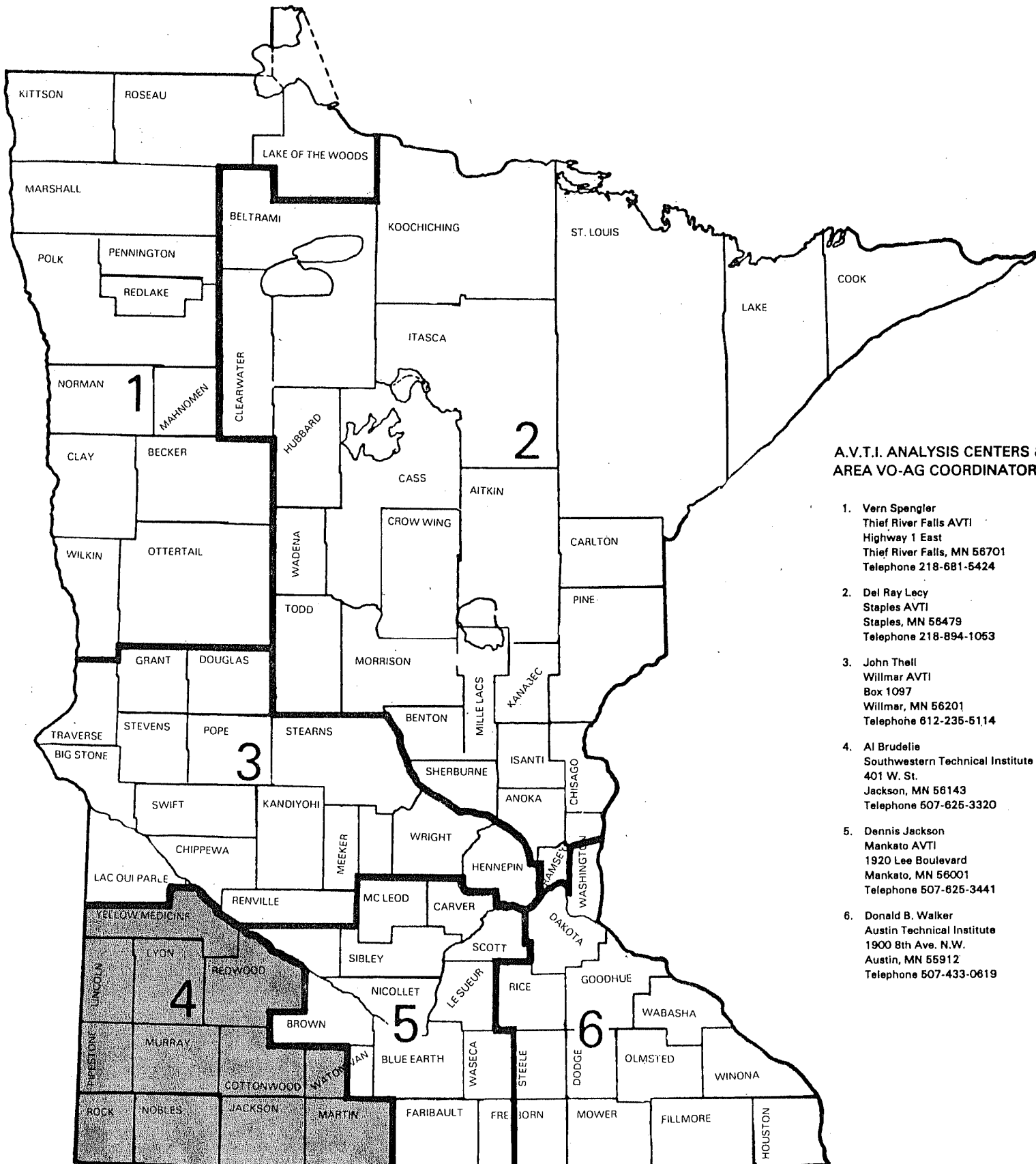
AN ADULT
EDUCATIONAL
PROGRAM

In cooperation with: State Board of Vocational Technical Education
Division of Agricultural Education — University of Minnesota

SOUTHWESTERN TECHNICAL INSTITUTE

Price \$5.00

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1986 ANNUAL VOCATIONAL AGRICULTURE FARM BUSINESS MANAGEMENT EDUCATION
PROGRAM REPORT OF SOUTHWESTERN MINNESOTA

AL BRUDELIE
AREA VO-AG PROGRAM COORDINATOR

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INTRODUCTION

Adult Farm Business Management Education programs have been part of the Public School Vocational Agriculture offerings since 1952. From the early cooperative efforts of the State Department of Education, Department of Agricultural Education (University of Minnesota) and the Department of Agricultural Economics (University of Minnesota), the program has expanded to serve over 4,500 farm families in six regional farm management areas. Programs are now managed by the Minnesota State Board of Vocational Technical Education, through AVTI's and local school districts.

From the very beginning the purpose of the Farm Business Management education part of the adult agricultural program was to help farm families achieve their farm business and family goals through improved management, organization and efficiency of their farm business. The purpose has not changed.

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

1. Farmers enroll in a specific farm management course.
2. Each course has a specific major objective and specific units of instruction to meet the objective.
3. Courses are offered in sequence, and farmers are expected to enroll in the first course and follow the sequence. They may continue enrollment in the advanced courses as long as they desire.
4. There is continuity between the courses: Each one leads to the other.
5. Part of the instruction is done on the farm with the individual farm family.

Most programs organize their course around the same central themes. They are:

- Year 1 - Farm business records and accounts.
- Year 2 - Farm business analysis and evaluation.
- Year 2 - Farm business organization.

Advanced (For students who have completed years 1, 2, and 3). In the advanced series of classes and on-farm-instructional visits, the major emphasis is on evaluating the business, examining alternatives, and continuing the reorganization of the resources used in the business.

Like most education programs, enrollees benefit from the instruction in relation to how much effort they put into study. There have been some research studies that show on the average, enrollees get some exciting results.

Of course, some farmers may have benefited 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 the study.

The summary of farm records for the Jackson area (Southwest Minnesota) shows the results of the farm businesses enrolled in management education programs in 1986. Study the results carefully so you can use this information to improve agriculture in your area and your business.

Below is a listing of the schools involved and the instructors responsible for these programs.

Class Location	Instructor
Brewster	Gerald McConkey
Canby	Dale Schoberg
Fulda	Mel Faltinson
Heron Lake/Okabena	Dick Amendt
Jackson	Charles Asman
	Doug O'Neil
Granite Falls	M.E. Resvick
	Neale Deters
Lakefield	Harry Gerdes
Luverne	James Ouverson
Marshall	Dennis Schroeder
Mt. Lake	Leland Thiesen
Pipestone	Heimer Swanson
	Dwayne Eisfeld
Slayton	Chuck Lucht
St. James	Richard Spitzner
Truman	Cliff Vrieze
	Louise Worm
Tyler H.V.C.C.	Paul Bartz
Wabasso	John Clark
Worthington	Wayne Flynn
	Rolf Mahlberg

The analysis of the records and preparation of the report for the Southwest area is done under the direction of Al Bruderie, Area Ag Coordinator, at the Southwestern Technical Institute (Jackson Campus). Directing in a supervisory capacity are Marlin Wacholz, Director, Southwestern Technical Institute; Dennis Finstad, Campus Director; John Murray, Education Specialist, State Board of Vocational Technical Education; and Dr. Edgar Persons, Chairman of the University of Minnesota Agricultural Education Division. Data processing was done by Specialized Data System, Inc., Madison, Wisconsin. Special acknowledgement to Terri Pelzel for her part in the preparation of this report.

Table 1- Summary of Farm Inventories* - 1986

Items	Averages of 280 Farms	
1. Size of Farm - Total Acres	453.4	
2. - Tillable Acres	415.7	
3. Work Units - Crops	200.15	
4. - Livestock	182.47	
5. - Other	44.32	
6. Total Size of Business in Work Units	426.94	
7. Number of Workers	1.32	
8. Farm Capital Investment Per Worker	\$ 400,963	
8A. Farm Capital Investment Per Work Unit	\$ 1,453	
	Jan. 1	Dec. 31
9. Productive Livestock		
10. Dairy Cows	4,534	
11. Other Dairy Cattle	2,601	
12. Beef Breeding Cattle	2,717	
13. Beef Feeder Cattle	9,995	
14. Hogs	16,236	
15. Sheep (Including Feeders) & Goats	376	
16. Poultry - All Types	97	
17. Other Livestock	571	
18. Total Productive Livestock	\$ 37,127	
19. Crop, Seed & Feed	49,320	
20. Power, Machinery & Equipment		
21. Auto & Truck (Farm Share)	2,760	
22. Power & Machinery	27,792	
23. Irrigation Equipment		
24. Custom Work Equipment	491	
25. Livestock Equipment	5,079	
26. Total Power, Machinery & Equipment	\$ 36,122	
27. Land	348,187	
28. Buildings-Fences-Etc.	35,698	
29. Total Farm Capital	\$ 506,454	
30. Increase or Decrease In		
Total Farm Capital	\$	
	(3,332)*	

*Table 1 on this page lists the categories of Farm Capital for the averages of 280 farms. Page 4 lists the same information for the 56 most profitable and 56 least profitable farm businesses. Table 1 includes the landlord's share of the investment for rented farms.

Other measures of farm size listed in lines 1 through 8 are helpful in describing the farms included in this report.

Size as measured by acres for individual farms varied from 80 to over 1200 acres. However, the majority of the farms fell in the range of 400 to 640 acres.

Table 1- Summary of Farm Inventories* - 1986

Items	56 FARMS HIGH PROFIT		56 FARMS LOW PROFIT	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
1. Size of Farm - Total Acres	632.9		465.4	
2. - Tillable Acres	600.9		421.8	
3. Work Units - Crops	292.96		198.37	
4. - Livestock	308.79		149.49	
5. - Other	157.49		22.02	
6. Total Size of Business in Work Units	759.25		369.89	
7. Number of Workers	1.53		1.42	
8. Farm Capital Investment Per Worker	\$ 524,150		\$ 428,576	
8A Farm Capital Investment Per Work Unit	\$ 1,318		\$ 1,787	
9. Productive Livestock				
10. Dairy Cows	1,931	1,898	3,687	3,040
11. Other Dairy Cattle	1,106	1,291	2,328	2,140
12. Beef Breeding Cattle	1,650	1,514	4,148	3,974
13. Beef Feeder Cattle	20,640	21,898	11,014	11,265
14. Hogs	35,066	43,979	11,902	11,775
15. Sheep (Including Feeders) & Goats	371	1,033	154	380
16. Poultry - All Types			477	95
17. Other Livestock			38	30
18. Total Productive Livestock	\$ 60,764	71,613 *	\$ 33,748	32,699 *
19. Crop, Seed & Feed	75,170	85,315	54,340	43,468
20. Power, Machinery & Equipment				
21. Auto & Truck (Farm Share)	2,914	4,274	4,051	4,117
22. Power & Machinery	34,535	35,703	35,232	32,110
23. Irrigation Equipment				
24. Custom Work Equipment				
25. Livestock Equipment	8,359	7,554	4,847	4,115
26. Total Power, Machinery & Equipment	\$ 45,808	47,531 *	\$ 44,130	40,342 *
27. Land	495,328	499,066	399,876	383,828
28. Buildings-Fences-Etc.	56,060	53,964	45,102	39,300
29. Total Farm Capital	\$ 733,130	757,489 *	\$ 577,196	539,637 *
30. Increase or Decrease In Total Farm Capital		\$ 24,359 *		\$ (37,559) *

Machinery, Equipment, and Building values reflect cost less depreciation. Land is valued at a conservative market value.

Market livestock, crops for sale or feed are valued at market price at time of inventory. Purchased and raised breeding livestock is valued at time it's put into useful production and carries same value for its useful life.

Work units provide a measure of work load and size of the farm business. Some clue to the farm organization is indicated by the distribution of work between crops and livestock.

The number of workers listed on line 7 includes the operator(s), hired-labor, and unpaid family labor as well as the labor portion of custom work hired.

Table 2A - Whole Farm Summary of Cash Receipts - 1986

Items	Average 280	High 56	Low 56
1. Sale of Livestock & Livestock Products			
2. Dairy Cows	\$ 996	374	1,161
3. Dairy Products	9,300	5,157	8,082
4. Other Dairy Cattle	946	104	549
5. Beef Breeding Cattle	888	328	1,792
6. Beef Feeder Cattle	19,603	43,123	20,545
7. Hogs Complete & Mixed	27,499	60,569	12,600
8. Hogs Finishing	17,063	40,244	21,924
9. Hogs Producing Weaning Pigs	2,972	6,868	3,086
10. Sheep, Goats & Wool, Farm Flock	673	554	382
11. Sheep & Wool, Feeder Lambs	195	149	
12. Chickens (Including Hens & Broilers)	10	22	15
13. Turkeys			
14. Eggs	370		1,813
15. Other Productive Livestock	11		25
16. Other Miscellaneous Livestock Income	145		20
17. Total Sales of Productive Livestock	\$ 80,671 *	157,492 *	71,994 *
18. Sale of Crops			
19. Wheat	1,068	1,039	1,048
19A. Durum			
20. Other Small Grains	261	202	264
21. Corn	27,400	45,793	27,898
22. Soybeans	26,170	41,116	25,630
22A. Sunflowers			
23. Other Row Crops	2,440	4,575	216
24. Legumes & Other Forage	451	192	586
25. Grass Seed			
26. Fruit & Nuts			
27. Vegetable Roadside Market & Specialty			
28. Nursery, Timber & Other	369	723	805
29. Set Aside Acres-Government Payments	12,001	20,164	9,624
29A. Pik Acres			
29B. Sale of Crops+Supplies Purch for Resale	1,903	1,695	1,145
30. Total Sales From Crops	\$ 72,063 *	115,499 *	67,216 *
31. Cap. Assets Sold (Auto/Trk/Mach)	426	444	447
31A. Cap. Assets Sold (Buildings & Improv.)	204	4	
31B. Cap. Assets Sold (Land)	1,612	6,886	1,157
32. Gas Tax Refund			
33. Income From Work Off the Farm	2,668	7,229	1,735
34. Custom Work Enterprise Income	523	1,349	319
35. Patronage Refunds	425	268	596
36. Miscellaneous Farm Income	4,873	7,191	4,072
37. Total Farm Sales	\$ 163,465 *	296,362 *	147,536 *
38. Increase in Farm Capital		24,360	
39. Family Living From the Farm	295	304	223
40. Total Farm Receipts	\$ 163,760 *	321,026 *	147,759 *

*Operators labor and management earnings, Page 6, Line 46, represent the return to the operator after all expenses are deducted. The calculation is determined by subtracting Table 2B Line 45 From Line 40 Table 2A.

Table 2B - Whole Farm Summary of Cash Expenses - 1986

Items	Average 280	High 56	Low 56
1. Purchase of Livestock			
2. Dairy Cows	\$ 185		38
3. Other Dairy Cattle	263		17
4. Beef Breeding Cattle	248	50	49
5. Beef Feeder Cattle	11,324	27,166	11,360
6. Hogs Complete & Mixed	1,782	3,719	644
7. Hogs Finishing	4,210	6,744	6,567
8. Hogs Producing Weaning Pigs	621	1,652	339
9. Sheep & Goats	116	121	243
10. Sheep, Feeder Lambs	227	579	
11. Chickens (Including Hens & Broilers)	7	11	2
12. Turkeys			
13. Other Productive Livestock	1		
14. Miscellaneous Livestock Expense	3,296	5,636	2,815
14A. Purch of Crops/Supplies Purch for Resale	2,265	1,658	1,403
15. Feed Bought	22,234	46,823	18,273
16. Fertilizer	6,671	10,616	6,662
17. Chemicals	4,971	7,284	5,066
18. Other Crop Expense	9,699	14,367	10,246
19. Irrigation Operation Expense			
20. Custom Work Ent. Costs, Incl. Labor	49	119	90
21. Custom Work Hired	3,086	5,259	2,783
22. Repair & Upkeep of Livestock Equip.	1,200	1,850	1,355
23. Repair & Upkeep of Farm Real Estate	864	1,411	964
24. Gas, Diesel + Lubricants Bought (F S)	4,329	6,231	4,301
25. Repair of Mach, Tractor, Truck & Auto	6,686	9,228	7,065
26. Repair & Upkeep of Irrigation Equip.			
27. Repairs - Custom Work Enterprise	113	56	39
28. Wages of Hired Labor	3,299	5,485	4,406
29. Personal Property & Real Estate Taxes	3,033	4,046	2,753
30. General Farm Expense	2,595	4,100	2,328
31. Telephone Expense (Farm Share)	368	415	351
32. Electricity Expense (Farm Share)	1,780	2,798	1,742
33. Total Cash Operating Expense	\$ 95,522 *	167,424 *	91,901 *
34. Power & Mach. Bought (Farm Share)	9,227	15,442	12,602
35. Irrigation Equipment Bought			
36. Custom Work Equipment Bought	251	97	
37. Livestock Equipment Bought	1,063	1,911	679
38. New Real Estate - Buildings/Improvements	3,699	6,848	5,402
38A. New Real Estate - Land	1,981	4,552	4,314
39. Total Farm Purchases (33) Thru (38A)	\$ 111,743 *	196,274 *	114,898 *
40. Decrease in Farm Capital	3,331		37,560
41. Interest on Farm Capital (7% Chg)	35,335	52,172	39,089
42. Unpaid Family Labor	222	270	138
43. Labor Charge Partner & Other Operators	218	306	171
44. Board Furnished Hired Labor	9		
45. Total Farm Expense (39) thru (44)	\$ 150,858 *	249,022 *	191,856 *
46. Return to Oper. Labor & Mgmt-Single Opert. (W.F.) (2A/40) - (45)	12,902 *	72,004 *	(44,097) *
47. Number of Operators	1	1	1
48. Full Time Operators Equivalents	1.09	1.19	1.13
49. Return to Operator Labor & Mgt/Full Time Operator Equivalent	11,209	62,763	(41,967)

Table 3 - Enterprise Statement For Whole Farm - 1986

Items	Average 280	High 56	Low 56
1. Returns & Net Increases			
2. Productive Livestock			
3. Dairy Cows	\$ 8,933	5,026	7,401
4. Other Dairy Cattle	2,756	877	1,893
5. Beef Breeding Cattle	1,309	523	1,946
6. Feeder Cattle	8,417	16,985	8,895
7. Hogs, Complete & Mixed	28,362	64,505	12,588
8. Hogs Finishing Enterprise	10,703	25,397	12,668
9. Producing Weaning Pigs	4,954	14,682	4,751
10. Sheep & Goats	685	411	364
11. Sheep, Feeder Lambs	105	253	
12. Chickens (Including Hens & Broilers)	300	11	1,444
13. Turkeys			
14. Other Productive Livestock	61		17
15. Total All Productive Livestock	\$ 66,585 *	128,670 *	51,967 *
16. Value of Feed Fed to Livestock (Minus)	32,366	58,104	29,411
17. Return Over Feed From Livestock	34,219	70,566	22,557
18. Crop, Seed & Feed	57,316	102,897	44,301
18A. Crops + Supplies Purch For Resale (Net)	(362)	38	(258)
19. Patronage Refunds	425	268	596
20. Miscellaneous Farm Income	4,873	7,191	4,072
21. Custom Work Enterprises	324	1,164	191
22. Total Returns & Net Increases	\$ 96,795 *	182,124 *	71,459 *
23. Expenses & Net Decreases			
24. Truck & Auto (Farm Share)	\$ 3,750	4,557	4,312
25. Tractors & Crop Machinery	18,443	26,036	23,391
26. Irrigation Equipment			
27. Electricity	1,780	2,798	1,742
28. Livestock Equipment	3,047	5,544	2,897
29. Buildings, Fences & Tiling	6,772	10,351	12,168
30. Bare Land	2,749	(6,071)	19,204
31. Miscellaneous Livestock Expense	3,296	5,636	2,815
32. Labor-Paid, Unpaid, (Excl Custom Work labor)	2,504	231	4,332
33. Labor Charge for Other Operator(s)	218	306	171
34. Property Tax	3,033	4,046	2,753
35. General Farm Expense	2,595	4,100	2,328
35A. Telephone Expense	368	415	351
36. Interest on Farm Capital (7% Chg)	35,335	52,172	39,089
37. Total Expenses & Net Decreases	\$ 83,890 *	110,121 *	115,553 *
38. Return to Operator & Mgt. (Single Operator)	\$ 12,905	72,003	(44,094)
39. Number of Farm Operators	1	1	1
40. Full Time Operators Equivalents	1.09	1.19	1.13
41. Rtrn to Opr Labor & Mgt/Full Time Opr.	11,209	62,763	(41,967)

Table 3 combines Table 1, 2A & 3. Cash receipts and expenses are adjusted for changes in inventory for each enterprise and for each category of expense in order to show net increases and net decreases. The resulting return to operators labor and management is the same as those on page 6 Line 46.

Table 4 - Household and Personal Expenses - 1986

Items	Average of 204 FARMS	Per Adult Equivalent
1. Number of Persons - Family	4	
2. Number of Adult Equivalent - Family	3.0	
3. Church & Welfare	\$ 877	292.33
4. Medical Care & Health Insurance	2,273	757.67
5. Food & Meals Bought	4,181	1393.67
6. Operating Expense & Supplies	1,880	626.67
7. Furnishings & Equipment	1,073	357.67
8. Clothing & Clothing Materials	1,150	383.33
9. Personal Care & Spending	1,550	516.67
10. Education	367	122.33
11. Recreation	743	247.67
12. Gifts & Special Events	746	248.67
12A. Personal Interest	95	31.67
13. Personal Share Truck & Auto Expense	952	317.33
14. Operator Share Upkeep on Dwelling	296	98.67
14A. Cash Rent (Personal)	11	3.67
15. Personal Share Telephone & Elec. Exp	650	216.67
15A. Personal Share - General Farm Expense	32	10.67
16. Total Cash Living Expense	\$ 16,876	5,625.36 *
17. Personal Share New Truck & Auto	726	242.00
18. New Dwelling Bought	20	6.67
19. Taxes & Other Deductions	1,213	404.33
20. Life Insurance	973	324.33
21. Total Household & Personal	\$ 19,808	6,602.67 *
22. Total Family Living	314	104.67
23. Total Cash & Non-Cash Expenses	\$ 20,122	6,707.33 *
23A. Paid on Personal Debt	94	31.33
23B. Savings + Investments (Excl. Life Ins)	1,261	420.33
23C. Total Cash/Noncash Funds for Pers. Use\$	21,476	

Family Living From The Farm

	Quantity	Operator Share
26. Milk & Cream (Quarts)	82	20
27. Beef + Buffalo (Pounds)	325	215
28. Pork (Pounds)	161	72
29. Lamb, Mutton, Goat (Pounds)	3	2
30. Poultry, All Fowl (Pounds)	3	2
32. Vegetables, Fruits & Other Prod. + Fuel		1
33. Total Family Living From the Farm		\$ 312 *

Household and personal accounts are important if the family is to manage their financial affairs wisely. The household and personal expenses and receipts are presented in Table 4. *These families spent an average of \$1,406 per month for cash living expense (line 16) and a total of \$1,650 per month for total personal and household expense (Line 21).

**Table 4 includes 204 farm families who kept complete household and personal records.

Table 5 - Statement of Financial Position - 1986
For Those Operators With a Complete Record of Assets & Liabilities

Items	Average 280	
	Jan. 1	Dec. 31
1. Total Productive Livestock	\$ 34,044	38,602
2. Crop, Seed & Feed	46,801	45,486
3. Total Power, Machinery & Equipment	34,245	33,173
4. Bare Land	110,410	108,710
5. Buildings, Fences, Etc.	32,010	29,853
6. Total Farm Capital	\$ 257,510	255,824 *
7. Non-Farm Assets	23,009	26,949
7A. Cash On Hand & In Bank	6,872	9,096
7B. Non Farm Real Estate	1,954	1,975
8. Dwelling	16,507	16,942
9. Total Assets	\$ 305,852	310,786 *
10. Real Estate Mortgages	93,514	90,074
11. Chattel Mortgages	60,592	57,242
12. Notes	19,311	18,272
13. Accounts Payable	1,987	1,722
14. Total Liabilities	\$ 175,404	167,310 *
15. Farmers Net Worth	\$ 130,448	143,476 *
16. Gain (or Loss) in Net Worth		\$ 13,028 *
* * * * *		
17. Supplementary Management Information		
18. Return to Operators Labor & Mgmt. (6B/47)	\$ 12,565	
19. Return to Capital & Family Labor (6b/48)	17,425	
20. Non-Farm Income		
21. Outside Investment Income	1,163	
22. Other Personal Income & Income Tax Refund	9,983	
22A. Sale of (P.S.) Dwelling, Auto & Truck	26	
23. Total Non-Farm Income	\$ 11,172	
24. Total Family Farm & Non-Farm Income	\$ 28,597	
25. Total Money Borrowed (Business + Personal)	74,376	
26. Total Paid on Debt (Principal-Business Only)	82,195	
27. Total Cash/Noncash Expense/Pers. Use (4/23C)	20,003	
28. Ratio: Total Farm-Expenses To Receipts (O.S.)	0.924	
	Jan. 1	Dec. 31
29. Ratio: Total-Assets to Liabilities	1.744	1.858
30. Ratio: Non-Real Estate-Assets to Liab.	1.770	1.985
31. Ratio: Real Estate-Assets to Liab.	1.720	1.748
32. Ratio: Net Worth to Total Liabilities	0.744	0.858
33. *Ratio: Cash Oper. Exp to adj Total Farm Sales (O.S.)		0.780
34. Ratio: Total Farm Recpts to Ave Farm Capital (W.F.)		0.346
35. Ratio: Total Farm Recpts to Ave Farm Capital (O.S.)		0.640
36. Inventoried Value of Farm Per Owned Acre		1,375
37. Inventoried Value of Farm Per Tillable Acre		1,555
38. Debt (All Sources) Per Acre Owned		1,479
*Adjusted Farm Sales Does Not Include Sale of Capital Assets		

Table 5 - Statement of Financial Position - 1986
For Those Operators With a Complete Record of Assets & Liabilities

Items	56 High Profit Farms		56 Low Profit Farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
1. Total Productive Livestock	\$ 50,135	63,105	\$ 29,024	27,874
2. Crop, Seed & Feed	55,525	64,845	59,284	47,999
3. Total Power, Machinery & Equipment	33,452	37,801	38,245	35,231
4. Bare Land	101,336	111,880	172,484	156,795
5. Buildings, Fences, Etc.	43,322	42,097	35,518	31,020
6. Total Farm Capital	\$ 283,770	319,728 *	\$ 334,555	298,919 *
7. Non-Farm Assets	22,364	28,195	27,547	31,954
7A. Cash On Hand & In Bank	4,339	5,994	8,239	13,343
7B. Non Farm Real Estate	1,251	1,425	2,873	2,721
8. Dwelling	15,100	15,410	16,296	18,818
9. Total Assets	\$ 326,824	370,752 *	\$ 389,510	365,755 *
10. Real Estate Mortgages	100,558	95,216	111,575	111,804
11. Chattel Mortgages	83,814	81,465	50,964	47,155
12. Notes	23,179	20,883	30,405	29,151
13. Accounts Payable	1,382	1,554	2,772	2,653
14. Total Liabilities	\$ 208,933	199,118 *	\$ 195,716	190,763 *
15. Farmers Net Worth	\$ 117,891	171,634 *	\$ 193,794	174,992 *
16. Gain (or Loss) in Net Worth		\$ 53,743 *		\$ (18,802) *
* * * * *				
17. Supplementary Management Information				
18. Return to Operators Labor & Mgmt. (6B/47)	60,032		(37,804)	
19. Return to Capital & Family Labor (6B/48)	63,299		(26,879)	
20. Non-Farm Income				
21. Outside Investment Income	1,114		2,315	
22. Other Personal Income & Income Tax Refund	7,916		17,672	
22A. Sale of (P.S.) Dwelling, Auto & Truck	18			
23. Total Non-Farm Income	9,049		19,987	
24. Total Family Farm & Non-Farm Income	72,348		(6,892)	
25. Total Money Borrowed (Business + Personal)	112,312		77,885	
26. Total Paid on Debt (Principal-Business Only)	121,977		82,718	
27. Total Cash/Noncash Expense/Pers. Use (4/23C)	24,290		19,182	
28. Ratio: Total Farm-Expenses To Receipts (O.S.)	0.776		1.271	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
29. Ratio: Total-Assets to Liabilities	1.564	1.862	1.990	1.917
30. Ratio: Non-Real Estate-Assets to Liab.	1.530	1.924	1.929	1.981
31. Ratio: Real Estate-Assets to Liab.	1.601	1.794	2.036	1.873
32. Ratio: Net Worth to Total Liabilities	0.564	0.862	0.990	0.917
33. *Ratio: Cash Oper. Exp to adj Total Farm Sales (O.S.)		0.759		0.802
34. Ratio: Total Farm Recpts to Ave Farm Capital (W.F.)		0.439		0.261
35. Ratio: Total Farm Recpts to Ave Farm Capital (O.S.)		0.887		0.440
36. Inventoried Value of Farm Per Owned Acre		1,375		1,631
37. Inventoried Value of Farm Per Tillable Acre		1,479		1,960
38. Debt (All Sources) Per Acre Owned		1,616		1,506

*Adjusted Farm Sales Does Not Include Sale of Capital Assets

The Net Worth statement presents a picture of the financial structure of the operator's share of the farm business at the beginning and end of the year. The gain or loss in net worth is a dollar measure of progress. This statement accurately kept, over a period of years is one of the best measures of financial progress.

The supplementary information listed in table 5 is helpful in studying the financial structure of the farm.

*The ratio of total farm expense to total farm receipts (line 28) is a way of expressing the so-called margin. It answers the question, "How many dollars does it cost me to take in \$100"?

**The ratio of assets to liabilities (line 29) indicates the degree of solvency at the beginning and end of the year. This ratio is often referred to as the "Net Capital Ratio". It answers the question: "How many dollars of total

Table 6A - Operator's Share of Cash Receipts - 1986

Items	Average 280	High 56	Low 56
1. Sale of Livestock & Livestock Products			
2. Dairy Cows	\$ 980	514	1,130
3. Dairy Products	9,254	7,035	6,582
4. Other Dairy Cattle	933	411	468
5. Beef Breeding Cattle	803	437	1,284
6. Beef Feeder Cattle	18,252	27,852	14,303
7. Hogs Complete & Mixed	26,543	57,506	16,483
8. Hogs Finishing	16,286	35,699	10,723
9. Hogs Producing Weaning Pigs	2,785	4,221	2,097
10. Sheep, Goats & Wool, Farm Flock	661	858	130
11. Sheep & Wool, Feeder Lambs	195		
12. Chickens (Including Hens & Broilers)	10		
13. Turkeys			
14. Eggs	370		1,813
15. Other Productive Livestock	9		17
16. Other Miscellaneous Livestock Income	145		131
17. Total Sales of Productive Livestock	\$ 77,226 *	134,533 *	55,161 *
18. Sale of Crops			
19. Wheat	995	1,520	710
20. Other Small Grains	238	108	217
21. Corn	23,709	35,999	21,471
22. Soybeans	23,185	27,917	26,395
22A. Sunflowers			
23. Other Row Crops	2,440	6,751	39
24. Legumes & Other Forage	424	349	861
25. Grass Seed			
26. Fruit & Nuts			
27. Vegetable Roadside Market & Specialty			
28. Nursery, Timber & Other	333	723	623
29. Set Aside Acres-Government Payments	11,069	15,287	12,334
29A. Pik Acres			
29B. Sale of Crops+Supplies Purch for Resale	1,903	1,027	867
30. Total Sales From Crops + Supplies	\$ 64,296 *	89,681 *	63,517 *
31. Cap. Assets Sold (Auto/Trk/Mach.)	375	505	261
31A. Cap. Assets Sold (Bldgs & Improvements)	203		
31B. Cap. Assets Sold (Land)	1,612	1,351	1,157
32. Gas Tax Refund			
33. Income From Work Off the Farm	2,666	2,089	7,716
34. Custom Work Enterprise Income	523	1,415	319
35. Patronage Refunds	422	405	529
36. Miscellaneous Farm Income	4,829	6,188	6,238
37. Total Farm Sales	\$ 152,152 *	236,167 *	134,898 *
38. Increase in Farm Capital		36,539	
39. Family Living From the Farm	287	360	187
40. Total Farm Receipts (37)+(38)+(39)	\$ 152,439 *	273,066 *	135,085 *
41. Adjusted Total Farm Sales (37) - (31)	149,962	234,311	133,480
42. Total Cash Farm Operating Expense	117,302	179,965	106,176
43. Net Cash Operating Income	\$ 32,659 *	54,345 *	27,306 *

Table 6A is derived the same way as Table 2A with the exception that landlord's share of the farm business is not included. For the owner-operator, Table 2A and 6A are the same.

Table 6B - Operator's Share of Cash Expenses - 1986

Items	Average 280	High 56	Low 56
1. Purchase of Livestock			
2. Dairy Cows	\$ 185	4	56
3. Other Dairy Cattle	260	57	28
4. Beef Breeding Cattle	248	18,506	354
5. Beef Feeder Cattle	10,507	3,723	5,935
6. Hogs Complete & Mixed	1,753	6,304	876
7. Hogs Finishing	4,078	1,160	3,637
8. Hogs Producing Weaning Pigs	621	139	237
9. Sheep & Goats	115		3
10. Sheep, Feeder Lambs	227		
11. Chickens (Including Hens & Broilers)	7		1
12. Turkeys			
13. Other Productive Livestock	1		
14. Miscellaneous Livestock Expense	3,233	5,268	2,605
14A. Purch of Crops/Supplies Purch for Resale	2,265	1,997	1,491
15. Feed Bought	21,515	42,629	13,308
16. Fertilizer	6,104	8,365	7,000
17. Chemicals	4,506	6,288	4,802
18. Other Crop Expense	9,253	11,700	11,135
19. Irrigation Operation Expense			
20. Custom Work Ent. Costs, Incl. Labor	49	117	90
21. Custom Work Hired	3,043	4,359	3,247
22. Repair & Upkeep of Livestock Equip.	1,180	1,938	1,139
23. Repair & Upkeep of Farm Real Estate	854	1,550	904
24. Gas, Diesel + Lubricants (F S)	4,286	5,725	4,478
25. Repair of Mach, Tractor, Truck & Auto	6,593	8,624	6,755
26. Repair & Upkeep of Irrigation Equip.			
27. Repairs - Custom Work Enterprise	112	249	39
28. Wages of Hired Labor	3,290	5,235	3,788
29. Personal Property & Real Estate Taxes	1,079	1,245	1,537
30. Cash Rent	13,755	19,286	17,110
31. General Farm Expense	2,560	3,690	2,386
32. Telephone Expense (Farm Share)	364	408	387
33. Electricity Expense (Farm Share)	1,765	2,569	1,594
34. Interest Actually Paid	13,495	18,831	11,256
35. Total Cash Operating Expense	\$ 117,303 *	179,966 *	106,178 *
36. Power & Mach. Bought (Farm Share)	9,012	15,888	10,243
37. Irrigation Equipment Bought			
38. Custom Work Equipment Bought	251	97	
39. Livestock Equipment Bought	1,029	1,423	285
40. New Real Estate - Buildings/Improvements	3,640	6,221	5,844
40A. New Real Estate - Land	1,981	5,808	2,652
41. Total Farm Purchases (33) Thru (38A)	\$ 133,216 *	209,403 *	125,202 *
42. Decrease in Farm Capital	1,743		36,190
43. Interest on Farm Capital (7% Chg)	4,782	3,391	11,383
44. Unpaid Family Labor	222	281	152
45. Board Furnished Hired Labor	6		6
46. Total Farm Expense (41) Thru (45)	\$ 139,969 *	213,075 *	172,933 *
47. Return to Oper. Labor & Mgmt-Single Opert. (6A/40) - (46)	\$ 12,470 *	59,991 *	(37,848) *
48. Return to Capital & Family Labor (47)+(44)+(43)	\$ 17,474	63,663	(26,313)

Return to Capital and Family Labor, Line 48 of this page represents the amount

THERMOMETER CHART

Using your figures from page 15, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for farms included in this summary are located between the dotted lines across the center of the chart.

Return To Labor & Mgt.	Index Of Crop Yield	Gross Return Per Acre	Index Return Per \$100 feed fed	Lvstk Units Per Acre	Work Units Per Worker	Build & Equip Expense Per W.U.	
125,000	124	230	132	38	830	485	0
110,000	121	225	128	36	780	468	10
95,000	118	220	124	34	730	445	20
80,000	115	215	120	32	680	425	30
65,000	112	210	116	30	630	405	40
50,000	109	205	112	28	580	385	50
35,000	106	200	108	26	530	365	60
20,000	103	195	104	24	480	345	70
-----	-----	-----	-----	-----	-----	-----	-----
12,907	100	190	100	22	425	325	80
-----	-----	-----	-----	-----	-----	-----	-----
-10,000	97	185	96	20	380	305	90
-25,000	94	180	92	18	330	285	100
-40,000	91	175	88	16	280	265	110
-55,000	88	170	84	14	230	245	120
-70,000	85	165	80	12	180	225	130
-85,000	82	160	76	10	130	205	140

MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

The following explanations and definitions are for use in interpreting Table 8 and the Thermometer Chart on page 13.

1. RET TO LABOR & MGT - A measure of the relative financial return for the operator's labor taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. This is based on the whole farm business and is found 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.
3. PERCENT OF TILLABLE LAND IN HIGH RETURN CROPS - A measure of crop selection based on a rating of individual crops. Crop ratings take into account such things as dollar return, effect on soil, TDN yield, labor required, etc. Ratings can be found on Table 9.
4. GROSS RETURN PER ACRE - An additional measure of crop selection based on total production times an average price for the crops.
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.
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 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 cost of items listed in Table 3 divided by the number of work units.
10. FARM CAPITAL INVESTMENT PER WORKER - Indicates size of business. Useful in comparing a farm business to other industries or businesses.

Other items listed on Table 8 are related to the above measures and serve to further define and describe the efficiency level of a farm business.

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

Table 8 - Measures of Farm Organization and Management Efficiency - 1986

Items	Average 280	High 56	Low 56
1. Return to Operators Labor & Management	\$ 12,907	72,001	(44,096)
2. Crop Yield Index	100.0	111.6	97.1
3. % Tillable Land in High Return Crops	95.4	97.5	96.2
4. Gross Return per Tillable Acre	\$ 169.60	190.41	165.65
5. Return per \$100 Feed Fed Productive Livestock Index	100.0	104.3	91.8
6. *Livestock Units per 100 Acres	21.65	28.31	17.4
7. Size of Business - Work Units	426.94	759.25	369.89
8. Work Units per Worker	323.44	496.24	260.49
9. Power, Machinery, Equipment, Building Expense per Work Unit	\$ 79.23	64.93	120.69
10. Farm Capital Investment per Worker	\$ 382,415	487,130	393,252

30. Number of Animal Units	90.37	170.23	73.6
31. Work Units			
32. Crops	200.15	292.96	198.37
33. Productive Livestock	182.47	308.79	149.49
34. Other Productive Livestock	44.32	157.49	22.02
35. Expenses Per Work Unit			
36. Tractor & Crop Machinery Expenses	\$ 44.24	34.30	63.42
37. Farm Share of Auto & Truck	\$ 8.79	6.00	11.69
38. Farm Share of Electric Expense	\$ 4.17	3.69	4.72
39. Livestock Equipment Expense	\$ 7.14	7.30	7.85
40. Building, Fence & Tiling Expense	\$ 15.88	13.64	32.99
40A. Other exp/Work Units (Inc. Custom Ent)			
40B. General Farm Telephone/Other Utilities Except Electricity	\$ 6.94	5.95	7.24
40C. Hired Labor	\$ 7.73	7.22	11.91
41.** Tractor & Crop Machinery Expense per Crop Acre	\$ 44.24	43.30	55.39
42. Farm Power & Machinery Cost Allocation To Livestock	\$ 1,973.43	3,082.10	1,772.61
43. Bldg., Fence & Tiling Cost Allocated to Crops BCAF (5)	\$ 3,774.11	4,379.37	8,680.93
44. *Acres Include All Tillable Land, Non-Tillable Hay & Pasture			
45. **Acres Include all Tillable Land Plus Acres in Non-Tillable Hay			

TABLE 9 - CROP DATA FOR MAJOR CROPS, DISTRIBUTION OF ACRES & YIELDS - 1986

Crop	ACRES		
	Average of 280 Farms	56 Most Profitable Farms	56 Least Profitable Farms
Total Small Grain + Canning Peas	20.7 *	17.7 *	20.4 *
Total Row Crop	333.8 *	509.0 *	335.5 *
Total Legumes, Including Seed	13.8 *	9.9 *	20.4 *
Total Other Hay	1.1 *	1.6 *	0.4 *
Total Silage + Fodder	9.6 *	10.5 *	8.8 *
Total Tillable Pasture	0.1 *	*	0.3 *
Total Fallow + Idle Land	36.5 *	52.2 *	36.0 *
Total Tillable Land	415.6 *	600.9 *	421.8 *
Total Non-Tillable Hay/Pasture	1.7 *	0.4 *	1.2 *
Wild Hay Not Harvested (Non-Tillable)	2.3	0.3	4.7
Pasture Not Harvested	13.5	9.0	16.4
Roads + Waste	10.4	12.7	9.9
Farmstead	9.8	9.6	11.4
TOTAL LAND NOT HARVESTED	36.0 *	31.6 *	42.4 *
TOTAL NON-TILLABLE LAND	37.7 *	32.0 *	43.6 *
TOTAL LAND IN FARM OR RANCH	453.3 *	632.9 *	465.4 *

SUPPLEMENTARY MANAGEMENT INFORMATION

	280 Average All Farms	56 High Earnings Farms	56 Low Earnings Farms
Percent Land Tillable	91.7	94.9	90.6
Percent land in High Return Crops	95.4	97.5	96.2
*Fertilizer Cost per Acre	16.24	18.00	16.03
*Crop Chemicals per Acre	12.46	13.44	12.90
*Seed and Other Costs per Acre	23.52	25.28	22.32
*Gas, Diesel + Lubricants per Acre	12.37	12.37	11.92
*Repair and Maintenance Cost per Acre	17.63	16.82	18.31

* Tillable land minus tillable pasture, fallow and idle land.

YIELDS

	Number of Farms Growing	Crop Rank	Average Yield All Growers	20% High Yield	20% Low Yield
Corn	280	A	126.0	153.3	91.6
Soybeans	280	A	35.7	46.9	23.3
Alfalfa Hay	138	A	4.2	6.7	1.7
Corn Silage	71	B	14.9	21.6	8.9
Spring Wheat	90	B	37.8	50.2	26.3
Oats	106	D	56.7	83.2	38.1

Table 10 - Crop Data For Oats, Feed - 1986

	Average 106	High 21	Low 21
1. Acres	19.3	21.2	16.2
	Per Acre	Per Acre	Per Acre
2. Yield	56.7	83.2	38.1
3. Value Per Production Unit	0.92	1.02	0.83
4. Crop Product Return	\$ 52.18	84.88	31.60
5. Other Crop Income**	34.72	49.91	16.60
6. Total Crop Return	\$ 86.90 *	134.79 *	48.20 *
7. Direct Costs			
8. Fertilizer	7.88	2.56	16.23
9. Chemicals	1.45	1.53	1.91
10. Seed	7.20	5.58	11.11
10A. Crop Drying			
10B. Other Expense	0.83	1.63	0.62
11. Special Hired Labor	0.26	0.42	
12. Custom Work Hired	3.52	2.42	3.09
13. Irrigation Operation			
14. Total Direct Costs	\$ 21.14	14.14	32.96
15. Return Over Direct Costs	\$ 65.76 *	120.65 *	15.24 *
16. Allocated Costs (Direct + Fixed)			
17. Farm Power + Machinery - Ownership	13.73	16.79	15.11
18. Farm Power + Machinery - Operation	13.98	16.08	11.61
19. Irrig. Equip Ownership (Manual Alloc)			
20. Land Costs	60.27	62.90	63.52
21. Miscellaneous Costs	0.26		1.42
22. *Interest on Mach. + Equip. Investment	3.10	3.16	2.69
23. Total Allocated Costs	\$ 91.34	98.93	94.35
24. Return Over All Listed Costs	\$ (25.58) *	21.72 *	(79.11) *
25. Supplementary Management Information			
26. Work Units Assigned Per Acre	0.30	0.30	0.30
27. Power Costs Allocation Factor	1.00	1.00	1.00
28. Total Listed Cost/Unit of Production	1.98	1.36	3.34
29. Return Over Listed Costs Per Unit	(0.45)	0.26	(2.08)
30. Breakeven Yield/Units of Production	122.26	110.85	153.39
30A. Estimated Total Machine Costs/Acre	33.16	37.64	31.47
31. Total Listed Costs Per Acre	\$ 112.48 *	113.07 *	127.31 *
32. Other Possible Costs Not Listed			
33. Utilities + Other General Farm Expenses	57.00	38.50	51.91
33A. Buildings, Fences + Tiling Costs			
34. Interest Allocation			
35. Other Costs Not Listed			
36. Total Costs			

*Does not include interest on investment of irrigation equipment

**Line 5 includes value of crop residue, straw, insurance loss payments and disaster aid payments.

LINES 13,17,18, + 22 were allocated to this crop by special formula

Table 10 - Crop Data For Spring Wheat, Canning Peas, & Sugarbeets 1986

	Canning Peas 4 Farms	Wheat 90 Farms	Sugarbeets 4 Farms
1. Acres	30.0	38.0	217.5
2. Yield	Per Acre 221.4	Per Acre 37.8	Per Acre 14.7
3. Value Per Production Unit	1.00	2.48	34.22
4. Crop Product Return	\$ 221.40	93.79	503.47
5. Other Crop Income**		10.26	
6. Total Crop Return	\$ 221.40 *	104.05 *	503.47 *
7. Direct Costs			
8. Fertilizer	9.60	19.50	29.69
9. Chemicals	3.17	2.68	50.89
10. Seed	33.13	10.61	37.05
10A. Crop Drying			
10B. Other Expense	22.00	1.64	6.15
11. Special Hired Labor		0.68	55.31
12. Custom Work Hired		2.37	31.30
13. Irrigation Operation			
14. Total Direct Costs	\$ 67.90	37.48	210.39
15. Return Over Direct Costs	\$ 153.50 *	66.57 *	293.08 *
16. Allocated Costs (Direct + Fixed)			
17. Farm Power + Machinery - Ownership	2.08	14.58	46.14
18. Farm Power + Machinery - Operation	15.71	15.38	98.20
19. Irrig. Equip. Ownership (Manual Alloc)			
20. Land Costs	56.00	63.97	73.50
21. Miscellaneous Costs		0.26	
22. *Interest on Mach. + Equip. Investment	0.24	3.27	12.01
23. Total Allocated Costs	\$ 74.03	97.46	229.85
24. Return Over All Listed Costs	\$ 79.47 *	(30.89) *	63.23 *
25. Supplementary Management Information			
26. Work Units Assigned Per Acre	0.40	0.30	2.00
27. Power Costs Allocation Factor	1.00	1.00	1.00
28. Total Listed Cost/Unit of Production	0.64	3.57	29.92
29. Return Over Listed Costs Per Unit	0.36	(0.82)	4.30
30. Breakeven Yield/Units of Production	141.93	54.41	12.86
30A. Estimated Total Machine Costs/Acre	18.03	34.81	177.23
31. Total Listed Costs Per Acre	\$ 141.93 *	134.94 *	440.24 *
32. Other Possible Costs Not Listed			
33. Utilities +Other General Farm Expenses	64.67	116.53	9,533.00
33A. Buildings, Fences + Tiling Costs			
34. Interest Allocation			
35. Other Costs Not Listed			
36. Total Costs			

*Does not include interest on investment of irrigation equipment

**Line 5 includes value of crop residue, straw, insurance loss payments and disaster aid payments.

Lines 13,17,18, + 22 were allocated to this crop by special formula

Table 10 - Crop Data For Corn For Grain - 1986

	Average 280	High 86	Low 86
1. Acres	114.7	125.9	102.1
	Per Acre	Per Acre	Per Acre
2. Yield	126	153.3	91.6
3. Value Per Production Unit	1.69	1.72	1.62
4. Crop Product Return	\$ 213.01	263.71	148.43
5. Other Crop Income**	2.56	8.00	1.50
6. Total Crop Return	\$ 215.57 *	271.71 *	149.93 *
7. Direct Costs			
8. Fertilizer	32.41	33.15	28.21
9. Chemicals	14.28	13.65	18.13
10. Seed	19.99	20.71	18.30
10A. Crop Drying	10.91	10.19	10.19
10B. Other Expense	4.18	3.88	3.84
11. Special Hired Labor	1.24	1.95	0.52
12. Custom Work Hire	2.57	0.94	5.08
13. Irrigation Operation			
14. Total Direct Costs	\$ 85.58	84.47	84.27
15. Return Over Direct Costs	\$ 129.99 *	187.24 *	65.66 *
16. Allocated Costs (Direct + Fixed)			
17. Farm Power + Machinery - Ownership	24.99	29.03	27.06
18. Farm Power + Machinery - Operation	26.07	27.00	25.42
19. Irrig. Equip Ownership (Manual Alloc)			
20. Land Costs	67.21	77.74	54.81
21. Miscellaneous Costs	0.17	0.26	0.27
22. *Interest on Mach. + Equip. Investment	5.40	4.99	5.94
23. Total Allocated Costs	\$ 123.84	139.02	113.50
24. Return Over All Listed Costs	\$ 6.15 *	48.22 *	(47.84) *
25. Supplementary Management Information			
26. Work Units Assigned Per Acre	0.55	0.55	0.55
27. Power Costs Allocation Factor	1.00	1.00	1.00
28. Total Listed Cost/Unit of Production	1.66	1.46	2.16
29. Return Over Listed Costs Per Unit	0.05	0.31	(0.52)
30. Breakeven Yield/Units of Production	123.92	129.94	122.08
30A. Estimated Total Machine Costs/Acre	58.17	61.65	61.81
31. Total Listed Costs Per Acre	\$ 209.42 *	223.49 *	197.77 *
32. Other Possible Costs Not Listed			
33. Utilities + Other General Farm Expenses	815.70	826.26	576.40
33A. Buildings, Fences + Tiling Costs			
34. Interest Allocation			
35. Other Costs Not Listed			
36. Total Costs			

*Does not include interest on investment of irrigation equipment

**Line 5 includes value of crop residue, corn stalks, insurance loss payments, and disaster aid payments.

LINES 13,17,18, + 22 were allocated to this crop by special formula

Table 10 - Crop Data For Soybeans - 1986

	Average 280	High 84	Low 84
1. Acres	120.7	122.2	103.6
	Per Acre	Per Acre	Per Acre
2. Yield	35.7	46.9	23.3
3. Value Per Production Unit	4.43	4.52	4.32
4. Crop Product Return	\$ 158.11	211.95	100.78
5. Other Crop Income**	3.74	3.54	4.09
6. Total Crop Return	\$ 161.85 *	215.49 *	104.87 *
7. Direct Costs			
8. Fertilizer	1.26	1.57	1.39
9. Chemicals	12.37	10.47	12.64
10. Seed	8.80	7.81	8.91
10A. Crop Drying			
10B. Other Expense	6.88	8.72	5.25
11. Special Hired Labor	1.61	3.31	0.87
12. Custom Work Hired	1.52	0.62	1.94
13. Irrigation Operation			
14. Total Direct Costs	\$ 32.44	32.50	31.00
15. Return Over Direct Costs	\$ 129.41 *	182.99 *	73.87 *
16. Allocated Costs (Direct + Fixed)			
17. Farm Power + Machinery - Ownership	20.36	28.15	15.90
18. Farm Power + Machinery - Operation	21.40	20.88	20.48
19. Irrig. Equip Ownership (Manual Alloc)			
20. Land Costs	66.86	79.51	55.02
21. Miscellaneous Costs	0.21	0.46	0.17
22. *Interest on Mach. + Equip. Investment	4.35	4.39	4.65
23. Total Allocated Costs	\$ 113.18	133.39	96.22
24. Return Over All Listed Costs	\$ 16.23 *	49.60 *	(22.35) *
25. Supplementary Management Information			
26. Work Units Assigned Per Acre	0.45	0.45	0.45
27. Power Costs Allocation Factor	1.00	1.00	1.00
28. Total Listed Cost/Unit of Production	4.08	3.54	5.45
29. Return Over Listed Costs Per Unit	0.46	1.06	(0.96)
30. Breakeven Yield/Units of Production	32.87	36.70	29.45
30A. Estimated Total Machine Costs/Acre	47.12	53.83	42.32
31. Total Listed Costs Per Acre	\$ 145.62 *	165.89 *	127.22 *
32. Other Possible Costs Not Listed			
33. Utilities + Other General Farm Expenses	730.06	768.46	531.60
33A. Buildings, Fences, + Tiling Costs			
34. Interest Allocation			
35. Other Costs Not Listed			
36. Total Costs			

*Does not include interest on investment of irrigation equipment

**Line 5 includes value of crop residue, straw, insurance loss payments, and disaster aid payments.

LINES 13,17,18, + 22 were allocated to this crop by special formula

Table 10 - Crop Data For Alfalfa Hay - 1986

	Average 138	High 28	Low 28
1. Acres	27.5	23.1	33.3
	Per Acre	Per Acre	Per Acre
2. Yield	4.2	6.7	1.7
3. Value Per Production Unit	46.87	46.05	42.46
4. Crop Product Return	\$ 197.71	308.68	73.96
5. Other Crop Income	1.13		2.22
6. Total Crop Return	\$ 198.84 *	308.68 *	76.18 *
7. Direct Costs			
8. Fertilizer	9.35	7.27	5.26
9. Chemicals	0.62	0.13	0.78
10. Seed	8.11	10.82	6.82
10A. Crop Drying			
10B. Other Expense	2.22	1.82	2.64
11. Special Hired Labor	0.47	0.48	0.06
12. Custom Work Hired	6.07	2.16	11.32
13. Irrigation Operation			
14. Total Direct Costs	\$ 26.84	22.68	26.88
15. Return Over Direct Costs	\$ 172.00 *	286.00 *	49.30 *
16. Allocated Costs (Direct + Fixed)			
17. Farm Power + Machinery - Ownership	22.36	24.40	20.23
18. Farm Power + Machinery - Operation	29.67	34.14	29.09
19. Irrig. Equip Ownership (Manual Alloc)			
20. Land Costs	59.35	56.50	59.43
21. Miscellaneous Costs	0.40		0.06
22. *Interest on Mach. + Equip. Investment	5.52	6.27	4.25
23. Total Allocated Costs	\$ 117.30	121.31	113.06
24. Return Over All Listed Costs	\$ 54.70 *	164.69 *	(63.76) *
25. Supplementary Management Information			
26. Work Units Assigned Per Acre	0.60	0.60	0.60
27. Power Costs Allocation Factor	1.00	1.00	1.00
28. Total Listed Cost/Unit of Production	34.17	21.49	80.36
29. Return Over Listed Costs Per Unit	13.02	24.58	(36.62)
30. Breakeven Yield/Units of Production	3.10	3.13	3.30
30A. Estimated Total Machine Costs/Acre	61.60	66.25	61.12
31. Total Listed Costs Per Acre	\$ 144.14 *	143.99 *	139.94 *
32. Other Possible Costs Not Listed			
33. Utilities + Other General Farm Expenses	179.39	98.10	209.32
33A. Buildings, Fences + Tiling Costs			
34. Interest Allocation			
35. Other Costs Not Listed			
36. Total Costs			

*Does not include interest on investment of irrigation equipment
 Lines 13,17,18, + 22 were allocated to this crop by special formula

Table 10 - Crop Data For Corn And Oats Silage - 1986

	Corn Silage 71 Farms	Oats Silage 38 Farms
1. Acres	23.7	22.5
	Per Acre	Per Acre
2. Yield	14.9	5.8
3. Value Per Production Unit	15.18	11.59
4. Crop Product Return	\$ 225.44	67.47
5. Other Crop Income**	2.78	92.71
6. Total Crop Return	\$ 228.22 *	160.18 *
7. Direct Costs		
8. Fertilizer	23.16	3.91
9. Chemicals	12.78	0.58
10. Seed	17.26	8.31
10A. Crop Drying		
10B. Other Expense	2.15	0.18
11. Special Hired Labor	0.51	0.67
12. Custom Work Hired	3.29	3.33
13. Irrigation Operation		
14. Total Direct Costs	\$ 59.15	16.98
15. Return Over Direct Costs	\$ 169.07 *	143.20 *
16. Allocated Costs (Direct + Fixed)		
17. Farm Power + Machinery - Ownership	28.87	13.35
18. Farm Power + Machinery - Operation	32.60	19.22
19. Irrig. Equip Ownership (Manual Alloc)		
20. Land Costs	61.24	54.03
21. Miscellaneous Costs		
22. *Interest on Mach. + Equip. Investment	6.44	3.56
23. Total Allocated Costs	\$ 129.15	90.16
24. Return Over All Listed Costs	\$ 39.92 *	53.04 *
25. Supplementary Management Information		
26. Work Units Assigned Per Acre	0.60	0.40
27. Power Costs Allocation Factor	1.00	1.00
28. Total Listed Cost/Unit of Production	12.68	18.40
29. Return Over Listed Costs Per Unit	2.69	9.11
30. Breakeven Yield/Units of Production	12.40	9.24
30A. Estimated Total Machine Costs/Acre	70.10	38.35
31. Total Listed Costs Per Acre	\$ 188.30 *	107.14 *
32. Other Possible Costs Not Listed		
33. Utilities + Other General Farm Expenses	172.32	129.37
33A. Buildings, Fences + Tiling costs	_____	_____
34. Interest Allocation	_____	_____
35. Other Costs Not Listed	_____	_____
36. Total Costs	_____	_____

*Does not include interest on investment of irrigation equipment

**Line 5 includes value of insurance loss payments and disaster aid payments.

Lines 13, 17, 18, + 22 were allocated to this crop by special formula

COSTS AND RETURNS FROM LIVESTOCK ENTERPRISES

Productive livestock enterprises are an important part of the Farm Business in all but a few of the farms involved in this report. Table 11 through 17A pertain to the major Livestock Enterprises.

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

Other cash cost items that are relatively easy to identify and classify in the record book are listed in each of the tables as other direct costs to livestock enterprises. The return over feed and supplemental cost, therefore, is not a new return, but rather the amount available after paying for the feed and those cost items listed to cover outlay for the costs of buildings, machinery, equipment, labor, taxes, insurance, interest, and other fixed costs.

In calculating the total return for the enterprise, the inventory change, purchase and sale of livestock, value of animals, butchered, products sold, and products used in the home are considered in order to arrive at the total income or total return for the enterprise. The total is divided by the net quantity produced or the number of head to arrive at a per unit figure for comparison.

Feed costs are determined from feed records kept by the farm operator. Purchase price is used for all feed purchased from off the farm. An average price is charged for each kind of farm grown feed. Farm grown feed prices are listed below.

The items listed as supplementary management information provide further clues to the reasons for high, low or average livestock returns.

All livestock costs and returns for livestock enterprises are computed as return per head or per hundred weight produced.

AVERAGE PRICES USED FOR 1986 FARM GROWN FEEDS

GRAINS		OTHER ROUGHAGES		PASTURE	
CORN	\$1.80 PER BU.	CORN SILAGE	\$17.00 PER TON	COWS	\$9.00 PER HEAD/MO
OATS	\$1.20 PER BU.	GRASS SILAGE	\$13.00 PER TON	YOUNG CATTLE	\$4.50 PER HEAD/MO
		LEGUME HAYLAGE	\$25.00 PER TON	HOGS	\$1.00 PER HEAD/MO
		OATS STRAW	\$1.00 PER BALE	SHEEP	\$1.25 PER HEAD/MO
HAY		CORN STACKS	\$10.00 PER TON	LAMBS	\$.90 PER HEAD/MO
ALFALFA	\$50.00 PER TON				
MIXED HAY	\$40.00 PER TON				
WILD HAY	\$30.00 PER TON				

EXPLANATION OF WORK UNITS

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

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

ITEM	NO. OF WORK UNITS	ITEM	NO. OF WORK UNITS	ITEM	NO. OF WORK UNITS
DAIRY COW	7.0/COW	BARLEY, WHEAT	.30/ACRE	SUGARBEETS	2.00/ACRE
OTHER DAIRY CATTLE	1.2/HEAD	OATS	.30/ACRE	OTHER LEGUME HAY	.40/ACRE
BEEF BREEDING COWS	1.5/HEAD	RYE, FLAX	.30/ACRE	MIXED HAY	.40/ACRE
BEEF FEEDERS	.12/CWT.	CANNING PEAS	.40/ACRE	TAME GRASS HAY	.20/ACRE
HOGS - COMPLETE	.12/CWT.	OATS SILAGE	.40/ACRE	ANNUAL HAY	.30/ACRE
HOGS - FINISHING	.06/CWT.	CORN FOR SEED	.60/ACRE	TILLABLE LAND IDLE	.05/ACRE
HOGS - WEAN. PIGS	1.4/LITTER	CORN FOR GRAIN	.55/ACRE	SET ASIDE ACRES	.05/ACRE
SHEEP, FARM FLOCK	.60/HEAD	CANNING CORN	.50/ACRE	SOYBEANS FOR SEED	.50/ACRE
LAMBS, FEEDER	.30/CWT.	SOYBEANS	.45/ACRE	SORGHUM FOR GRAIN	.50/ACRE
CHICKEN, LAYING FLOCK	5.0/100	CORN SILAGE	.60/ACRE	LABOR OFF THE FARM	1.0/\$40
BROILERS	.20/CWT.	ALFALFA HAY	.60/ACRE		

ANIMAL UNITS

One animal unit represents; one dairy cow or bull, two other dairy cattle, 1.25 beef cows or bulls, one feeder steer or heifer, 3.33 other beef cattle, 7 sheep, 14 lambs, 2.50 hogs, 5 pigs, 50 hens, or 1,100 lbs. of turkey produced.

OTHER NON-CASH COSTS

Unpaid Family Labor . . . \$25.00/DAY Board Furnished Hired Labor. . . \$6.00/DAY Interest on Farm Capital. . . 7%

Table 11A 6470 - Hogs, Farrow to Finish - 1986

	Average 80	High 17	Low 17
1. Pounds of Hogs Produced	170,529	191,438	135,943
	Per CWT	Per CWT	Per CWT
2. Net Value Produced	\$ 51.55	56.05	43.08
3. Other Miscellaneous Hog Income			
4. Total Value Produced	\$ 51.55 *	56.05 *	43.08 *
5. Pounds of Feed Fed			
6. Corn	245.4	257.0	204.6
7. Small Grain	6.6	2.4	5.4
8. Complete Ration	72.9	31.0	149.8
9. Protein, Salt, Mineral + Milk	78.5	82.5	53.1
10. Total Concentrates	403.4	372.9	412.9
11. Forages	0.3	0.2	
12. Feed Cost			
13. Grains	8.06	8.28	6.90
14. Complete Ration	4.98	1.95	11.42
15. Protein, Salt, Mineral + Milk	10.82	9.96	10.61
16. Forages	0.01	0.01	
17. Pasture			
18. Total Feed Costs	\$ 23.87	20.20	28.93
19. Return Over Feed Costs	\$ 27.68 *	35.85 *	14.15 *
20. Other Direct Costs			
21. Miscellaneous Livestock Expense	0.96	0.90	0.54
22. Veterinary Expense	0.97	1.48	0.83
23. Custom Hauling, Grinding, Marketing Etc.	0.24	0.13	0.37
24. Special Hired Labor	0.52	1.63	0.05
25. Total Other Direct Costs	\$ 2.69	4.14	1.79
26. Return Over Feed + Other Direct Costs	\$ 24.99 *	31.71 *	12.36 *
27. Allocated Costs			
28. Power + Machinery Costs (PCAF 1.00)	1.35	1.13	1.71
29. Livestock Equipment Costs (ECAF 5)	2.19	2.99	2.59
30. Building + Fences (BCAF 5)	2.45	3.19	2.43
31. Total Allocated Costs	\$ 5.99	7.31	6.73
32. Return Over All Listed Costs	\$ 19.00 *	24.40 *	5.63 *
33. Supplementary Management Information			
34. Return For \$100 Feed Fed	215.99	277.49	148.93
35. Price Received Per CWT All Animals	50.97	54.09	48.93
36. Price Received Per CWT Sold Mkt. Only	51.14	53.00	49.50
37. Number of Litters Farrowed	97	127	64
37A. Litters Per Bearing Female Per Year	1.6	2.0	1.6
38. Number of Pigs Born Per Litter	9.7	10.0	8.5
39. Number of Pigs Weaned Per Litter	8.2	8.8	7.3
39A. Number of Pigs Produced per Litter	7.7	7.8	7.2
40. Percent Death Loss	11.7	9.0	15.3
41. Average Weight of All Hogs Sold	239.2	242.7	246.1
42. Average Weight of Market Hogs Sold	228.8	220.9	236.1
43. Price Per CWT Concentrate Fed	5.91	5.41	7.01
44. Price Per Cwt Protein, Salt + Mineral	13.80	12.08	19.98
45. Pounds of Pork Purchased	4,963	7,972	12,162
46. Total Listed Costs Per Cwt Produced	\$ 32.55 *	31.65 *	37.45 *
47. Utilities + General Farm Expense	2,811.54	2,090.79	2,803.58
48. Interest Allocation			

Table 11B 6490 - Hogs, Finishing Enterprise - 1986

	Average 59	High 13	Low 13
1. Average Number of Pigs on Hand	262.1	180.8	180.4
2. Pounds of Hogs Produced	137,186	107,030	96,623
	Per CWT	Per CWT	Per CWT
3. Net Value Produced	\$ 38.75	46.67	34.62
4. Other Miscellaneous Hog Income		0.48	
5. Total Value Produced	\$ 38.75 *	47.15 *	34.62 *
6. Pounds of Feed Fed			
7. Corn	271.6	249.7	281.8
8. Small Grain	3.7	7.1	5.3
9. Complete Ration	29.2	80.2	86.8
10. Protein, Salt, Mineral + Milk	78.1	53.6	78.5
11. Total Concentrate	382.6	390.6	452.4
12. Forages			
13. Feed Cost			
14. Grains	9.01	8.35	9.72
15. Complete Ration	1.76	4.34	5.28
16. Protein, Salt, Mineral + Milk	9.64	7.15	11.65
17. Forages			
18. Pasture			
19. Total Feed Costs	\$ 20.41	19.84	26.65
20. Return Over Feed Costs	\$ 18.34 *	27.31 *	7.97 *
21. Other Direct Costs			
22. Miscellaneous Livestock Expense	0.87	0.70	0.80
23. Veterinary Expense	0.42	0.55	0.16
24. Custom Hauling, Grinding, Marketing Etc.	1.02	0.14	0.31
25. Special Hired Labor	0.26		0.04
26. Total Other Direct Costs	\$ 2.57	1.39	1.31
27. Return Over Feed + Other Direct Costs	\$ 15.77 *	25.92 *	6.66 *
28. Allocated Costs			
29. Power + Machinery Costs (PCAF 1.00)	1.09	0.92	1.56
30. Livestock Equipment Costs (ECAF 5)	1.65	1.76	1.82
31. Building + Fences (BCAF 5)	2.46	3.25	2.96
32. Total Allocated Costs	5.20	5.93	6.34
33. Return Over All Listed Costs	10.57 *	19.99 *	0.32 *
34. Supplementary Management Information			
35. Return For \$100 Feed Fed	189.86	237.67	129.90
36. Price Received Per CWT.	50.78	53.00	47.85
37. Average Weight of Pigs Sold	236.3	249.4	229.9
38. Average Price Paid Per Pig Bought	48.98	45.02	51.50
39. Average Weight Per Pig Bought	47.6	47.6	48.4
40. Number of Pigs Purchased	458	365	498
41. No. Pigs Transferred In	318	295	
42. Average Weight of Pigs Transferred In	51.2	56.5	
43. Pounds of Pork Purchased	21,817	17,390	24,079
44. Percent Death Loss	2.5	2.2	4.9
45. Price Per CWT. Concentrate Fed	5.33	5.80	5.89
46. Price Per CWT. Protein, Salt, + Mineral	12.34	13.34	14.84
47. Effective Daily Gain - Pounds/Pig/Day	1.43	1.62	1.47
48. Total Listed Cost Per CWT Produced	28.18 *	27.16 *	34.30 *
49. Utilities + Other General Farm Expense	1190.68	525.18	576.90
50. Interest Allocation			

Table 11C 6510 - Hogs, Weaning Pig Production - 1986

	Average 24	High 12	Low 12
1. Number of Litter Farrowed	153	176	131
	Per LITTER	Per LITTER	Per LITTER
2. Net Value Produced	\$ 431.86	470.88	376.14
3. Other Miscellaneous Hog Income			
4. Total Value Produced	\$ 431.86 *	470.88 *	376.14 *
5. Pounds of Feed Fed			
6. Corn	1387.2	1,116.0	1740.9
7. Small Grain	54.1	78.4	21.1
8. Complete Ration	309.9	518.8	27.0
9. Protein, Salt, Mineral + Milk	689.6	825.2	502.1
10. Total Concentrates	2440.8	2,538.4	2,291.1
11. Forages			
12. Feed Cost			
13. Grains	50.22	43.52	58.82
14. Complete Ration	23.86	37.72	5.06
15. Protein, Salt, Mineral + Milk	75.87	54.07	104.60
16. Forages			
17. Pasture			
18. Total Feed Costs	\$ 149.95	135.31	168.48
19. Return Over Feed Costs	\$ 281.91 *	335.57 *	207.66 *
20. Other Direct Costs			
21. Miscellaneous Livestock Expense	13.50	13.68	13.15
22. Veterinary Expense	21.29	24.75	16.49
23. Custom Hauling, Grinding, Marketing Etc.	4.39	6.18	1.93
24. Special Hired Labor	6.96	5.47	8.92
25. Total Other Direct Costs	\$ 46.14	50.08	40.49
26. Return Over Feed + Other Direct Costs	\$ 235.77 *	285.49 *	167.17 *
27. Allocated Costs			
28. Power + Machinery Costs (PCAF 1.00)	15.62	17.33	13.23
29. Livestock Equipment Costs (ECAF 5)	22.59	20.86	24.75
30. Building + Fences (BCAF 5)	40.21	48.21	29.48
31. Total Allocated Costs	\$ 78.42	86.40	67.46
32. Return Over All Listed Costs	\$ 157.35 *	199.09 *	99.71 *
33. Supplementary Management Information			
34. Return For \$100 Feed Fed	288.00	347.99	223.25
35. Average Price Received Per Animal Sold	53.50	54.00	50.02
36. Average Price Per Pig Sold or Transferred	51.84	54.07	49.78
37. Average Weight Per Pig Sold or Transferred	51.5	56.1	46.1
38. Number of Pigs Produced	1,168	1,322	1,014
39. Number of Pigs Born Per Litter	10.1	10.1	10.1
40. Number of Pigs Weaned Per Litter	8.3	8.7	7.8
40A. Litter/Bearing Female/Year	1.7	1.9	1.6
40B. Pigs Produced/Per Sow/Per Year	14.1	15.8	12.2
41. Percent Death Loss	14.8	11.8	19.0
42. Price Per CWT Concentrate Fed	6.14	5.33	7.35
43. Price Per CWT Protein, Salt + Mineral	11.00	6.55	20.83
44. Feed + Direct Costs Per Pig Produced	25.69	24.68	27.52
45. Total Listed Costs Per Litter	\$ 274.51 *	271.79 *	276.43 *
46. Utilities + General Farm Expense	2701.60	1,911.08	2,402.76
47. Interest Allocation			

Table 12 - Dairy Cows, Commercial - 1986

	Average 36	High 12	Low 12
1. Average Number of Cows	38.9	42.3	37.0
	Per COW	Per COW	Per COW
2. Pounds of Milk	13,314	15,110	11,714
3. Pounds of Butterfat	479.3	536.1	416.3
4. Percent of Butterfat in Milk	3.6	3.6	3.6
5. Value of Produce			
6. Dairy Products Sold	\$ 1,505.30	1,702.96	1,308.11
7. Dairy Products Used in Home	3.37	2.36	4.05
8. Milk Fed to Livestock	17.97	22.34	7.19
9. Net Change in Value of Cows	(84.96)	(11.54)	(141.68)
10. Other Miscellaneous Dairy Income	21.34	58.89	
11. Total Value Produced	\$ 1,463.02 *	1,775.01 *	1,177.67 *
12. Pounds of Feed Fed			
13. Corn	5,392.5	5,592.4	5,626.4
14. Small Grain	248.4	182.4	388.0
15. Complete Ration	92.6	636.9	
16. Protein, Salt + Mineral	1,034.6	1,038.9	1,004.8
17. Total Concentrates	6,768.1	7,450.6	7,019.2
18. Legume Hay	6,513.7	5,200.5	9,115.3
19. Other Hay + Dry Roughage	130.8	7.1	404.5
20. Silage	14,389.6	13,111.9	18,492.8
20A. Haylage	1,038.3	106.1	2,702.7
21. Feed Costs			
22. Grains	182.37	191.87	189.11
23. Complete Ration	20.00	80.80	
24. Protein/Salt/Mineral	172.96	182.81	120.08
25. Hay/Haylage + Dry Roughage	151.62	148.18	167.11
26. Silage	102.01	104.56	108.43
27. Pasture	2.44	0.78	5.68
28. Total Feed Costs	\$ 631.40	709.00	590.41
29. Return Over Feed Costs	\$ 831.62 *	1,066.01 *	587.26 *
30. Other Direct costs			
31. Miscellaneous Livestock Expense	104.42	104.96	107.35
32. Veterinary Expense	25.94	31.56	25.54
33. Custom Hauling, Grinding, Marketing, Etc.	58.12	60.45	51.24
34. Special Hired Labor	20.93	28.20	
35. Total Other Direct Costs	\$ 209.41	225.17	184.13
36. Return Over Feed + Other Direct Costs	\$ 622.21 *	840.84 *	403.13 *
37. Allocated Costs			
38. Power + Machinery Costs (PCAF 1.00)	55.48	66.75	48.99
39. Livestock Equipment Costs (ECAF 5)	69.61	103.12	38.59
40. Buildings + Fences (BCAF 5)	54.25	72.64	36.77
41. Total Allocated Costs	\$ 179.34	242.51	124.35
42. Return Over All Listed Costs	\$ 442.87 *	598.33 *	278.78 *
43. Supplementary Management Information			
44. Return For \$100 Feed Fed	231.71	250.35	199.47
45. Feed Cost Per CWT. Milk	4.74	4.69	5.04
45. Feed Cost Per Pound of Butterfat	1.32	1.32	1.42
47. Pounds of Milk Per Pound of Concentrate	1.56	1.31	1.67
48. Average Price Per CWT. Milk Sold	11.53	11.54	11.30
49. Average Price Per Pound of Butterfat	3.18	3.21	3.18
50. Total Listed Costs Per CWT. Milk Produced	7.66	7.79	9.67
51. Dairy Cow Turnover Percentage	48.8	44.9	51.4
52. Total Listed Costs Per Cow	\$ 1,020.15 *	1,176.68 *	898.89 *
53. Utilities + Other General Farm Expense	3,006.60	2,551.28	2,646.52

Table 13 - Other Dairy, Commercial Replacement - 1986

	Average 34	High 12	Low 12
1. Number of Head	63.0	54.9	63.3
	Per HEAD	Per HEAD	Per HEAD
2. Net Value Produced	\$ 327.22	461.40	218.23
3. Other Miscellaneous Income			
4. Total Income	\$ 327.22 *	461.40 *	218.23
5. Pounds of Feed Fed			
6. Corn	1,252.2	1,094.6	1,168.8
7. Small Grain	171.9	278.3	110.9
8. Complete Ration	342.2	5.6	353.0
9. Protein, Salt + Mineral	235.9	227.6	198.4
10. Hay + Roughage	1,740.1	1,810.6	1,761.6
11. Silages	5,176.3	5,577.1	5,103.3
11A. Haylage	246.5	39.7	410.7
12. Milk	57.2	85.3	34.2
13. Feed Cost			
14. Grains	45.44	44.21	40.98
15. Complete Ration	8.46	0.73	21.58
16. Protein, Salt + Minerals	38.54	37.47	32.50
17. Hay/Haylage+ Dry Roughage	47.46	44.95	53.71
18. Silage	41.84	46.89	38.15
19. Milk	5.52	6.47	3.67
20. Pasture	2.41	1.44	3.76
21. Total Feed Costs	\$ 189.67	182.16	194.35
22. Return Over Feed Costs	\$ 137.55 *	279.24 *	23.88 *
23. Other Direct Costs			
24. Miscellaneous Expense	9.03	10.95	10.90
25. Veterinary Expenses	5.35	6.67	3.98
26. Custom Hauling, Grinding, Marketing Etc.	1.48	0.58	2.23
27. Special Hired Labor	2.75	0.33	8.17
28. Total Other Direct Costs	\$ 18.61	18.53	25.28
29. Return Over Feed + Other Direct Costs	\$ 118.94 *	260.71 *	(1.40)*
30. Allocated Costs			
31. Power + Machinery Costs (PCAF 1.00)	10.65	11.02	12.39
32. Livestock Equipment Costs (ECAAF 5)	14.31	10.08	19.81
33. Building + Fences (BCAF 5)	11.74	10.84	15.08
34. Total Allocated Costs	\$ 36.70	31.94	47.28
35. Return Over All Listed Costs	\$ 82.24 *	228.77 *	(48.68)*
36. Supplementary Management Information			
37. Return For \$100 Feed Fed	172.52	253.28	112.29
38. Percent Death Loss - Total	7.9	6.1	9.3
39. Percent Calf Death Loss	20.9	14.6	24.3
40. Total Listed Costs Per Head	\$ 244.98 *	232.63 *	266.91 *
41. Utilities + Other General Farm Expenses	920.38	370.97	1354.68
42. Interest Allocation			

Table 14 - All Dairy Cattle - 1986

	Average 44	High 15	Low 15
1. Average Number of Cows	39.7	39.1	46.5
	Per COW	Per COW	Per COW
2. Value of Dairy Products	\$ 1,546.37	1,787.03	1,319.85
3. Net Change in Value	351.54	490.90	228.58
4. Miscellaneous Dairy Income	17.10	50.97	
5. Total Value Produced	\$ 1,915.01 *	2,328.90 *	1,548.43 *
6. Pounds of Feed Fed			
7. Grains	7,354.8	7,434.8	7,411.6
8. Complete Rations	2,068.0	352.6	395.1
9. Protein, Salt + Mineral, Incl Milk Equiv	1,314.6	1,539.3	1,172.9
10. Hay + Dry Roughage	9,309.8	7,530.8	11,535.2
11. Silage	21,371.9	19,163.9	28,209.0
11A. Haylage	2,235.1	1,890.2	3,523.0
12. Feed Cost			
13. Grains	235.29	238.95	234.71
14. Complete Ration	52.64	37.26	22.41
15. Protein, Salt + Minerals, Incl Milk	209.35	280.38	150.71
16. Hay/Haylage + Dry Roughage	218.04	221.94	214.19
17. Silage	150.55	156.27	168.43
18. Pasture	4.91	3.17	5.61
19. Total Feed Costs	\$ 870.78	937.97	796.06
20. Return Over Feed Costs	\$ 1,044.23 *	1,390.93 *	752.37 *
21. Other Direct Costs			
22. Miscellaneous Livestock Expense	116.88	108.44	101.87
23. Veterinary Expense	36.35	45.45	22.09
24. Custom Hauling, Grinding, Marketing Etc.	61.16	62.28	55.83
25. Special Hired Labor	20.15	25.91	28.67
26. Total Other Direct Costs	\$ 234.54	242.08	208.46
27. Return Over Feed + Other Direct Costs	\$ 809.69 *	1,148.85 *	543.91 *
28. Allocated Costs			
29. Power + Machinery Costs	74.21	84.06	69.69
30. Livestock Equipment Costs	97.26	127.35	83.36
31. Building + Fences	77.10	71.19	77.86
32. Total Allocated Costs	\$ 248.57	282.60	230.91
33. Return Over All Listed Costs	\$ 561.12 *	866.25 *	313.00 *
34. Supplementary Management Information			
35. Return For \$100 Feed Fed	219.92	248.29	194.51
36. Total Listed Costs Per Cow	\$ 1,353.89 *	1,462.65 *	1,235.43 *
37. Utilities + Other General Farm Expense	3944.57	2102.26	5810.80
38. Interest Allocation			

Table 15A - Beef Breeding Cattle - 1986

	Average 22	High 11	Low 11
1. Average Number of Cows	52.6	48.9	56.3
2. Average Number of Other Beef Animals + Bulls	31.0	36.1	25.8
3. Pounds of Beef Produced	21,490 Per COW	21,158 Per COW	21,823 Per COW
4. Net Value Produced	\$ 281.88	361.68	212.58
5. Other Miscellaneous Beef Income			
6. Total Value Produced	\$ 281.88 *	361.68 *	212.58 *
7. Pounds of Feed Fed			
8. Grain	448.0	445.5	450.2
9. Protein, Salt + Mineral	56.9	72.5	43.4
10. Legume Hay	2,604.0	3,438.9	1,878.9
11. Other Hay + Dry Roughage	602.5	474.1	714.0
12. Silage	3,634.6	3,456.4	3,789.4
12A. Haylage			
13. Feed Costs			
14. Grain	15.91	17.20	14.80
15. Protein, Salt + Mineral	6.16	4.30	7.76
16. Legume Hay/Haylage	63.84	90.33	40.83
17. Other Hay + Dry Roughage	5.48	4.60	6.23
18. Silage	33.88	29.00	38.13
19. Pasture	30.49	28.06	32.61
20. Total Feed Costs	\$ 155.76	173.49	140.36
21. Return Over Feed Costs	\$ 126.12 *	188.19 *	72.22 *
22. Other Direct Costs			
23. Miscellaneous Livestock Expense	4.18	1.94	6.13
24. Veterinary Expense	7.74	6.67	8.65
25. Custom Hauling, Grinding, Marketing Etc.	1.58	1.00	2.06
26. Special Hired Labor	1.63	3.35	0.16
27. Total Other Direct Costs	\$ 15.13	12.96	17.00
28. Return Over Feed + Other Direct Costs	\$ 110.99 *	175.23 *	55.22 *
29. Allocated Costs			
30. Power + Machinery Costs (PCAF 1.00)	17.48	15.71	16.50
31. Livestock Equipment Costs (ECAAF 5)	30.67	29.46	27.92
32. Building + Fences (BCAF 5)	24.27	13.46	27.37
33. Total Allocated Costs	\$ 72.42	58.63	71.79
34. Return Over All listed Costs	\$ 38.57 *	116.60 *	(16.57)*
35. Supplementary Management Information			
36. Return For \$100 Feed Fed	180.97	208.46	151.46
37. Price Per CWT. Sold	52.59	56.87	44.64
38. Price Per CWT. Calves Sold or Transferred	55.69	51.39	61.12
39. Average Weight Per Head Sold	812.7	793.0	929.5
40. Average Weight Per Calf Sold/Transferred	567.8	667.4	478.0
41. Percent Death Loss	4.1	4.0	3.3
42. Percent Calf Crop	94.5	96.0	93.3
42A. Percent Calf Death Loss	6.3	6.4	8.2
43. Total Listed Costs Per Cow	\$ 243.31 *	245.08 *	229.15 *
44. Utilities + Other General Farm Expense	787.39	346.67	1126.11
45. Interest Allocation			

Table 15B Beef Feeders Feedlot - 1986

	Calves Average 35	Yearlings Average 21	2 Yr Olds Average 8
1. Average Number of Beef Feeders	53.9	89.2	151.7
2. Pounds of Beef Produced	35,211	66,243	118,619
	Per CWT	Per CWT	Per CWT
3. Net Value Produced	\$ 55.33	53.50	52.81
4. Other Miscellaneous Beef Income			
5. Total Value Produced	\$ 55.33 *	53.50 *	52.81 *
6. Pounds of Feed Fed			
7. Grain	558.8	507.3	676.8
8. Protein, Salt + Mineral	54.7	82.4	43.3
9. Legume Hay	105.2	99.4	65.3
10. Other Hay + Dry Roughage	17.2	6.0	48.5
11. Silage	875.5	609.2	331.5
11A. Haylage	45.1	57.1	27.4
12. Feed Cost			
13. Grain	18.02	16.36	22.05
14. Protein, Salt + Mineral	6.73	5.97	6.04
15. Legume Hay/Haylage	3.23	3.08	1.97
16. Other Hay + Dry Roughage	0.25	0.13	0.39
17. Silage	7.28	6.11	2.70
18. Pasture	0.09	0.07	
19. Total Feed Costs	\$ 35.60	31.72	33.15
20. Return Over Feed Costs	\$ 19.73 *	21.78 *	19.66 *
21. Other Direct Costs			
22. Miscellaneous Livestock Expense	0.62	0.81	0.22
23. Veterinary Expense	1.32	1.23	0.88
24. Custom Hauling, Grinding, Marketing Etc.	0.76	1.15	0.60
25. Special Hired Labor	0.11	0.13	0.04
26. Total Other Direct Costs	\$ 2.81	3.32	1.74
27. Return Over Feed + Other Direct Costs	\$ 16.92 *	18.46 *	17.92 *
28. Allocated Costs			
29. Power + Machinery Costs (PCAF 1.00)	1.77	1.31	1.28
30. Livestock Equipment Costs (ECAF 5)	2.71	2.49	1.54
31. Building + Fences (BCAF 5)	2.45	2.02	3.24
32. Total Allocated Costs	\$ 6.93	5.82	6.06
33. Return Over All Listed Costs	\$ 9.99 *	12.64 *	11.86 *
34. Supplementary Management Information			
35. Return For \$100 Feed Fed	155.42	168.67	159.32
36. Price Per CWT. Sold	57.10	56.93	57.23
37. Average Weight Per Head Sold	1,091.7	1,106.4	1,118.1
38. Price Per CWT Bought	60.46	60.52	59.87
39. Average Weight Per Head Bought	519.0	650.9	716.1
40. Number of Head Bought	47	130	276
41. Percent Death Loss	0.9	0.9	0.4
42. Effective Daily Gain-Pounds/Head/Day	1.79	2.03	2.14
43. Total Listed Costs Per CWT Produced	\$ 45.34 *	40.86 *	40.95 *
44. Utilities + Other General Farm Expense	438.79	950.48	2173.07
45. Interest Allocation			

Table 16A-6670 - Sheep - Farm Flock -1986

	Average 18	High 9	Low 9
1. Average Number of Ewes	94.3	88.6	100.0
2. Pounds of Lamb + Mutton Produced	13,214	15,185	11,242
3. Pounds of Wool Produced	932	1,186	679
	Per EWE	Per EWE	Per EWE
4. Value Produced			
5. Wool	12.32	15.52	9.48
6. Net Value Produced - Animals	101.27	124.57	80.64
7. Other Miscellaneous Sheep Income			
8. Total Value Produce	\$ 113.59 *	140.09 *	90.12 *
9. Pounds of Feed Fed			
10. Grain	503.6	427.2	571.3
11. Protein, Salt + Mineral	89.0	87.7	90.1
12. Legume Hay	754.4	618.3	875.1
13. Other Hay + Dry Roughage	35.3	75.2	
14. Silage	205.0	270.9	146.7
14A. Haylage	106.0	225.7	
15. Feed Cost			
16. Grain	18.53	14.15	22.39
17. Protein, Salt + Mineral	11.89	11.32	12.39
18. Legume Hay/Haylage	20.66	18.77	22.34
19. Other Hay + Dry Roughage	1.11	1.88	0.43
20. Silage	1.57	2.17	1.04
21. Pasture	3.01	4.28	1.89
22. Total Feed Costs	\$ 56.77	52.57	60.48
23. Return Over Feed Costs	\$ 56.82 *	87.52 *	29.64 *
24. Other Direct Costs			
25. Miscellaneous Livestock Expense	2.83	3.54	2.19
26. Veterinary Expense	4.97	5.71	4.33
27. Custom Hauling, Grinding, Marketing Etc.	1.80	2.64	1.05
28. Special hired Labor	0.08	0.19	
29. Total Other Direct Costs	\$ 9.68	12.08	7.57
30. Return Over Feed + Other Direct Costs	\$ 47.14 *	75.44 *	22.07 *
31. Allocated Costs			
32. Power + Machinery Costs (PCAF 1.00)	6.96	6.12	7.78
33. Livestock Equipment Costs (ECAF 5)	9.99	7.19	12.67
34. Building + Fences (BCAF 5)	9.97	7.10	12.68
35. Total Allocated Costs	\$ 26.92	20.41	33.13
36. Return Over All Listed Costs	\$ 20.22 *	55.03 *	(11.06) *
37. Supplementary Management Information			
38. Return For \$100 Feed Fed	200.11	266.47	149.01
39. Price Per CWT. Lamb + Mutton Sold	69.43	70.26	68.41
40. Price Per CWT. Lamb Sold or Transferred	71.29	73.07	68.97
41. Average Weight of Lambs Sold/Transferred	112.5	110.0	115.8
42. Pounds of Wool per Sheep Sheared	12.3	15.6	9.1
43. Number of Ewes Kept For Lambing	88	87	88
44. Percent Lamb Crop	152.7	171.3	135.4
45. Percent Death Loss	8.8	7.5	10.0
45A. Percent Lamb Death Loss	11.9	10.1	14.8
46. Total Listed Costs Per Ewe	\$ 93.37 *	85.06 *	101.18 *
47. Utilities + Other General Farm Expense	459.59	275.88	485.90
48. Interest Allocation			

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Farm Size (Acres)	413	417	414	415	412	433	428	412	438	453
Return to Operator Labor & Management (WF)	18,241	39,054	7,706	29,431	(5,614)	12,675	4,513	(2,983)	5,280	11,209
Return to Capital & Family Labor (OS)	23,442	48,038	21,102	38,817	3,362	20,869	13,419	2,461	8,753	17,474
Average Investment Per Farm Business (T1)	388,344	486,911	542,965	622,154	646,726	705,838	709,421	634,488	566,308	504,788
Cash Sales Per Farm Business (T2A-37)	96,581	134,493	149,526	171,054	175,305	177,642	195,388	174,070	158,571	163,465
Cash Expense Per Farm Business (T2B-39)	83,702	113,674	144,956	138,216	139,406	140,676	191,228	192,034	104,553	111,743
Expenses Per Dollar of Income (T5-28)	0.85	0.78	0.94	0.85	1.00	0.91	0.96	1.02	0.97	0.92
Ratio of Assets to Liabilities (T5-L29)	2.42:1	2.55:1	2.55:1	2.77:1	2.24:1	1.88:1	1.87:1	1.95:1	1.78:1	1.85:1
Gain in Net Worth (T5-L16)	14,827	37,007	11,457	24,269	(9,570)	9,096	(1,173)	(6,583)	303	13,028
Size of Business (Work Units) (T1-L6)	365	385	396	414	422	434	455	396	429	427
Tractor & Crop Machinery Expense/Crop Acre (T8-L41)	29.07	34.27	41.27	48.41	48.94	50.35	49.73	51.28	46.44	44.24
Percent of Income From Livestock (WF)	55%	59%	62%	57%	59%	60%	54%	57%	52%	49%
Percent of Income From Crops (WF)	38%	35%	32%	38%	35%	35%	38%	37%	43%	44%
Percent of Miscellaneous Farm Income (WF)	7%	6%	6%	5%	6%	5%	8%	6%	3%	3%
Family Living Expenses/Year (T4-L23)	14,796	16,767	20,610	18,585	19,477	20,769	22,611	20,910	17,583	21,476
Family Living Expenses/Month	1,233	1,397	1,718	1,549	1,623	1,731	1,855	1,743	1,465	1,790

RETURN ABOVE FEED COST PER: -----											
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	
Dairy Cow	501	710	780	784	742	731	634	742	950	832	
Beef Cow	17	297	202	129	8	60	53	37	64	126	
CWT Feeder Cattle Produced	2.07	30.00	28.63	7.41	6.24	19.41	8.35	8.48	9.04	19.73	
CWT Hogs Produced	17.19	28.88	9.71	12.24	10.89	28.83	11.12	20.82	18.41	27.68	
YIELD PER ACRE											
Corn, Bu.	98.1	113.2	104.8	108.8	120.4	121.9	83.9	108.7	122.4	126.0	
Soybeans, Bu.	36.3	41.3	32.6	37.1	37.4	39.4	35.0	35.0	33.4	35.7	
Oats, Bu.	74.7	57.3	55.0	67.8	54.4	79.9	53.6	65.6	77.9	56.7	(34)
Corn Silage, Ton	13.4	15.1	15.7	13.7	14.4	15.9	12.1	13.6	16.3	14.9	
Alfalfa, Ton	3.3	4.3	4.6	3.8	3.4	4.5	4.1	4.6	4.1	4.2	
Wheat, Bu.	48.8	26.2	28.7	37.9	32.7	35.8	35.4	44.2	54.4	37.8	
RETURN OVER TOTAL COSTS PER ACRE											
Corn	30.96	32.08	19.82	97.82	35.15	7.52	17.47	16.92	63.75	6.15	
Soybeans	74.10	130.32	57.29	123.59	56.31	20.01	99.14	18.21	8.76	16.23	
Oats	1.61	-13.37	-10.88	30.61	-7.46	7.06	-19.18	18.53	0.77	-25.58	
Wheat	18.80	-26.52	9.01	42.39	3.31	9.77	11.44	55.39	60.42	-30.89	

SETTING GOALS

One of the primary aims of the farm management education program is to assist farmers in reaching their farm and family goals. Clarifying their ideas as to what they really want is a very important step in improving the farm business and as a result improve family living.

Sitting down as an operator or husband and wife and putting these wants in writing is done in one of the early classes in the adult farm management education program.

Planning goals is not easy. All members of a family may not agree on what goals are most important. The family may have to give serious thought and discussion to the goals they choose so that all members of the family can benefit from the farming business. Not all goals are related to farm income. Some very important goals for a family may be in the area of social, community, family, church and educational activities.

Setting up goals in a systematic way lets the family fit the wants and desires of all the family members into a plan. There are no right or wrong goals, since each family may approach the problems and opportunities they have in a different way. It is important that goals be reviewed frequently to see if conditions have changed. If the goals are too inflexible, they may be a liability to progress rather than an asset.

On the bottom of this page is a place for you and your family to write your goals for the coming year. The following year, these goals will be reviewed, evaluated and probably changed or expanded to fit the ever changing needs and desires of the family.

WHAT DOES YOUR FAMILY WANT?

NAME _____ DATE _____

ADDRESS _____

One of the steps for improving the farm and home business is to clarify what is wanted. You may know of things you have wanted as a family, but it takes considerable thought and discussion among family members to agree upon what is most important and which things come first. As a family, write down your goals for this year and for the future, then number them in order of priority.

	This year	Later
<u>FOR A PROFITABLE FARM BUSINESS:</u>		
<u>FOR SATISFYING LIVING:</u>		
<u>FOR DEVELOPMENT OF FAMILY MEMBERS:</u>		
<u>FOR LONG TERM FINANCIAL SECURITY:</u>		