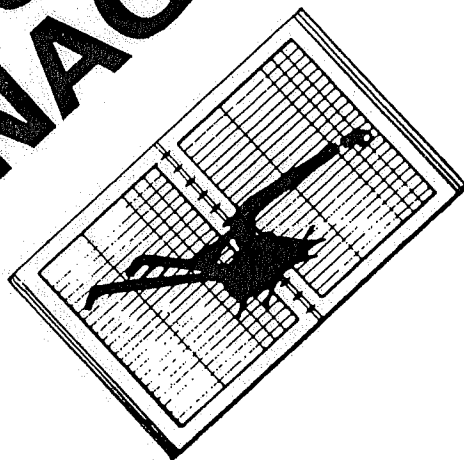


FARM BUSINESS MANAGEMENT



1978

Education Program Annual Report
Mankato Area Southern Minnesota
April 1979

Mankato AVTI
1920 Lee Blvd.
No. Mankato, Minn. 56001

**AN ADULT
EDUCATIONAL
PROGRAM**

A.V.T.I. ANALYSIS CENTERS & AREA VO-AG COORDINATORS

1. Thief River Falls
Ed Sisler
2. Staples
William E. Guelker
3. Willmar
John Thell
4. Jackson
John Murray
5. Mankato
Delbert Hodgkins
6. Austin
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1978 ANNUAL VOCATIONAL AGRICULTURE FARM MANAGEMENT PROGRAM REPORT

MANKATO AREA OF SOUTHERN MINNESOTA

Del Hodgkins

Area Vo-Ag Program Coordinator

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INTRODUCTION

The Farm Business Management Program is a public school program designed to bring the benefits of instruction in business management to farm families.

The main purpose of the program is to help farmers achieve their farm business and family goals through improved management, organization, and operational efficiency of their farms.

The Farm Business Management Program, a part of the total Vocational Agriculture Education Program in Minnesota, was started in 1952 as a co-operative program between the University of Minnesota Department of Agricultural Education and Agricultural Economics, the State Department of Education Vocational Division, and the Public School Vocational Agriculture Departments. Three Area Vocational Technical Institutes were designated as Area Analysis Centers in 1955 and established as the coordinating agency for the program in the area assigned. Six such areas exist in Minnesota at the present time. The map inside the front cover indicates the location of these centers.

Instructional programs in Farm Business Management have the following characteristics:

1. There are specific enrollees in each class.
2. Specific units of instruction are part of each course.
3. The courses are offered in a definite sequence.
4. There is continuity between courses leading toward the accomplishment of farm and family goals.
5. Individual on-the-farm instruction is offered each class member.

Farm record analysis is a vital part of the program. Records kept by the farm family are analyzed each year to determine the strengths and weaknesses of the farm business. This annual report is the twenty-fourth assigned to the Mankato Center. The analysis of the records and preparation for the Mankato Area is done under the direction of the Area Vo-Ag Program Coordinator at the Mankato Area Vocational Technical Institute. Data processing is done at Specialized Data Systems, Madison, Wisconsin.

SCHOOLS PARTICIPATING

This report deals with farmers enrolled in Farm Business Management classes in public schools in the Mankato area. The following tabulation indicates the number of 1978 records from each school and the instructor in charge of the program.

<u>Class Location</u>	<u>Instructor</u>	<u>Records Processed</u>
<u>Adult Farm Management</u>		
Alden	John Nelson	2
Blue Earth	Eugene Uppena	29
Fairfax	Richard Schiller	20
Glencoe	Kenneth Stenzel	52
Hutchinson	Dave Wasji	17
Kiester	Don VanHove	6
Madelia	John Rollings	22
Mankato	Paul Callanan	48
Mankato	Dennis Jackson	14
New Richland	Russell Schmiesing	18
New Ulm	Layton Peters & Gary Thome	47
Sleepy Eye	Leland Anderson	27
Springfield	Donn Russell	20
St. Peter	Cletus Janni	33
Waseca	Norman Bohmbach	50
Watertown	Craig Schmidt	9
Wells	Arnold Carlson	72
Winthrop	Dary Talley	42

Post High School A.V.T.I. & Technical College Production Ag Programs

Mankato A.V.T.I.	Lyle Phelps	18
Waseca U.M.W.	Boyd Fuller	23

Veterans Co-op Farm Management

Gaylord	Bruce White	12
Hutchinson	Warren Ekstrom	14
LeCenter	Charles Walarius	7
Sleepy Eye	Lawrence R. Ludtke	17

Total	619
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TABLE 1 - SUMMARY OF FARM INVENTORIES* - 1978

Items		Average of 394 Farms	
1.	Size of Farm (Total Acres)	377.8	
2.	(Tillable Acres)	343.6	
3.	Work Units (Crops)	170.44	
4.	(Livestock)	196.50	
5.	(Other)	15.85	
6.	Total Size of Business in Work Units	382.79	
7.	Number of Workers	1.60	
8.	Farm Capital Investment per Worker	\$259,350	
		Jan. 1	Dec. 31
9.	PRODUCTIVE LIVESTOCK		
10.	Dairy Cows	\$ 5,699	\$ 6,474
11.	Other Dairy Cattle	3,091	4,113
12.	Beef Breeding Cattle	769	977
13.	Beef Feeder Cattle	5,252	9,338
14.	Hogs	10,208	14,866
15.	Sheep (Including Feeders) & Goats	245	521
16.	Poultry - All Types	47	55
17.	Other Livestock	12	14
18.	Total Productive Livestock	\$ 25,323	\$ 36,358
19.	CROP, SEED AND FEED	\$ 55,143	\$ 64,318
20.	POWER, MACHINERY & EQUIPMENT		
21.	Auto & Truck (Farm Share)	\$ 4,161	\$ 4,891
22.	Power & Machinery	29,677	35,772
23.	Irrigation Equipment	797	909
24.	Custom Work Equipment	70	153
25.	Livestock Equipment	6,133	7,399
26.	Total Power, Mach. & Equip.	\$ 40,838	\$ 49,124
27.	LAND	\$ 233,509	\$ 239,082
28.	BUILDINGS - FENCES - ETC.	39,387	46,836
29.	TOTAL FARM CAPITAL	\$ 394,200	\$ 435,718
30.	INCREASE OR DECREASE IN TOTAL FARM CAPITAL		\$ 41,518

*Table 1 lists the categories of farm capital for the average of 394 farms and for the 79 most profitable and 79 least profitable farms. These averages include the landlord's share of the investment for rented farms.

Livestock, Crops, Seed, and Feed reflect a conservative market price at the time the inventory is taken.

Machiner, Equipment, and Building values reflect cost less depreciation. Land is valued at cost rather than present market value.

(Continued Page 2)

TABLE 1 - SUMMARY OF FARM INVENTORIES - 1978

Items	79 Most Profitable Farms		79 Least Profitable Farms	
	Jan 1.	Dec. 31	Jan. 1	Dec. 31
1. Size of Farm (Total Acres)		567.1		307.3
2. (Tillable Acres)		529.8		270.5
3. Work Units - (Crops)		263.03		131.48
4. (Livestock)		279.10		132.91
5. (Other)		11.85		14.97
6. Total Size of Business in Work Units		553.99		279.37
7. Number of Workers		2.09		1.48
8. Farm Capital Investment per Worker		\$285,825		\$273,832
9. PRODUCTIVE LIVESTOCK				
10. Dairy Cows	4,745	5,260	4,587	5,228
11. Other Dairy Cattle	2,542	3,294	2,570	3,441
12. Beef Breeding Cattle	947	1,133	1,059	1,616
13. Beef Feeder Cattle	13,001	26,895	2,725	4,259
14. Hogs	22,927	32,753	4,522	5,683
15. Sheep (Including Feeders) & Goats	92	112	917	2,039
16. Poultry - All Types			37	35
17. Other Livestock		23	50	47
18. Total Productive Livestock	\$ 44,254	\$ 69,470	\$ 16,470	\$ 22,349
19. CROP, SEED AND FEED	88,787	107,755	39,951	40,793
20. POWER, MACHINERY & EQUIPMENT				
21. Auto & Truck (Farm Share)	6,120	6,986	3,525	3,739
22. Power & Machinery	46,679	53,383	26,832	33,977
23. Irrigation Equipment	820	714		794
24. Custom Work Equipment			193	320
25. Livestock Equipment	9,756	11,607	4,423	5,809
26. Total Power, Mach. & Equip.	\$ 63,376	\$ 72,690	\$ 34,974	\$ 44,639
27. LAND	\$302,681	\$309,472	\$ 268,021	\$ 272,647
28. BUILDINGS-FENCES-ETC.	\$ 62,564	\$ 73,699	\$ 32,168	\$ 38,531
29. TOTAL FARM CAPITAL	\$561,662	\$633,087	\$ 391,581	\$ 418,959
30. INCREASE OR DECREASE IN TOTAL FARM CAPITAL		\$ 71,425		\$ 27,378

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

Size as measured by acres for individual farms varied from less than 100 to over 1600 acres; however, the majority of the farms fell in the range of 360 to 620 acres.

Work units provide a measure of the work load as an indication of size. A 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 - 1978

Items	Average of - 394 Farms	79 Most Profitable Farms	79 Least Profitable Farms
1. SALE OF LIVESTOCK & LIVESTOCK PRODUCTS			
2. Dairy Cows	\$ 1,815	\$ 1,515	\$ 1,566
3. Dairy Products	16,254	15,208	12,495
4. Other Dairy Cattle	1,492	1,239	955
5. Beef Breeding Cattle	334	360	135
6. Beef Feeder Cattle	11,961	32,604	5,150
7. Hogs Complete and Mixed	16,808	38,284	6,021
8. Hogs Finishing	11,377	27,453	4,168
9. Hogs Producing Weaning Pigs	1,998	1,483	1,671
10. Sheep, Goats & Wool, Farm Flock	91	92	75
11. Sheep & Wool, Feeder Lambs	686		3,421
12. Chickens (Including Hens & Broilers)	11		7
13. Turkeys	181	902	
14. Eggs	381		68
15. Other Productive Livestock & Products	30		129
16. Other-Miscellaneous Livestock Income	60	91	29
17. Total Sales of Productive Livestock	\$ 63,479	\$119,231	\$ 35,890
18. SALE OF CROPS			
19. Wheat	969	1,369	678
20. Other Small Grains	268	393	134
21. Corn	23,347	39,709	18,808
22. Soybeans	30,519	50,929	21,869
23. Other Row Crops	1,538	2,082	509
24. Legumes & Other Forage	177	70	310
25. Grass Seed	20	97	1
26. Fruits & Nuts			
27. Vegetable Roadside Market & Specialty			
28. Nursery, Timber & Other	11		53
29. Set Aside Acres - Government Payments	899	1,221	912
30. Total Sales From Crops	\$ 57,746	\$ 95,869	\$ 43,272
31. Capita Assets Sold	2,436	2,923	1,671
32. Gas Tax Refund	167	210	186
33. Income From Work off the Farm	1,214	1,645	851
34. Custom Work Enterprise Income	117		347
35. Patronage Refunds	1,315	2,149	949
36. Miscellaneous Farm Income	1,634	3,211	1,483
37. Total Farm Sales	\$128,107	\$225,239	\$ 84,648
38. Increase in Farm Capital	\$ 41,518	\$ 71,424	\$ 27,378
39. Family Living From the Farm	451	539	372
40. TOTAL FARM RECEIPTS (37) +(38) +(39)	\$170,076	\$297,202	\$112,398

Table 2A provides a listing of the sources of cash income. The landlord's share of crops and other items is included in order to calculate earnings for the whole farm business. In addition to cash sales, the increase in farm capital and value of farm produce used in the home are listed. These items represent accrued and consumed income.

The increase or decrease in value of farm produce on inventory are very significant and should be considered in interpreting the earnings statement.

TABLE 2B - WHOLE FARM SUMMARY OF CASH EXPENSES - 1978

Items	Average of - 394 Farms	79 Most Profitable Farms	79 Least Profitable Farms
1. PURCHASE OF LIVESTOCK			
2. Dairy Cows	\$ 278	\$ 173	\$ 396
3. Other Dairy Cattle	384	279	389
4. Beef Breeding Cattle	118	121	402
5. Beef Feeder Cattle	8,344	26,199	2,977
6. Hogs Complete & Mixed	1,471	1,999	931
7. Hogs Finishing	4,562	11,276	1,637
8. Hogs Producing Weaning Pigs	316	48	538
9. Sheep and Goats	47		29
10. Sheep, Feeder Lambs	787		3,926
11. Chickens (Including Hens & Broilers)	111		69
12. Turkeys	20	99	
13. Other Productive Livestock	15	23	50
14. Miscellaneous Livestock Expense	2,519	4,198	1,519
15. Feed Bought	12,710	23,122	6,897
16. Fertilizer	7,476	11,916	5,648
17. Chemicals	4,129	7,092	3,081
18. Other Crop Expense	5,646	9,361	4,153
19. Irrigation Operation Costs	26	35	19
20. Custom Work Enterprise Operator Costs, Including Labor	37		174
21. Custom Work Hired	2,300	2,885	1,826
22. Repair & Upkeep of Livestock Equipment	734	1,125	546
23. Repair & Upkeep of Farm Real Estate	1,209	1,595	1,357
24. Gas, Oil & Grease Bought (Farm Share)	3,273	4,627	2,774
25. Repair & Operator of Mach., Trac., Truck, Auto	4,298	5,622	4,147
26. Repair & Upkeep of Irrigation Equipment	2	4	
27. Repairs - Custom Work Enterprise	47		221
28. Wages of Hired Labor	2,609	4,876	1,545
29. Personal Property & Real Estate Taxes	3,247	5,215	2,483
30. General Farm Expense	1,455	2,552	1,050
31. Telephone Expense (Farm Share)	243	325	223
32. Electricity Expense (Farm Share)	1,015	1,501	749
33. TOTAL CASH OPERATING EXPENSE	\$ 69,427	\$126,269	\$ 49,756
34. Power, Crop & General Mach. Bought (FS)	16,465	21,659	15,876
35. Irrigation Equipment Bought	224		827
36. Custom Work Equipment Bought	111		209
37. Livestock Equipment Bought	2,750	4,124	2,363
38. New Real Estate & Improvement	18,866	26,373	15,201
39. TOTAL FARM PURCHASES (33) through (38)	\$107,843	\$178,425	\$ 84,232
40. Decrease in Farm Capital			
41. Interest on Farm Capital	29,407	41,816	28,369
42. Unpaid Family Labor	439	339	805
43. Labor Charge for Partners & Other Operators	800	1,561	601
44. Board Furnished Hired Labor	108	124	174
45. TOTAL FARM EXPENSE (39) through (44)	\$138,237	\$222,265	\$ 114,181
46. Return to Oper. Labor & Mgmt. - Single Oper. (W.F) (2A/40) - (45)	\$ 31,839	\$ 74,937	\$ (-1,783)
47. Number of Operators	1	1	1
48. Full Time Operator Equivalents	1.20	1.55	1.09
49. Return to Oper. Labor & Mgmt. - Full Time Operator Equivalent	26,532	63,080	(-1,338)

TABLE 3 - SUMMARY OF FARM EARNINGS (ENTERPRISE STATEMENT - WHOLE FARM) - 1978

Items	Average of - 394 Farms	79 Most Profitable Farms	79 Least Profitable Farms
1. <u>RETURNS AND NET INCREASES</u>			
2. Productive Livestock			
3. Dairy Cows	\$ 16,740	\$ 15,562	\$ 12,586
4. Other Dairy Cattle	4,467	3,610	3,495
5. Beef Breeding Cattle	660	719	801
6. Feeder Cattle	7,483	20,140	3,260
7. Hogs, Complete & Mixed	18,386	43,377	5,680
8. Hog Finishing Enterprise	6,781	16,724	2,347
9. Producing Weaning Pigs	3,416	3,778	1,945
10. Sheep & Goats	101	111	71
11. Sheep, Feeder Lambs	119		592
12. Chickens (Including Hens & Broilers)	291		4
13. Turkeys	161	804	
14. Other Productive Livestock	18		80
15. TOTAL ALL PRODUCTIVE LIVESTOCK	\$ 58,623	\$ 104,825	\$ 30,861
16. Value of Feed fed to Livestock	27,301	47,160	16,375
17. Return Over Feed From Livestock	31,321	57,665	14,486
18. Crop, Seed & Feed	64,127	110,413	40,629
19. Cooperative Patronage Refunds	1,315	2,149	949
20. Miscellaneous Farm Income	1,634	3,211	1,483
21. Custom Work Enterprise	22		(-61)
22. TOTAL RETURNS & NET INCREASES	\$ 98,419	\$ 173,438	\$ 57,486
23. <u>EXPENSES AND NET DECREASES</u>			
24. Truck and Auto (Farm Share)	\$ 3,399	\$ 4,534	\$ 2,961
25. Tractors & Crop Machinery	14,230	19,835	12,889
26. Irrigation Equipment	115	111	34
27. Electricity	1,015	1,501	749
28. Livestock Equipment	2,224	3,415	1,579
29. Buildings, Fences & Tiling	5,027	7,633	4,151
30. Bare Land			
31. Miscellaneous Livestock Expense	2,519	4,198	1,519
32. Labor	3,259	5,805	2,661
33. Labor Charge for Other Operator(s)	800	1,561	601
34. Property Tax	3,247	5,215	2,483
35. General Farm Expense & Telephone	1,698	2,876	1,274
36. Interest on Farm Capital	29,047	41,816	28,369
37. TOTAL EXPENSES AND NET DECREASES	\$ 66,580	\$ 98,501	\$ 59,269
38. RETURN TO OPERATORS LABOR & MANAGEMENT	\$ 31,839	\$ 74,937	\$ (-1,783)
39. Number of Farm Operators	1	1	1

Table 3 combines Tables 1, 2A & 2B. 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 labor earnings are the same as those on Page 4.

TABLE 4 - HOUSEHOLD AND PERSONAL EXPENSES - 1978

FOR THOSE FARMS WITH COMPLETE ACCOUNTS - OPERATOR'S SHARE

Items	Average of 184 Farms	Per Adult Equivalent
1. Number of Persons - Family	4	
2. Number of Adult Equivalent - Family	3.3	
3. Church and Welfare	\$ 629	\$ 190.61
4. Medical Care & Health Insurance	1,610	487.88
5. Food & Meals Bought	2,751	833.64
6. Operating Expense & Supplies	993	300.91
7. Furnishings & Equipment	1,144	346.67
8. Clothing & Clothing Materials	974	295.15
9. Personal Care, Personal Spending	709	214.85
10. Education	343	103.94
11. Recreation	765	231.82
12. Gifts & Special Events	634	192.12
13. Personal Share Truck & Auto Expense	693	210.00
14. Operator Share Upkeep on Dwelling	467	141.52
14A. Cash Rent (Personal)	7	2.12
15. Personal Share Telephone & Electricity Expense	412	124.85
15A. Personal Share - General Farm Expense	24	7.27
16. TOTAL CASH LIVING EXPENSE	\$ 12,154	\$ 3,683.03
17. Personal Share - New Truck and Auto	395	119.70
18. New Dwelling Bought	2,354	713.33
19. Taxes and Other Deductions	1,327	402.12
20. Life Insurance & Other Savings & Investments	1,768	535.76
21. TOTAL HOUSEHOLD & PERSONAL (16) thru (20)	\$ 17,998	\$ 5,453.94
22. TOTAL FAMILY LIVING FROM THE FARM (33)	462	140.00
23. TOTAL CASH & NON-CASH EXPENSES (21) + (22)	\$ 18,461	\$ 5,594.24
24. FAMILY LIVING FROM THE FARM		
25.	Quantity	Operator's Share
26. Milk and Cream (Quarts)	386	77
27. Beef & Buffalo (Pounds)	628	281
28. Pork (Pounds)	205	96
29. Lamb, Mutton, Goat (Pounds)	2	1
30. Poultry, All Fowl (Pounds)	2	1
31. Eggs (Dozen)	3	1
32. Vegetables, Fruits, Spuds, Other Produce & Fuel		5
33. TOTAL FAMILY LIVING FROM THE FARM		\$ 462

Household and personal accounts are important if the family is to manage its financial affairs wisely. The household and personal expenses and receipts are presented in Table 4.

Table 4 averages include only those farms where complete household and personal accounts were kept. Farms included in other tables may not be included in Table 4 averages.

TABLE 5 - NET WORTH STATEMENT - OPERATOR - 1978
FOR THOSE FARMS WITH A COMPLETE RECORD OF ALL ASSETS AND LIABILITIES

Items	Average of 351 Farms	
	Jan. 1	Dec. 1
1. Total Productive Livestock	\$ 23,211	\$ 33,855
2. Crop, Seed & Feed	49,899	58,745
3. Total Power, Machinery and Equipment	39,559	47,218
4. Land	93,572	101,384
5. Buildings, Fences, Etc.	37,692	45,387
6. TOTAL FARM CAPITAL	\$ 243,932	\$ 286,588
7. Non-Farm Assets	18,600	23,240
7A. Cash on Hand and in Bank	5,828	6,913
8. Dwelling	10,904	13,127
9. TOTAL ASSETS	\$ 279,264	\$ 329,868
10. Real Estate Mortgages	59,745	69,373
11. Chattel Mortgages	32,857	44,178
12. Notes	13,559	15,115
13. Accounts Payable	1,744	2,610
14. TOTAL LIABILITIES	\$ 107,905	\$ 131,276
15. FARMERS'S NET WORTH	\$ 171,359	\$ 198,593
16. GAIN (OR LOSS) IN NET WORTH		\$ 27,234
* * * * *		
17. Supplementary Management Information		
18. Return to Operator's Labor and Management (6B/47)	\$ 27,736	
19. Return to Capital and Family Labor (6B/48)	38,514	
20. Non-Farm Income		
21. Outside Investment Income		753
22. Other Personal Income & Income Tax Refund		1,948
22A. Sale of Personal Share-Dwelling, Auto and Truck		47
23. TOTAL NON-FARM INCOME	\$ 2,748	
24. TOTAL FAMILY FARM AND NON-FARM INCOME	\$ 41,262	
25. TOTAL MONEY BORROWED	\$ 74,748	
26. TOTAL PAID ON DEBT (PRINCIPAL)	\$ 51,221	
27. TOTAL HOUSEHOLD & PERSONAL CASH/NON-CASH EXP. (4/23)	\$ 13,323	
28. Ratio: Total Farm Exp. to Total Farm Receipts (O.S.)		.823
	Jan. 1	Dec. 1
29. Ratio: Total Assets to Total Liabilities	2.588	2.513
30. Ratio: Non-Real Estate Assets/Non-Real Est. Liabil.	2.847	2.746
31. Ratio: Real Estate to Real Estate Liabil.	2.380	2.305
32. Ratio: Net Worth to Total Liabilities	1.588	1.513
33.* Ratio: Cash Operating Expenses to Adjusted Total Farm Sales (O.S.)		.705
34. Ratio: Total Farm Receipts to Average Farm Cap. (W.F.)		.414
35. Ratio: Total Farm Receipts to Average Farm Cap. (O.S.)		.592

*Adjusted Total 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 at the 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.

Table 5 is the average of only those farms with complete net worth data. Farms included in other tables may not be included in the Table 5 averages.

TABLE 5 - NET WORTH STATEMENT - OPERATOR - 1978
FOR THOSE FARMS WITH A COMPLETE RECORD OF ALL ASSETS AND LIABILITIES

Items	68 High Profit Farms	
	Jan. 1	Dec. 1
1. Total Productive Livestock	\$ 43,106	\$ 68,738
2. Crop, Seed and Feed	80,228	100,579
3. Total Power, Machinery and Equipment	60,553	69,544
4. Land	113,481	123,412
5. Buildings, Fences, Etc.	62,485	71,830
6. TOTAL FARM CAPITAL	\$ 359,853	\$ 434,104
7. Non-Farm Assets	22,525	29,697
7A. Cash on Hand and in Bank	10,203	12,520
8. Dwelling	13,997	18,137
9. TOTAL ASSETS	\$ 406,578	\$ 494,458
10. Real Estate Mortgages	98,473	108,222
11. Chattel Mortgages	42,080	66,328
12. Notes	20,862	19,432
13. Accounts Payable	3,337	6,780
14. TOTAL LIABILITIES	\$ 164,751	\$ 200,762
15. FARMER'S NET WORTH	\$ 241,827	\$ 293,696
16. GAIN (OR LOSS) IN NET WORTH		\$ 51,869
* * * * *		
17. Supplementary Management Information		
18. Return to Operator's Labor and Management (6B/47)	\$ 65,149	
19. Return to Capital and Family Labor (6B/48)	80,018	
20. Non-Farm Income		
21. Outside Investment Income		925
22. Other Personal Income & Income Tax Refund		765
22A. Sale of Personal Share - Dwelling, Auto and Truck		25
23. TOTAL NON-FARM INCOME	\$ 1,715	
24. TOTAL FAMILY FARM & NON-FARM INCOME	\$ 81,733	
25. TOTAL MONEY BORROWED	\$ 130,341	
26. TOTAL PAID ON DEBT (PRINCIPAL)	94,198	
27. TOTAL HOUSEHOLD & PERSONAL CASH/NON-CASH EXP. (4/23)	20,995	
28. Ratio: Total Farm Exp. to Total Farm Receipts (O.S.)		.769
	Jan. 1	Dec. 31
29. Ratio: Total Assets to Total Liabilities	2.468	2.463
30. Ratio: Non-Real Estate Assets/Non-Real Est. Liabil.	3.268	3.037
31. Ratio: Real Estate Assets to Real Estate Liabil.	1.929	1.972
32. Ratio: Net Worth to Total Liabilities	1.468	1.463
33.* Ratio: Cash Operating Expenses to Adjusted Total Farm Sales (O.S.)		.728
34. Ratio: Total Farm Receipts to Average Farm Cap. (W.F.)		.486
35. Ratio: Total Farm Receipts to Average Farm Cap. (O.S.)		.711
*Adjusted Total Farm Sales Does Not Include Sale of Capital Assets		

The supplementary information listed in Table 5 is helpful in studying the financial structure of the farm. All figures are presented on the operator's share only basis.

The ratio of expense to income is a way of expressing the so-called margin. It answers the question, "How many dollars does it cost me to take in \$100?"

TABLE 5 - NET WORTH STATEMENT - OPERATOR - 1978
FOR THOSE FARMS WITH A COMPLETE RECORD OF ALL ASSETS AND LIABILITIES

Items	72 Low Profit Farms	
	Jan. 1	Dec. 31
1. Total Productive Livestock	\$ 15,133	\$ 20,621
2. Crop, Seed and Feed	35,212	34,766
3. Total Power, Machinery and Equipment	33,141	40,967
4. Land	119,452	122,984
5. Buildings, Fences, Etc.	29,286	34,153
6. TOTAL FARM CAPITAL	\$ 232,223	\$ 253,492
7. Non-Farm Assets	\$ 13,609	\$ 19,143
7A. Cash on Hand and In Bank	3,582	4,607
8. Dwelling	10,930	11,697
9. TOTAL ASSETS	\$ 260,345	\$ 288,939
10. Real Estate Mortgages	\$ 47,375	\$ 55,111
11. Chattel Mortgages	31,120	42,122
12. Notes	8,398	8,025
13. Accounts Payable	1,441	1,689
14. TOTAL LIABILITIES	\$ 88,334	\$ 106,947
15. FARMER'S NET WORTH	\$ 172,011	\$ 181,992
16. GAIN (OR LOSS) IN NET WORTH		\$ 9,982
* * * * *		* *
17. Supplementary Management Information		
18. Return to Operator's Labor and Management (6B/47)	\$ (-565)	
19. Return to Capital and Family Labor (6B/48)		10,245
20. Non-Farm Income		
21. Outside Investment Income		664
22. Other Personal Income and Income Tax Refund		3,121
22A. Sale of Personal Share - Dwelling, Auto and Truck		33
23. TOTAL NON-FARM INCOME	\$ 3,818	
24. TOTAL FAMILY FARM AND NON-FARM INCOME	\$ 14,064	
25. TOTAL MONEY BORROWED	\$ 60,352	
26. TOTAL PAID ON DEBT (PRINCIPAL)	\$ 41,409	
27. TOTAL HOUSEHOLD & PERSONAL CASH/NON-CASH EXP. (4/23)	\$ 9,229	
28. Ratio: Total Farm Exp. to Total Farm Receipts (O.S.)		1,006
	Jan. 1	Dec. 31
29. Ratio: Total Assets to Total Liabilities	2.947	2.702
30. Ratio: Non-Real Estate Assets/Non Real Est. Liabil.	2.458	2.317
31. Ratio: Real Estate Assets to Real Estate Liabil.	3.370	3.064
32. Ratio: Net Worth to Total Liabilities	1.947	1.702
33.* Ratio: Cash Operating Expenses to Adjusted Total Farm Sales (O.S.)		.757
34. Ratio: Total Farm Receipts to Average Farm Cap. (W.F.)		.309
35. Ratio: Total Farm Receipts to Average Farm Cap. (O.S.)		.388
*Adjusted Total Farm Sales Does Not Include Sale of Capital Assets		

The ratio of assets to liabilities 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 assets do I have to cover each dollar of debt?"

The ratio of Farm Receipts to Farm Capital indicates the rate of Capital turnover.

TABLE 6A - OPERATOR'S SHARE OF CASH RECEIPTS - 1978

Items	Average of - 394 Farms	79 Most Profitable Farms	79 Least Profitable Farms
1. SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2. Dairy Cows	\$ 1,582	\$ 1,370	\$ 1,249
3. Dairy Products	15,124	15,180	11,980
4. Other Dairy Cattle	1,400	1,214	1,023
5. Beef Breeding Cattle	254	165	262
6. Beef Feeder Cattle	11,501	34,375	6,048
7. Hogs Complete and Mixed	16,233	43,187	5,614
8. Hogs Finishing	10,612	21,703	3,033
9. Hogs Producing Weaning Pigs	1,985	1,442	1,612
10. Sheep, Goats, and Wool - Farm Flock	87	97	70
11. Sheep and Wool - Feeder Lambs	686		2,895
12. Chickens (Including Hens and Broilers)	11		7
13. Turkeys	181	902	
14. Eggs	376		68
15. Other Productive Livestock & Products	27		16
16. Other Miscellaneous Livestock Income	56	67	29
17. TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$ 60,115	\$ 119,701	\$ 33,907
18. SALE OF CROPS			
19. Wheat	\$ 905	\$ 1,522	\$ 643
20. Other Small Grain	242	383	127
21. Corn	19,773	31,785	13,902
22. Soybeans	26,748	41,005	17,185
23. Other Row Crops	1,353	2,985	636
24. Legumes and Other Roughage	149	127	241
25. Grass Seed	20	97	1
26. Fruits and Nuts			
27. Vegetables, Roadside Market & Specialty			
28. Nursery, Timber and Other	11		53
29. Set Aside Acres - Government Payments	810	1,137	604
30. TOTAL SALES FROM CROPS	\$ 50,010	\$ 79,041	\$ 33,391
31. Capital Assets Sold	\$ 941	\$ 1,376	\$ 1,362
32. Gas Tax Refund	162	224	162
33. Income From Work off the Farm	1,162	1,540	790
34. Custom Work Enterprise Income	77		238
35. Patronage Funds	1,266	1,932	806
36. Miscellaneous Farm Income	1,591	2,309	1,255
37. TOTAL FARM SALES	\$ 115,323	\$ 206,124	\$ 71,911
38. Increase in Farm Capital	\$ 41,949	\$ 76,058	\$ 19,929
39. Family Living from the Farm	451	572	356
40. TOTAL FARM RECEIPTS (37)+(38)+(39)	\$ 157,723	\$ 282,753	\$ 92,195
41. Adjusted Total Farm Sales (37)-(31)	\$ 114,382	\$ 204,748	\$ 70,549
42. Total Cash Farm Operating Expense	\$ 80,875	\$ 150,647	\$ 53,420
43. Net Cash Operating Income	\$ 33,507	54,102	17,129

Table 6A is derived the same way as Table 2A with the exception of the landlord's share which is left out. For the owner-operator, Table 2A and 6A are the same.

TABLE 6B - OPERATOR'S SHARE OF CASH EXPENSES - 1978

Items	Average of - 394 Farms	79 Most Profitable Farms	79 Least Profitable Farms
1. PURCHASE OF LIVESTOCK			
2. Dairy Cows	\$ 236	\$ 203	\$ 204
3. Other Dairy Cattle	352	412	312
4. Beef Breeding Cattle	113	124	401
5. Beef Feeder Cattle	8,053	27,333	3,467
6. Hogs Complete	1,443	2,882	974
7. Hogs Finishing	4,263	9,016	1,441
8. Hogs Producing Weaning Pigs	316	57	530
9. Sheep, Farm Flock	46	5	9
10. Sheep, Feeder Lambs	787		3,281
11. Chickens	111		69
12. Turkeys	20	99	
13. Other Productive Livestock	13	23	14
14. Miscellaneous Livestock Expense	2,410	4,147	1,473
15. Feed Bought	12,163	24,379	6,347
16. Fertilizer	6,777	10,938	4,554
17. Chemicals	3,777	6,350	2,500
18. Other Crop Expense	5,253	8,691	3,246
19. Irrigation Operation Cost	22	68	19
20. Custom Work - Operator Costs (incl. labor)	27		127
21. Custom Work - Hired	2,189	3,068	1,808
22. Repair and Upkeep of Livestock Equipment	712	1,065	469
23. Repair and Upkeep of Farm Real Estate	1,155	1,590	1,119
24. Gas, Oil, Grease Bought (Farm Share)	3,155	4,628	2,425
25. Repair & Oper. of Mach., Tract., Truck, and Auto (Farm Share)	4,162	5,658	3,724
26. Repair & Upkeep of Irrigation Equipment	2	8	
27. Repairs, Custom Work Enterprise	35		165
28. Wages of Hired Labor	2,572	5,087	1,299
29. Personal Property & Real Estate Taxes	1,677	2,771	1,191
30. Cash Rent	8,133	14,709	3,606
31. General Farm Expenses	1,362	2,124	980
32. Telephone Expense (Farm Share)	236	307	195
33. Electricity Expense (Farm Share)	975	1,449	672
34. Interest Expense	8,328	13,456	6,801
35. TOTAL CASH OPERATING EXPENSE	\$ 80,875	\$ 150,647	\$ 53,420
36. Power, Crop & Gen. Mach. Bought (F. Share)	16,145	22,723	13,321
37. Irrigation Equipment Bought	224	204	827
38. Custom Work Enterprise Equip. Bought	77		209
39. Livestock Equipment Bought	2,656	4,229	2,142
40. New Real Estate & Improvements	18,480	24,509	11,785
41. TOTAL FARM PURCHASES (35) THRU (40)	\$118,456	\$ 202,312	\$ 81,705
42. Decrease in Farm Capital			
43. Interest on Farm Capital (Equity)	10,503	14,677	10,020
44. Unpaid Family Labor	439	309	699
45. Board Furnished Hired Labor	107	105	153
46. TOTAL FARM EXPENSE (41) THRU (45)	\$129,506	\$ 217,402	\$ 92,578
47. Return to Operator Labor & Mgmt. (Operator's Share) (6A/40)-(46)	\$ 28,217	\$ 65,351	\$ (-382)
48. Ret. to Cap. & Fam. Lab. (47)+(44)+(43)	\$ 39,160	\$ 80,337	\$ 10,337

Return to capital and family labor represents the amount available for debt service, living expense, and savings.

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 14.

1. Labor Earnings - 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.

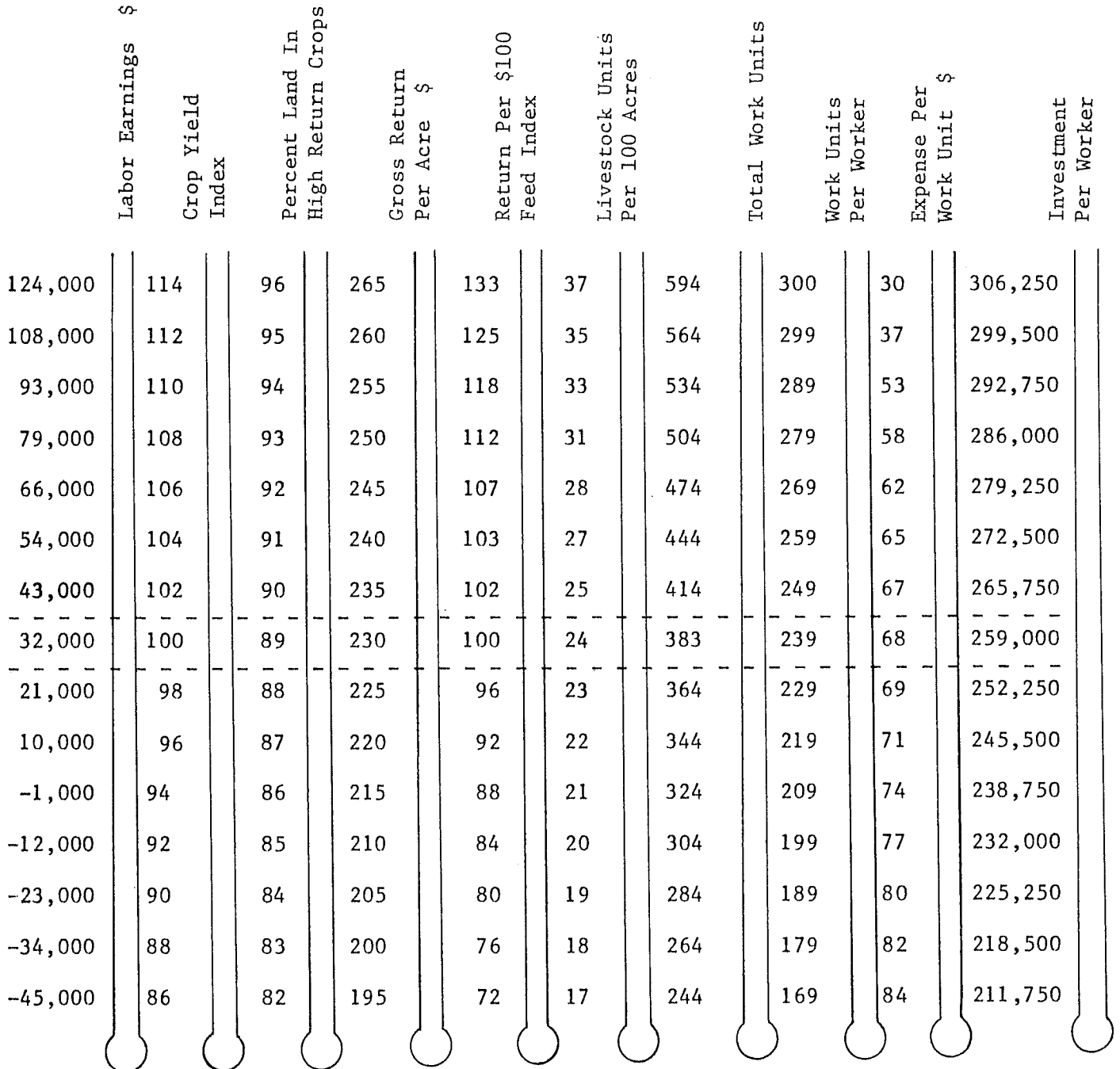
Note should be taken that items listed in Table 8 and the Thermometer Chart are to be considered in light of the individual farm and farm operator. Although in general, an above-average level for each factor listed would indicate above average earnings, this may not be true when individual farms are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

TABLE 8 - MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY - 1978

Items		Average of - 394 Farms	79 Most Profitable Farms	79 Least Profitable Farms
1.	Return to Operator's Labor & Mgmt.	\$ 31,839	\$ 74,937	\$ (-1,783)
2.	Crop Yield Index	100.0	97.2	99.9
3.	Percent Tillable Land in High Return Crops	89.5	93.1	87.1
4.	Gross Return per Tillable Acre (excluding Pasture)	\$ 230.32	\$ 247.35	\$ 207.60
5.	Return per \$100 Feed Fed Productive Livestock Index	100.0	107.4	84.2
6.*	Livestock Units per 100 Acres	23.19	27.83	17.2
7.	Size of Business - Work Units	382.79	553.99	279.37
8.	Work Units per Worker	239.24	265.07	188.76
9.	Power, Machinery, Equipment, Building Expense per Worker Unit	\$ 68.12	\$ 66.84	\$ 81.26
10.	Farm Capital Investment per Worker	\$ 259,350	\$ 285,825	\$ 273,832
	* * * *	*	*	*
30.	Number of Animal Units	80.03	147.50	46.72
31.	Work Units			
32.	Crops	170.44	263.03	131.48
33.	Productive Livestock	196.50	279.10	132.91
34.	Other Productive Work Units	15.85	11.85	14.97
35.	Expenses per Work Units			
36.	Tractor and Crop Machinery Expense	\$ 37.57	\$ 36.00	\$ 46.96
37.	Farm Share of Auto & Truck Expense	8.90	8.18	10.76
38.	Farm Share of Electric Expense	2.66	2.71	2.72
39.	Livestock Equipment Expense	5.82	6.16	5.74
40.	Building, Fence and Tiling Expense	13.17	13.78	15.08
41.**	Tractor & Crop Machinery Expense per Crop Acre	41.37	37.42	47.56
42.	Farm Power & Machinery Cost Allocation to Livestock	\$2,009.38	\$2,539.79	\$2,022.25
43.	Building, Fence & Tiling Cost Allocation to Crops BCAF (2)	\$2,408.40	\$3,309.96	\$2,221.88
44.	*Acres include all tillable land, non-tillable hay and pasture.			
45.	**Acres include all tillable land plus acres in non-tillable hay.			

THERMOMETER CHART

Using your figures from page 13, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the farms included in this summary are located between the dotted lines across the center of the chart.



394 Farms

TABLE 9 - CROP DATA FOR MAJOR CROPS & DISTRIBUTION OF ACRES, YIELD & COST PER UNIT - 1978

Crop	Crop Rank	Average Yield	Cost per Unit
Oats	D	66.6 bu.	\$ 1.77
Spring Wheat	C	26.8 bu.	4.24
Canning Peas	B	\$ 155.64	.79
All Other Small Grain	C & D		
TOTAL ACRES SMALL GRAIN & PEAS		17.0 Acres	
Canning Corn	B	\$ 182.67	\$.97
Corn - Grain	A	127.8 bu.	1.59
Soybeans	A	41.0 bu.	3.58
Corn Silage	B	18.7 ton	10.45
All Other Row Crops	A & B		
TOTAL ACRES ROW CROPS		297.5 Acres	
Alfalfa Hay	B	5.0 ton	\$30.64
Other Hay	C & D		
TOTAL ACRES HAY		17.8 Acres	
Tillable Pasture		.8 Acres	
Tillable Land Idle		10.5 Acres	
TOTAL TILLABLE LAND		343.6 Acres	
Non-Tillable Pasture		9.9 Acres	
Timber		3.1 Acres	
Roads and Waste		11.5 Acres	
Farmstead		9.7 Acres	
TOTAL NON-TILLABLE LAND		34.2 Acres	
TOTAL LAND IN FARM		377.8 Acres	

SUPPLEMENTARY MANAGEMENT INFORMATION

	394 Average All Farms	79 High Earnings Farms	79 Low Earnings Farms
Percent Land Tillable	91.0	93.4	88.0
Percent Land on High Return Crops	89.5	93.1	87.1
*Fertilizer Cost per Acre	\$ 20.56	\$22.13	\$ 20.47
*Crop Chemicals per Acre	11.65	13.01	10.86
*Seed and Other Costs per Acre	16.60	17.23	16.27
*Gas, Oil & Grease Bought per Acre	7.44	6.81	7.81

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

TABLE 10 - CROPS ANALYSIS

The Crops Analysis Tables for each individual crop show yield, value per unit and gross return per acre. Other Crop income includes the value of straw, crop insurance and the like.

Out of pocket costs for fertilizer, chemicals, seed and miscellaneous crop expense, hired labor, custom work, and irrigation are actual costs that are assigned to each individual crop in the account book. These costs are shown in Table 10, under the heading Supplemental Costs.

Other costs, called Allocated Costs, are not actual costs but are either calculated costs, assigned costs, or non-cash costs. The Power and Crop Machinery expense is calculated from the expenses and net decreases shown in Table 3. Ownership and Operation refer to what are commonly called fixed and variable costs. Interest is the allocated portion of the average investment in machinery at the 7% rate. Work Units are used as a factor in allocating a portion of the total power and machinery expense to each crop.

Land cost is considered to be the cash rental value based on comparable or actual rental values for similar land in each local area. For the land owner this rental must be at least enough to cover taxes and interest on investment in the land.

TABLE 10 - CROP DATA FOR OATS - FEED - 1978

Items	Average Yield of 186 Farms	93 Farms High in Yield	93 Farms Low in Yield
1. Acres	18.8	18.8	18.8
2. Yield	66.6	80.7	52.4
3. Value per Production Unit	\$ 1.18	\$ 1.18	\$ 1.18
4. Crop Product Return	78.56	95.27	61.86
5. Other Crop Income	18.14	19.41	16.86
6. TOTAL CROP RETURN	\$ 96.70	\$ 114.68	\$ 78.72
7. DIRECT COSTS			
8. Fertilizer	\$ 6.65	\$ 6.86	\$ 6.44
9. Chemicals	.69	1.01	.37
10. Seed and Other	7.71	8.51	6.86
11. Special Hired Labor	.11	.11	.11
12. Custom Work Hired	5.32	4.57	6.01
13. Irrigation Operation			
14. TOTAL DIRECT COSTS	\$ 20.48	\$ 21.06	\$ 19.73
15. RETURN OVER DIRECT COSTS PER ACRE	\$ 76.22	\$ 93.62	\$ 58.99
16. ALLOCATED COSTS			
17. Farm Power and Machinery - Ownership	\$ 13.59	\$ 13.20	\$ 13.97
18. Farm Power and Machinery - Operation	12.68	12.45	12.90
19. Irrigation Equipment - Ownership			
20. Land Costs	67.24	69.82	64.66
21. Miscellaneous Costs			
22. *Interest on Mach. & Equipment Investment	4.15	3.96	4.35
23. TOTAL ALLOCATED COSTS	\$ 97.66	\$ 99.43	\$ 95.88
24. RETURN OVER ALL LISTED COSTS	\$ (-21.44)	\$ (-5.81)	\$ (-36.89)
25. SUPPLEMENTARY MANAGEMENT INFORMATION			
26. Work Units Assigned per Acre	.30	.30	.30
27. Power Costs Allocation Factor	\$ 1.00	\$.99	\$ 1.01
28. Total Listed Cost per Unit of Production	1.77	1.49	2.21
29. Return Over Listed Costs per Unit	(-.32)	(-.07)	(-.70)
30. BREAK-EVEN YIELD/UNITS OF PRODUCTION	100.12 bu.	102.11 bu.	97.97 bu.
31. TOTAL LISTED COSTS PER ACRE	\$ 118.14	\$ 120.49	\$115.61

*Does not include interest on investment in irrigation equipment or land.

TABLE 10 - CROP DATA FOR SPRING WHEAT - 1978

Items		Average Yield of 65 Farms	32 Farms High in Yield	32 Farms Low in Yield
1.	Acres	26.8	27.0	26.4
2.	Yield	26.8	33.5	20.0
3.	Value per Production Unit	\$ 2.69	\$ 2.72	\$ 2.67
4.	Crop Product Return	72.16	91.07	53.48
5.	Other Crop Income	9.66	7.22	12.50
6.	TOTAL CROP RETURN	\$ 81.82	\$ 98.29	\$ 65.98
7.	DIRECT COSTS			
8.	Fertilizer	\$ 11.65	\$ 11.19	\$ 12.11
9.	Chemicals	1.32	1.33	1.26
10.	Seed and Other	10.08	11.59	8.47
11.	Special Hired Labor			
12.	Custom Work Hired	3.01	3.93	2.18
13.	Irrigation Operation			
14.	TOTAL DIRECT COSTS	\$ 26.06	\$ 28.04	\$ 24.02
15.	RETURN OVER DIRECT COSTS	\$ 55.76	\$ 70.25	\$ 41.96
16.	ALLOCATED COSTS			
17.	Farm Power and Machinery - Ownership	\$ 9.22	\$ 8.20	\$ 9.97
18.	Farm Power and Machinery - Operation	8.30	9.18	7.13
19.	Irrigation Equipment - Ownership			
20.	Land Costs	67.31	69.97	64.72
21.	Miscellaneous Costs			
22.	*Interest on Mach. & Equip. Investment	3.24	2.81	3.55
23.	TOTAL ALLOCATED COSTS	\$ 88.07	\$ 90.16	\$ 85.37
24.	RETURN OVER ALL LISTED COSTS	\$ (-32.31)	\$ (-19.91)	\$ (-43.41)
25.	SUPPLEMENTARY MANAGEMENT INFORMATION			
26.	Work Units Assigned per Acre	.25	.25	.24
27.	Power Costs Allocation Factor	\$.97	.97	.98
28.	Total Listed Cost per Unit of Production	4.24	3.53	5.48
29.	Return Over Listed Costs per Unit	(-1.18)	(-.59)	(-2.14)
30.	BREAK-EVEN YIELD/UNITS OF PRODUCTION	\$ 42.91	\$ 43.46	\$ 42.07
31.	TOTAL LISTED COSTS PER ACRE	\$ 114.13	\$ 118.20	\$ 109.39

*Does not include interest on investment in irrigation equipment or land.

TABLE 10 - CROP DATA FOR CANNING CORN - 1978

Items		Average Yield of 42 Farms	21 Farms High in Yield	21 Farms Low in Yield
1.	Acres	36.7	38.1	35.3
2.	Yield	\$ 182.67	\$ 240.47	\$ 120.31
3.	Value per Production Unit	1.00	1.00	1.00
4.	Crop Product Return	182.47	240.47	120.31
5.	Other Crop Income	1.39	.60	2.27
6.	TOTAL CROP RETURN	\$ 184.06	\$ 241.07	\$ 122.58
7.	DIRECT COSTS			
8.	Fertilizer	\$ 28.17	\$ 28.08	\$ 28.27
9.	Chemicals	9.13	10.89	7.22
10.	Seed and Other	5.42	7.82	2.83
11.	Special Hired Labor	.68	1.29	
12.	Custom Work Hired	4.93	8.01	1.61
13.	Irrigation Operation			
14.	TOTAL DIRECT COSTS	\$ 48.33	\$ 56.09	\$ 39.93
15.	RETURN OVER DIRECT COSTS	\$ 135.73	\$ 184.98	\$ 82.65
16.	ALLOCATED COSTS			
17.	Farm Power and Machinery - Ownership	\$ 21.01	\$ 13.99	\$ 28.59
18.	Farm Power & Machinery - Operation	17.16	14.20	20.36
19.	Irrigation Equipment - Ownership			
20.	Land Costs	73.81	74.24	73.38
21.	Miscellaneous Costs			
22.	*Interest on Mach. & Equip. Investment	5.60	4.27	7.04
23.	TOTAL ALLOCATED COSTS	\$ 117.58	\$ 106.70	\$ 129.37
24.	RETURN OVER ALL LISTED COSTS	\$ 18.15	\$ 78.28	\$ (-46.72)
25.	SUPPLEMENTARY MANAGEMENT INFORMATION			
26.	Work Units Assigned per Acre	.50	.50	.50
27.	Power Costs Allocation Factor	\$.94	\$.95	\$.94
28.	Total Listed Cost per Unit of Production	.91	.68	1.41
29.	Return Over Listed Costs per Unit	.10	.33	(-.39)
30.	BREAK-EVEN/UNITS OF PRODUCTION	\$ 165.91	\$ 162.79	\$ 169.30
31.	TOTAL LISTED COSTS PER ACRE	\$ 165.91	\$ 162.79	\$ 169.30

*Does not include interest on investment in irrigation equipment or land.

TABLE 10 - CROP DATA FOR CORN FOR GRAIN - 1978

Items		Average Yield of 468 Farms	234 Farms High in Yield	234 Farms Low in Yield
1.	Acres	132.5	151.3	113.6
2.	Yield	127.8	140.2	111.4
3.	Value per Production Unit	\$ 1.89	\$ 1.91	\$ 1.87
4.	Crop Product Return	241.56	267.83	208.28
5.	Other Crop Income	.72	.28	1.32
6.	TOTAL CROP RETURN	\$ 242.28	\$ 268.11	\$ 209.60
7.	DIRECT COSTS			
8.	Fertilizer	\$ 37.12	\$ 39.44	\$ 34.05
9.	Chemicals	13.86	14.63	12.84
10.	Seed and Other	21.48	22.45	20.21
11.	Special Hired Labor	.06	.08	.04
12.	Custom Work Hired	4.00	3.83	4.23
13.	Irrigation Operation			
14.	TOTAL DIRECT COSTS	\$ 76.52	\$ 80.43	\$ 71.37
15.	RETURN OVER DIRECT COSTS	\$165.76	\$ 187.68	\$ 138.23
16.	ALLOCATED COSTS			
17.	Farm Power and Machinery - Ownership	\$ 26.67	\$ 27.27	\$ 25.89
18.	Farm Power and Machinery - Operation	20.42	\$ 19.57	21.57
19.	Irrigation Equipment - Ownership			
20.	Land Costs	71.93	75.95	67.91
21.	Miscellaneous Costs	.01	.01	
22.	*Interest on Mach. & Equip. Investment	7.70	7.71	7.69
23.	TOTAL ALLOCATED COSTS	\$126.73	\$ 130.51	\$ 123.06
24.	RETURN OVER ALL LISTED COSTS	\$ 39.03	\$ 57.17	\$ 15.17
25.	SUPPLEMENTARY MANAGEMENT INFORMATION			
26.	Work Units Assigned per Acre	.55	.55	.55
27.	Power Costs Allocation Factor	\$ 1.03	\$ 1.00	\$ 1.06
28.	Total Listed Cost per Unit of Production	1.59	1.50	1.75
29.	Return Over Listed Costs per Unit	.31	.41	.14
30.	BREAK-EVEN YIELD/UNITS OF PRODUCTION	107.54 bu.	110.44 bu.	103.97 bu.
31.	TOTAL LISTED COSTS PER ACRE	\$203.25	\$ 210.94	\$ 194.43

*Does not include interest on investment in irrigation equipment or land.

TABLE 10 - CROP DATA FOR SOYBEANS - 1978

Items	Average Yield of 442 Farms	221 Farms High in Yield	221 Farms Low in Yield
1. Acres	118.7	123.0	114.5
2. Yield	41.0	45.9	35.7
3. Value per Production Unit	\$ 6.06	\$ 6.06	\$ 6.05
4. Crop Product Return	248.42	278.07	216.00
5. Other Crop Income	4.26	.90	7.87
6. TOTAL CROP RETURN	\$ 252.68	\$ 278.97	\$ 223.87
7. DIRECT COSTS			
8. Fertilizer	\$ 2.41	\$ 2.74	\$ 2.04
9. Chemicals	11.85	11.98	11.71
10. Seed and Other	13.34	13.13	13.54
11. Special Hired Labor	.72	.88	.55
12. Custom Work Hired	2.19	1.59	2.83
13. Irrigation Operation	.02		.04
14. TOTAL DIRECT COSTS	\$ 30.53	\$ 30.32	\$ 30.71
15. RETURN OVER DIRECT COSTS	\$ 222.15	\$ 248.65	\$ 193.16
16. ALLOCATED COSTS			
17. Farm Power and Machinery - Ownership	\$ 21.64	\$ 23.18	\$ 19.97
18. Farm Power and Machinery - Operation	15.88	16.04	15.70
19. Irrigation Equipment - Ownership	.03		.07
20. Land Costs	72.29	74.59	70.00
21. Miscellaneous Costs			
22. *Interest on Mach. & Equip. Investment	6.26	6.40	6.10
23. TOTAL ALLOCATED COSTS	\$ 116.10	\$ 120.21	\$ 111.84
24. RETURN OVER ALL LISTED COSTS	\$ 106.05	\$ 128.44	\$ 81.32
25. SUPPLEMENTARY MANAGEMENT INFORMATION			
26. Work Units Assigned per Acre	.45	.45	.45
27. Power Costs Allocation Factor	\$ 1.00	\$ 1.00	\$ 1.00
28. Total Listed Cost per Unit of Production	3.58	3.28	3.99
29. Return Over Listed Costs per Unit	2.59	2.80	2.28
30. BREAK-EVEN YIELD/UNITS OF PRODUCTION	24.20 bu.	24.84 bu.	23.56 bu.
31. TOTAL LISTED COSTS PER ACRE	\$ 146.63	\$ 150.53	\$ 142.55

*Does not include interest on investment in irrigation equipment or land.

TABLE 10 - CROP DATA FOR CANNING PEAS - 1978

Items	Average Yield 31 Farms	15 Farms High in Yield	12 Farms Low in Yield
1. Acres	26.4	27.6	25.7
2. Yield	155.64	208.15	98.79
3. Value per Production Unit	\$ 1.00	\$ 1.00	\$ 1.00
4. Crop Product Return	155.64	208.15	98.79
5. Other Crop Income	2.50	.33	4.98
6. TOTAL CROP RETURN	\$ 158.14	\$ 208.48	\$ 103.77
7. DIRECT COSTS			
8. Fertilizer	\$ 7.39	\$ 6.45	\$ 8.72
9. Chemicals	2.20	2.86	1.36
10. Seed and Other	10.38	16.09	4.59
11. Special Hired Labor			
12. Custom Work Hired	.23	.25	.23
13. Irrigation Operation			
14. TOTAL DIRECT COSTS	\$ 20.20	\$ 25.65	\$ 14.90
15. RETURN OVER DIRECT COSTS	\$ 137.94	\$ 182.83	\$ 88.87
16. ALLOCATED COSTS			
17. Farm Power and Machinery - Ownership	\$ 13.60	\$ 11.24	\$ 15.59
18. Farm Power & Machinery - Operation	12.87	13.31	11.98
19. Irrigation Equipment - Ownership			
20. Land Costs	71.61	66.87	75.80
21. Miscellaneous Costs			
22. *Interest on Mach. & Equip. Investment	5.36	4.47	6.24
23. TOTAL ALLOCATED COSTS	\$ 103.44	\$ 95.89	\$ 109.61
24. RETURN OVER ALL LISTED COSTS	\$ 34.50	\$ 86.94	\$ (-20.74)
25. SUPPLEMENTARY MANAGEMENT INFORMATION			
26. Work Units Assigned per Acre	.40	.40	.40
27. Power Costs Allocation Factor	\$.97	\$.93	\$ 1.00
28. Total Listed Cost Per Unit of Production	.79	.58	1.26
29. Return Over Listed Costs per Unit	.22	.42	(-.21)
30. BREAK-EVEN YIELD/UNITS OF PRODUCTION	123.64	121.54	124.51
31. TOTAL LISTED COSTS PER ACRE	\$ 123.64	\$ 121.54	\$ 124.51

*Does not include interest on investment in irrigation equipment or land.

TABLE 10 - CROP DATA FOR ALFALFA HAY - 1978

Items		Average Yield 254 Farms	127 Farms High in Yield	127 Farms Low in Yield
1.	Acres	27.9	31.5	24.3
2.	Yield	5.0	5.9	3.8
3.	Value per Production Unit	\$ 34.66	\$ 35.04	\$ 34.29
4.	Crop Product Return	173.91	208.00	131.23
5.	Other Crop Income	1.08		2.47
6.	TOTAL CROP RETURN	\$ 174.99	\$ 208.00	\$ 133.70
7.	DIRECT COSTS			
8.	Fertilizer	\$ 10.75	\$ 13.52	\$ 7.12
9.	Chemicals	.14	.16	.12
10.	Seed and Other	10.25	11.24	8.97
11.	Special Hired Labor	.39	.54	.21
12.	Custom Work Hired	4.34	5.78	2.47
13.	Irrigation Operation			
14.	TOTAL DIRECT COSTS	\$ 25.87	\$ 31.24	\$ 18.89
15.	RETURN OVER DIRECT COSTS	\$ 149.12	\$ 176.76	\$ 114.81
16.	ALLOCATED COSTS			
17.	Farm Power and Machinery - Ownership	\$ 28.01	\$ 28.91	\$ 26.83
18.	Farm Power and Machinery - Operation	24.35	25.55	22.80
19.	Irrigation Equipment - Ownership			
20.	Land Costs	67.52	68.13	66.91
21.	Miscellaneous Costs	.04		.04
22.	*Interest on Mach. & Equip. Investment	8.01	8.53	7.33
23.	TOTAL ALLOCATED COSTS	\$ 127.93	\$ 131.12	\$ 123.91
24.	RETURN OVER ALL LISTED COSTS	\$ 21.19	\$ 45.64	\$ (-9.10)
25.	SUPPLEMENTARY MANAGEMENT INFORMATION			
26.	Work Units Assigned per Acre	.60	.60	.60
27.	Power Costs Allocation Factor	\$ 1.00	\$ 1.01	\$.98
28.	Total Listed Cost per Unit of Production	30.64	27.35	37.31
29.	Return Over Listed Costs per Unit	4.23	7.68	(-2.38)
30.	BREAK-EVEN YIELD/UNITS OF PRODUCTION	4.44 T.	4.63 T.	4.16 T
31.	TOTAL LISTED COSTS PER ACRE	\$ 153.80	\$ 162.36	\$ 142.80

*Does not include interest on investment in irrigation equipment or land.

TABLE 10 - CROP DATA FOR CORN SILAGE - 1978

Items		Average Yield of 164 Farms	82 Farms High in Yield	82 Farms Low in Yield
1.	Acres	20.5	18.9	22.0
2.	Yield	18.7	22.1	15.9
3.	Value per Production Unit	\$ 15.78	\$ 15.80	\$ 15.76
4.	Crop Product Return	295.61	349.42	250.00
5.	Other Crop Income	.29		.55
6.	TOTAL CROP RETURN	\$ 295.90	\$ 349.42	\$ 250.55
7.	DIRECT COSTS			
8.	Fertilizer	\$ 31.37	\$ 31.27	\$ 31.64
9.	Chemicals	12.34	12.80	12.05
10.	Seed and Other	14.78	16.08	13.73
11.	Special Hired Labor			
12.	Custom Work Hired	4.68	6.30	3.27
13.	Irrigation Operation			
14.	TOTAL DIRECT COSTS	\$ 63.17	\$ 66.45	\$ 60.69
15.	RETURN OVER DIRECT COSTS	\$ 232.73	\$ 282.97	\$ 189.86
16.	ALLOCATED COSTS			
17.	Farm Power & Machinery - Ownership	\$ 28.99	\$ 31.38	\$ 27.08
18.	Farm Power & Machinery - Operation	26.36	26.58	26.30
19.	Irrigation Equipment - Ownership			
20.	Land Costs	68.73	68.22	69.23
21.	Miscellaneous Costs			
22.	*Interest on Mach. & Equip. Investment	8.47	9.05	8.01
23.	TOTAL ALLOCATED COSTS	\$ 132.55	\$ 135.23	\$ 130.62
24.	RETURN OVER ALL LISTED COSTS	\$ 100.18	\$ 147.74	\$ 59.24
25.	SUPPLEMENTARY MANAGEMENT INFORMATION			
26.	Work Units Assigned per Acre	.60	.60	.60
27.	Power Costs Allocation Factor	\$ 1.04	\$ 1.03	\$ 1.05
28.	Total Listed Cost per Unit of Production	10.45	9.12	12.06
29.	Return Over Listed Costs per Unit	5.35	6.68	3.73
30.	BREAK-EVEN YIELD/UNITS OF PRODUCTION	12.40 T.	12.76 T.	12.14 T.
31.	TOTAL LISTED COSTS PER ACRE	\$ 195.72	\$ 201.68	\$ 191.31

*Does not include interest on investment in irrigation equipment or land.

TABLE 10 - CROP DATA FOR SET ASIDE ACRES - 1978

Items	TILLED	IDLE
	Average of 107 Farms	Average of 43 Farms
1. Acres	29.1	23.7
2. Yield	88.9	79.2
3. Value per Production Unit	\$.99	\$.84
4. Crop Product Return	88.01	66.58
5. Other Crop Income	.82	.55
6. TOTAL CROP RETURN	\$ 88.83	\$ 67.13
7. DIRECT COSTS		
8. Fertilizer	\$.10	\$
9. Chemicals	.14	1.50
10. Seed and Other	1.37	2.34
11. Special Hired Labor		
12. Custom Work Hired		.05
13. Irrigation Operation		
14. TOTAL DIRECT COSTS	\$ 1.61	\$ 3.89
15. RETURN OVER DIRECT COSTS	\$ 87.22	\$ 63.24
16. ALLOCATED COSTS		
17. Farm Power and Machinery - Ownership	\$ 8.49	\$ 2.87
18. Farm Power and Machinery - Operation	.685	2.20
19. Irrigation Equipment - Ownership		
20. Land Costs	70.06	57.33
21. Miscellaneous Costs		
22. *Interest on Mach. & Equip. Investment	2.26	.75
23. TOTAL ALLOCATED COSTS	\$ 87.66	\$ 63.15
24. RETURN OVER ALL LISTED COSTS	\$ (-.44)	\$.09
25. SUPPLEMENTARY MANAGEMENT INFORMATION		
26. Work Units Assigned per Acre	.20	.04
27. Power Costs Allocation Factor	\$.91	\$.84
28. Total Listed Cost per Unit of Production	1.00	.76
29. Return Over Listed Costs per Unit	(-.01)	.08
30. BREAK-EVEN YIELD/UNITS OF PRODUCTION	90.17 bu.	79.81 bu.
31. TOTAL LISTED COSTS PER ACRE	\$ 89.27	\$ 67.04

*Does not include interest on investment in irrigation equipment or land.

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. Tables 11A through 15B 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.

Supplemental Costs are those costs which have been identified as cash costs attributable to the enterprise and recorded as such in the record.

Allocated Costs are calculated costs and are derived by first allocating the total cost for each category between the crops and livestock; then further allocating the livestock portion to each livestock enterprise on a work unit basis.

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 net increase for the enterprise. The net increase is divided by the net quantity produced or 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 feeds purchased from off the farm. An average price is charged for each kind of farm grown feed.

The items listed as Supplementary Management Information provide further clues to the reasons for good, bad, or average livestock returns.

All livestock costs and returns are computed on an annual basis. Thus, with feeder enterprises, inventories of feeder animals are involved. In such cases, the amount indicated as "Price Per Cwt. Bought" is the cost of those animals on hand at the end of the year; likewise, the amount given as "Price Per Cwt. Sold" is the price received for animals sold during the twelve month period, most of which were animals on hand at the beginning of the year.

TABLE 11A - COSTS AND RETURNS FROM COMPLETE HOG ENTERPRISE* - 1978

Items	Average of 106 Farms	21 Farms Highest in Return above Feed Cost	21 Farms Lowest in Return above Feed Cost
1. Pounds of Hogs Produced	110,285	101,368	76,012
	Per Cwt.	Per Cwt.	Per Cwt.
2. Net Increase in Value of Hogs	\$ 50.63	\$ 55.30	\$ 46.18
3. Other Miscellaneous Hog Income			
4. TOTAL VALUE PRODUCED	\$ 50.63	\$ 55.30	\$ 46.18
5. POUNDS OF FEED FED			
6. Corn	303.0	283.1	338.5
7. Small Grain	15.8	14.0	24.5
8. Complete Ration	5.2	1.5	34.8
9. Protein, Salt & Mineral & Milk	82.5	73.5	79.4
10. TOTAL CONCENTRATES	406.5	372.1	477.2
11. Forages	1.8	3.1	1.3
12. FEED COST			
13. Grain	\$ 11.04	\$ 10.10	\$ 12.61
14. Complete Ration	.49	.14	3.23
15. Protein, Salt & Mineral & Milk	10.76	8.30	13.53
16. Forages	.03	.05	.02
17. Pasture	.01	.05	.03
18. TOTAL FEED COSTS	\$ 22.33	\$ 18.59	\$ 29.42
19. RETURN OVER FEED COSTS	\$ 28.30	\$ 36.71	\$ 16.76
20. OTHER DIRECT COSTS			
21. Miscellaneous Livestock Expense	\$ 1.47	\$ 1.66	\$ 1.69
22. Veterinary Expense	.61	.65	.59
23. Custom Work	.39	.34	.42
24. Special Hired Labor	.08		.56
25. TOTAL OTHER DIRECT COSTS	\$ 2.55	\$ 2.65	\$ 3.26
26. RETURN OVER FEED AND DIRECT COSTS	\$ 25.75	\$ 34.06	\$ 13.50
27. ALLOCATED COSTS			
28. Power and Machinery Costs	\$ 1.25	\$ 1.34	\$ 1.53
29. Livestock Equipment Costs	1.77	1.97	2.06
30. Building and Fences	2.24	2.46	1.40
31. TOTAL ALLOCATED COSTS	\$ 5.26	\$ 5.77	\$ 4.99
32. RETURN OVER ALL LISTED COSTS	\$ 20.49	\$ 28.29	\$ 8.51
33. SUPPLEMENTARY MANAGEMENT INFORMATION			
34. Return for \$100 Feed Fed	\$ 226.73	\$ 297.46	\$ 156.96
35. Price Received per Cwt. All Animals	48.07	51.13	47.83
36. Price Received per Cwt. Sold Mkt. Only	48.75	52.02	48.39
37. Number of Litters Farrowed	63	62	35
38. Number of Pigs Born per Litter	10.0	11.0	9.9
39. Number of Pigs Weaned per Litter	7.8	8.4	7.7
40. Percent Death Loss	15.4	18.4	12.7
41. Average Weight of All Hogs Sold	222.9	189.8	230.9
42. Average Weight of Mkt. Hogs Sold	216.4	196.1	218.6
43. Price per Cwt. Concentrate Fed	\$ 5.48	\$ 4.98	\$ 6.15
44. Price per Cwt. Protein, Salt & Mineral	\$ 13.04	\$ 11.30	\$ 17.03
45. Pounds of Pork Purchased	3,382	1,586	7,002
46. TOTAL LISTED COSTS PER CWT. PORK PROD.	\$ 30.14	\$ 27.01	\$ 37.67

*Farms included in Table 11A carried out a complete program of farrowing and marketing their own hogs. The feed costs include feed for the breeding herd and market animals.

TABLE 11 B - COSTS AND RETURNS FROM HOG FINISHING ENTERPRISE* - 1978

Items		Average of 76 Farms	15 Farms Highest in Return above Feed Cost	15 Farms Lowest in Return above Feed Cost
1.	Average Number of Pigs on Hand	239.2	271.6	159.8
2.	Pounds of Hogs Produced	102,593	107,964	64,587
3.	Net Increase in Value of Hogs per Cwt.	\$ 33.62	\$ 39.57	\$ 26.43
4.	Other Miscellaneous Hog Income			
5.	TOTAL VALUE PRODUCED	\$ 33.62	\$ 39.57	\$ 26.43
6.	POUNDS OF FEED FED	Per Cwt.	Per Cwt.	Per Cwt.
7.	Corn	303.6	274.2	367.7
8.	Small Grain	8.1	7.1	11.5
9.	Complete Ration	1.6		
10.	Protein, Salt & Mineral & Milk	78.7	74.4	93.6
11.	TOTAL CONCENTRATES	392.0	355.7	472.8
12.	Forages	1.5		.2
13.	FEED COST			
14.	Grains	\$ 10.58	\$ 9.53	\$ 12.94
15.	Complete Ration	.16		
16.	Protein, Salt & Mineral & Milk	9.77	9.40	11.12
17.	Forages	.03		
18.	Pasture	.03	.13	
19.	TOTAL FEED COSTS	\$ 20.57	\$ 19.06	\$ 24.06
20.	RETURN OVER FEED COSTS	\$ 13.05	\$ 20.51	\$ 2.37
21.	OTHER DIRECT COSTS			
22.	Miscellaneous Livestock Expense	\$.56	\$.39	\$.33
23.	Veterinary Expense	.30	.08	.12
24.	Custom Work	.36	.35	.53
25.	Special Hired Labor			
26.	TOTAL OTHER DIRECT COSTS	\$ 1.22	\$.82	\$.98
27.	RETURN OVER FEED AND OTHER DIRECT COSTS	\$ 11.83	\$ 19.69	\$ 1.39
28.	ALLOCATED COSTS			
29.	Power and Machinery Costs	\$.71	\$.53	\$.63
30.	Livestock Equipment Costs	1.27	.91	1.13
31.	Building and Fences	1.22	1.69	.99
32.	TOTAL ALLOCATED COSTS	\$ 3.31	\$ 2.40	\$ 2.82
33.	RETURN OVER ALL LISTED COSTS	\$ 8.52	\$ 17.29	\$ (-1.43)
34.	SUPPLEMENTARY MANAGEMENT INFORMATION			
35.	Return for \$100 Feed Fed	\$ 163.43	\$ 207.61	\$ 109.85
36.	Price Received Per Cwt.	47.60	48.95	44.81
37.	Average Weight of Pigs Sold	220.5	224.6	212.0
38.	Average Price Paid per Pig Bought	\$ 48.68	\$ 38.23	\$ 47.22
39.	Average Weight per Pig Bought	41.9	24.2	39.5
40.	Number of Pigs Purchased	465	290	320
41.	Number of Pigs Transferred In	171	298	140
42.	Average Weight of Pigs Transferred In	39.8	34.1	36.1
43.	Pounds of Pork Purchased	19,489	7,031	12,627
44.	Percent Death Loss	3.5	2.1	7.0
45.	Price Per Cwt. Concentrate Fed	\$ 5.23	\$ 5.32	\$ 5.09
46.	Price Per Cwt. Protein, Salt & Mineral Fed	12.41	12.63	11.88
47.	Effective Daily Gain -lbs. per Day per Pig	1.18	1.09	1.11
48.	TOTAL LISTED COST PER CWT. PORK PROD.	\$ 25.10	\$ 22.28	\$ 27.86

*Farms included in Table 11B either purchased feeder pigs or transferred home farrowed pigs to the finishing lots. Feed costs and returns do not include any breeding herd maintenance costs.

TABLE 11C - COSTS AND RETURNS FROM PRODUCING WEANING PIGS - 1978

Items	Average of 36 Farms	13 Farms Highest in Return above Feed Cost	13 Farms Lowest in Return above Feed Cost
1. Number of Litters Farrowed	96	89	84
2. Net Increase in Value of Hogs per litter	\$ 389.59	\$ 478.37	\$ 322.99
3. Other Miscellaneous Weaning Pigs Income			
4. TOTAL VALUE PRODUCED	\$ 389.59	\$ 478.37	\$ 322.99
5. POUNDS OF FEED FED	Per Litter	Per Litter	Per Litter
6. Corn	1382.6	1524.5	1310.9
7. Small Grain	142.2	102.5	166.1
8. Complete Ration	30.6	1.4	15.6
9. Protein, Salt & Mineral, & Milk	622.7	750.8	608.0
10. TOTAL CONCENTRATES	2178.1	2379.2	2100.6
11. Forages	28.3	53.2	12.5
12. FEED COST			
13. Grains	\$ 51.99	\$ 54.71	\$ 50.36
14. Complete Ration	2.85	.25	1.50
15. Protein, Salt & Mineral & Milk	84.77	85.20	97.85
16. Forages	.48	.94	.15
17. Pasture	.71		1.05
18. TOTAL FEED COSTS	\$ 140.80	\$ 141.10	\$ 150.91
19. RETURN OVER FEED COSTS	\$ 243.79	\$ 337.27	\$ 172.08
20. OTHER DIRECT COSTS			
21. Miscellaneous Livestock Expense	\$ 15.17	\$ 15.58	\$ 13.70
22. Veterinary Expense	7.81	9.53	9.61
23. Custom Work	1.94	2.49	.49
24. Special Hired Labor	.09	.27	.01
25. TOTAL OTHER DIRECT COSTS	\$ 25.01	\$ 27.87	\$ 23.81
26. RETURN OVER FEED AND OTHER DIRECT COSTS	\$ 223.78	\$ 309.40	\$ 148.27
27. ALLOCATED COSTS			
28. Power and Machinery Costs	\$ 12.48	\$ 15.57	\$ 11.56
29. Livestock Equipment Costs	20.99	16.58	24.46
30. Building and Fences	22.68	22.22	21.21
31. TOTAL ALLOCATED COST	\$ 56.15	\$ 54.37	\$ 57.23
32. RETURN OVER ALL LISTED COSTS	\$ 167.63	\$ 255.03	\$ 91.04
33. SUPPLEMENTARY MANAGEMENT INFORMATION			
34. Return for \$100 Feed Fed	\$ 276.70	\$ 339.03	\$ 214.03
35. Average Price Received per Animal Sold	57.25	59.54	58.77
36. Average Price per Pig Sold or Transferred	46.51	47.36	45.67
37. Average Weight per Pig Sold or Transferred	41.7	41.6	41.2
38. Number of Pigs Produced	725	704	576
39. Number of Pigs Born per Litter	9.4	9.8	3.9
40. Number of Pigs Weaned per Litter	7.7	8.2	6.9
41. Percent Death Loss	15.7	13.7	18.1
42. Price per Cwt. Concentrate Fed	\$ 6.41	\$ 5.89	\$ 7.13
43. Price per Cwt. Protein, Salt & Mineral Fed	\$ 13.60	\$ 11.34	\$ 16.09
44. Feed & Supplemental Costs per Pig Produced	\$ 21.96	\$ 21.36	\$ 25.48
45. TOTAL LISTED COSTS PER LITTER	\$ 221.96	\$ 223.34	\$ 231.95

Farms included in Table 11C produced pigs for sale as feeders. Returns and costs are reported on a per litter basis.

TABLE 11D - COSTS AND RETURNS FROM MIXED HOG ENTERPRISE* - 1978

Items	Average of - 34 Farms	11 Farms Highest in Return above Feed Cost	11 Farms Lowest in Return above Feed Cost
1. Pounds of Hogs Produced	84,375 Per Cwt.	64,305 Per Cwt.	72,922 Per Cwt.
2. Net Increase in Value of Hogs	\$ 53.15	\$ 66.59	\$ 44.07
3. Other Miscellaneous Hog Income			
4. TOTAL VALUE PRODUCED	\$ 53.15	\$ 66.59	\$ 44.07
5. POUNDS OF FEED FED			
6. Corn	331.3	291.3	382.5
7. Small Grain	13.3	9.2	22.3
8. Complete Ration	95.3	170.2	
9. Protein, Salt & Mineral & Milk	90.5	100.7	101.2
10. TOTAL CONCENTRATES	530.4	571.4	506.0
11. Forages	.3	1.2	
12. FEED COST			
13. Grains	\$ 11.75	\$ 10.12	\$ 13.58
14. Complete Ration	.68	1.45	
15. Protein, Salt & Mineral & Milk	12.68	12.68	14.24
16. Forages		.02	
17. Pasture	.02	.03	.04
18. TOTAL FEED COSTS	\$ 25.13	\$ 24.30	\$ 27.86
19. RETURN OVER FEED COSTS	\$ 28.02	\$ 42.29	\$ 16.21
20. OTHER DIRECT COSTS			
21. Miscellaneous Livestock Expense	\$ 1.16	\$ 1.34	\$ 1.18
22. Veterinary Expense	.77	1.16	.78
23. Custom Work	.32	.40	.28
24. Special Hired Labor			
25. TOTAL OTHER DIRECT COSTS	\$ 2.25	\$ 2.90	\$ 2.24
26. RETURN OVER FEED & OTHER DIRECT COSTS	\$ 25.77	\$ 39.39	\$ 13.97
27. ALLOCATED COSTS			
28. Power and Machinery Costs	\$ 1.53	\$ 1.20	\$ 1.98
29. Livestock Equipment Costs	1.87	2.30	2.43
30. Building and Fences	1.96	1.14	2.87
31. TOTAL ALLOCATED COSTS	\$ 5.36	\$ 4.64	\$ 7.28
32. RETURN OVER ALL LISTED COSTS	\$ 20.41	\$ 34.75	\$ 6.69
33. SUPPLEMENTARY MANAGEMENT INFORMATION			
34. Return for \$100 Feed Fed	\$ 211.50	\$ 274.04	\$ 158.19
35. Price Received per Cwt. All Animals	52.94	66.24	52.41
36. Price Received per Cwt. Sold Mkt. Only	53.49	69.82	52.81
37. Number of Litters Farrowed	61	83	28
38. Number of Pigs Born per Litter	8.9	9.1	8.0
39. Number of Pigs Weaned per Litter	6.9	6.5	6.8
40. Percent Death Loss	14.2	23.8	5.6
41. Average Weight of All Hogs Sold	177.6	108.0	195.9
42. Average Weight of Mkt. Hogs Sold	172.4	93.8	194.3
43. Price per Cwt. Concentrate Fed	\$ 4.73	\$ 4.24	\$ 5.50
44. Price per Cwt. Protein, Salt & Mineral	\$ 14.01	\$ 12.60	\$ 14.08
45. Pounds of Pork Purchased	6,997	2,497	14,018
46. TOTAL LISTED COSTS PER CWT. PORK PRODUCED	\$ 32.74	\$ 31.84	\$ 37.38

*Farms included in Table 11D may have bought or sold feeders as well as farrowing and finishing their own.

TABLE 12 - COSTS AND RETURNS FROM DAIRY COWS, COMMERCIAL HERDS - 1978

Items	Average of 131 Farms	26 Farms	26 Farms
		Highest in Return above Feed Cost	Lowest in Return above Feed Cost
1. Average Number of Cows	39.2	41.7	38.6
	Per Cow	Per Cow	Per Cow
2. Pounds of Milk	12,968	15,291	10,483
3. Pounds of Butterfat	461.9	529.3	373.5
4. Percent of Butterfat in Milk	3.6	3.5	3.6
5. VALUE OF PRODUCE			
6. Dairy Products Sold	\$ 1,248.67	\$ 1,499.21	\$ 990.23
7. Dairy Products Used in Home	4.77	4.32	4.02
8. Milk Fed to Livestock	8.01	12.01	4.61
9. Net Increases in Value of Cows	18.52	36.45	(-7.88)
10. Other Miscellaneous Dairy Income	5.00	7.10	3.39
11. TOTAL VALUE PRODUCED	\$ 1,284.97	\$ 1,559.09	\$ 994.37
12. POUNDS OF FEED FED			
13. Corn	4,830.0	5,454.3	4,756.2
14. Small Grain	457.0	460.4	405.9
15. Complete Ration			
16. Protein, Salt & Mineral	849.1	825.9	839.6
17. TOTAL CONCENTRATES	6,136.1	6,740.6	6,001.7
18. Legume Hay	6,789.1	6,893.9	6,735.2
19. Other Hay & Dry Roughage	362.5	537.7	807.7
20. Silage	11,603.5	8,462.6	14,701.3
21. FEED COSTS			
22. Grains	\$ 179.87	\$ 200.62	\$ 178.78
23. Complete Ration			
24. Protein, Salt & Mineral	101.02	91.08	104.74
25. All Hay & Dry Roughage	121.79	125.59	123.89
26. Silage	86.53	64.48	100.57
27. Pasture	3.80	.62	7.46
28. TOTAL FEED COSTS	\$ 493.01	\$ 482.39	515.44
29. RETURN OVER FEED COST	\$ 791.96	\$1,076.70	\$ 478.93
30. OTHER DIRECT COSTS			
31. Miscellaneous Livestock Expense	\$ 62.35	\$ 67.63	\$ 56.81
32. Veterinary Expense	23.29	30.79	19.66
33. Custom Work Hired	35.74	41.56	29.59
34. Special Hired Labor	2.37	7.60	
35. TOTAL OTHER DIRECT COSTS	\$ 123.75	\$ 147.58	\$ 106.06
36. RETURN OVER FEED AND OTHER DIRECT COSTS	\$ 668.21	\$ 929.12	\$ 372.87
37. ALLOCATED COSTS			
38. Power and Machinery Costs	\$ 60.91	\$ 68.89	\$ 64.91
39. Livestock Equipment Costs	56.34	55.66	51.75
40. Building and Fences	72.74	95.32	61.71
41. TOTAL ALLOCATED COSTS	\$ 189.99	\$ 219.87	\$ 178.37
42. RETURN OVER ALL LISTED COSTS	\$ 478.22	\$ 709.25	\$ 194.50
43. SUPPLEMENTARY MANAGEMENT INFORMATION			
44. Return for \$100 Feed Fed	\$ 260.64	\$ 323.20	\$ 192.92
45. Feed Cost per Cwt. Milk	3.80	3.15	4.91
46. Feed Cost per Pound of Butterfat	1.07	.91	1.38
47. Pounds of Milk per Pound of Concentrate	2.11	2.27	1.75
48. Average Price per Cwt. Milk Sold	\$ 9.73	\$ 9.92	\$ 9.53
49. Average Price per Pound of Butterfat	2.73	2.87	2.68
50. Total Listed Costs per Cwt. Milk Produced	\$ 6.22	\$ 5.56	\$ 7.63
51. Dairy Cow Turnover Percentage	33.2	33.6	33.7
52. TOTAL LISTED COSTS PER COW	\$ 806.75	\$ 849.84	\$ 799.87

TABLE 12A - COSTS AND RETURNS FROM DAIRY COWS - PUREBRED HERDS - 1978

Items	Average of 4 Farms
1. Average Number of Cows	34.8
	Per Cow
2. Pounds of Milk	13,748
3. Pounds of Butterfat	444.7
4. Percent of Butterfat in Milk	3.2
5. VALUE OF PRODUCE	
6. Dairy Products Sold	\$ 1,363.02
7. Dairy Products Used in Home	3.30
8. Milk Fed to Livestock	23.79
9. Net Increases in Value of Cows	40.20
10. Other Miscellaneous Dairy Income	2.76
11. TOTAL VALUE PRODUCED	\$ 1,433.07
12. POUNDS OF FEED FED	
13. Corn	3,927.2
14. Small Grain	723.0
15. Complete Ration	
16. Protein, Salt & Mineral	1,004.5
17. TOTAL CONCENTRATES	5,654.7
18. Legume Hay	7,047.4
19. Other Hay & Dry Roughage	1465.5
20. Silage	8,462.6
21. FEED COSTS	
22. Grains	\$ 159.22
23. Complete Ration	
24. Protein, Salt & Mineral	108.10
25. All Hay & Dry Roughage	135.43
26. Silage	71.29
27. Pasture	9.05
28. TOTAL FEED COSTS	\$ 483.09
29. RETURN OVER FEED COST	\$ 949.98
30. OTHER DIRECT COSTS	
31. Miscellaneous Livestock Expense	\$ 99.54
32. Veterinary Expense	33.33
33. Custom Work Hired	40.32
34. Special Hired Labor	
35. TOTAL OTHER DIRECT COSTS	\$ 173.19
36. RETURN OVER FEED AND OTHER DIRECT COSTS	\$ 776.79
37. ALLOCATED COSTS	
38. Power and Machinery Costs	\$ 53.31
39. Livestock Equipment Costs	42.98
40. Building and Fences	73.61
41. TOTAL ALLOCATED COSTS	\$ 169.90
42. RETURN OVER ALL LISTED COSTS	\$ 606.89
43. SUPPLEMENTARY MANAGEMENT INFORMATION	
44. Return for \$100 Feed Fed	\$ 296.64
45. Feed Cost per Cwt. Milk	3.51
46. Feed Cost per Pound of Butterfat	1.09
47. Pounds of Milk per Pound of Concentrate	2.43
48. Average Price per Cwt. Milk Sold	10.13
49. Average Price per Pound of Butterfat	3.13
50. Total Listed Costs per Cwt. Milk Produced	6.01
51. Dairy Cow Turnover Percentage	25.9
52. TOTAL LISTED COSTS PER COW	\$ 826.18

TABLE 13 - COSTS AND RETURNS FROM OTHER DAIRY CATTLE, COMMERCIAL & PUREBRED - 1978

Items	Average of - 123 Farms	25 Highest in Return above Feed per Cow	25 Lowest in Return above Feed per Cow
1. Number of Head	46.7	41.3	51.7
	per Cow	per Cow	per Cow
2. Net Increase in Value	\$ 286.49	\$ 416.42	\$ 177.68
3. Other Miscellaneous Income			
4. TOTAL INCOME	\$ 286.49	\$ 416.42	\$ 177.68
5. POUNDS OF FEED FED			
6. Corn	1,126.1	1,430.8	920.8
7. Small Grain	208.4	240.1	282.8
8. Complete Ration	.6		
9. Protein, Salt & Minerals	177.1	124.6	211.0
10. Hay & Dry Roughage	2,613.9	2,356.8	2,896.7
11. Silage	4,515.7	2,527.5	6,086.0
12. Milk	82.4	40.0	135.0
13. FEED COST			
14. Grains	\$ 45.65	\$ 57.36	\$ 41.39
15. Complete Ration	.21		
16. Protein, Salt & Minerals	23.23	17.68	23.98
17. Hay and Dry Roughage	44.30	36.22	49.81
18. Silage	33.45	17.60	45.13
19. Milk	7.47	3.78	12.13
20. Pasture	2.42	3.00	2.24
21. TOTAL FEED COSTS	\$ 156.73	\$ 135.64	\$ 174.68
22. RETURN OVER FEED COSTS	\$ 129.76	\$ 280.78	\$ 3.00
23. OTHER DIRECT COSTS			
24. Miscellaneous Expense	\$ 6.36	\$ 6.37	\$ 4.56
25. Veterinary Expense	2.59	2.40	3.17
26. Custom Work Hired	1.65	1.02	2.01
27. Special Hired Labor	.15		.62
28. TOTAL OTHER DIRECT COSTS	\$ 10.75	\$ 9.79	\$ 10.36
29. RETURN OVER FEED AND OTHER DIRECT COSTS	\$ 119.01	\$ 270.99	\$ (-7.36)
30. ALLOCATED COSTS			
31. Power and Machinery Costs	\$ 10.60	\$ 9.71	\$ 10.84
32. Livestock Equipment Costs	9.01	7.19	9.29
33. Building and Fences	12.66	10.42	11.93
34. TOTAL ALLOCATED COSTS	\$ 32.27	\$ 27.32	\$ 32.06
35. RETURN OVER ALL LISTED COSTS	\$ 86.74	\$ 243.67	\$ (-39.42)
36. SUPPLEMENTARY MANAGEMENT INFORMATION			
37. Return for \$100 Feed Fed	\$ 182.80	\$ 307.00	\$ 101.72
38. Percent Death Loss - Total	9.9	7.7	14.6
39. Percent Calf Death Loss	19.0	14.3	26.5
40. TOTAL LISTED COSTS PER HEAD	\$ 199.75	\$ 172.75	\$ 217.10

Table 13 pertains to young dairy cattle only. The high and low averages are based on return above feed cost of the cows for these farms.

TABLE 14 - COSTS AND RETURNS FROM ALL DAIRY CATTLE - 1978

Items	Average of 135 Farms	27 Farms Highest in Return above Feed Cost	27 Farms Lowest in Return above Feed Cost
1. Average Number of Cows	39.0	36.0	41.4
	per Cow	per Cow	per Cow
2. Value of Dairy Products	\$1,267.13	\$1,511.39	\$1,025.68
3. Net Increase in Value	355.46	523.53	275.51
4. Miscellaneous Dairy Income	4.95	3.25	8.43
5. TOTAL VALUE PRODUCED	\$1,627.54	\$2,038.17	\$1,309.62
6. POUNDS OF FEED FED			
7. Grains	6,855.0	8,317.1	6,732.1
8. Complete Rations	.7		3.2
9. Protein, Salt & Min., Inc. Milk Equiv.	1,076.9	1,227.5	1,373.5
10. Hay and Dry Roughage	10,221.5	11,538.5	8,248.2
11. Silage	16,942.2	15,737.3	20,322.6
12. FEED COST			
13. Grains	\$ 233.44	\$ 283.06	\$ 230.34
14. Complete Rations	.23		1.14
15. Protein, Salt & Minerals, Inclu. Milk	138.05	150.28	152.92
16. Hay and Dry Roughage	174.08	194.44	148.91
17. Silage	126.54	119.03	153.91
18. Pasture Costs	6.77	7.08	5.14
19. TOTAL FEED COSTS	\$ 679.11	\$ 753.89	\$ 692.36
20. RETURN OVER FEED COSTS	\$ 948.43	\$1,284.28	\$ 617.26
21. OTHER DIRECT COSTS			
22. Miscellaneous Livestock Expense	\$ 70.87	\$ 87.47	\$ 60.22
23. Veterinary Expense	26.56	37.78	23.82
24. Custom Work	37.87	46.83	30.48
25. Special Hired Labor	2.49	.86	
26. TOTAL OTHER DIRECT COSTS	\$ 137.79	\$ 172.94	\$ 114.52
27. RETURN OVER FEED & OTHER DIRECT COSTS	\$ 810.64	\$1,111.34	\$ 502.74
28. ALLOCATED COSTS			
29. Power and Machinery Costs	\$ 72.86	\$ 82.23	\$ 69.39
30. Livestock Equipment Costs	66.28	75.05	59.52
31. Building and Fences	87.17	106.50	67.39
32. TOTAL ALLOCATED COSTS	\$ 226.31	\$ 263.78	\$ 196.30
33. RETURN OVER ALL LISTED COSTS	\$ 504.33	\$ 847.56	\$ 306.44
34. SUPPLEMENTARY MANAGEMENT INFORMATION			
35. Return for \$100 Feed Fed	\$ 239.66	\$ 270.35	\$ 189.15
36. TOTAL LISTED COSTS PER COW	\$1,043.21	\$1,190.61	\$1,003.18

Table 14 presents a picture of the costs and returns from the whole dairy herd on a per cow basis. Return above feed cost was the factor used to determine these high and low average farms.

TABLE 15A - BEEF BREEDING CATTLE - 1978

Items	Average of 12 Farms	6 Highest in Return above Feed	6 Lowest in Return above Feed
1. Average Number of Beef Cows	23.8	20.5	27.2
2. Average Number of Other Beef Animals & Bulls	16.3	20.1	12.6
3. Pounds of Beef Produced	7,735	11,823	3,648
	per Cow	per Cow	per Cow
4. Net Increase in Value	\$ 384.33	\$ 555.22	\$ 254.15
5. Other Miscellaneous Beef Income			
6. TOTAL VALUE PRODUCED	\$ 384.33	\$ 555.22	\$ 254.15
7. POUNDS OF FEED FED			
8. Grain	662.9	981.3	420.6
9. Protein, Salt and Mineral	148.5	181.6	123.0
10. Legume Hay	2,567.2	3,141.5	2,125.0
11. Other Hay and Dry Roughage	975.5	910.6	1,020.8
12. Silage	3,928.6	6,991.9	1,605.4
13. FEED COST			
14. Grain	\$ 23.40	\$ 35.37	\$ 14.26
15. Protein, Salt and Mineral	13.11	15.32	11.36
16. Legume Hay	46.72	59.56	36.91
17. Other Hay and Dry Roughage	5.34	3.17	6.99
18. Silage	28.49	50.15	12.06
19. Pasture	8.32	6.10	9.93
20. TOTAL FEED COSTS	\$ 125.38	\$ 169.67	\$ 91.51
21. RETURN OVER FEED COST	\$ 258.95	\$ 385.55	\$ 162.64
22. OTHER DIRECT COSTS			
23. Miscellaneous Livestock Expense	\$ 14.71	\$ 25.07	\$ 6.84
24. Veterinary Expense	4.12	7.37	1.65
25. Custom Work	4.79	8.05	2.28
26. Special Hired Labor			
27. TOTAL OTHER DIRECT COSTS	\$ 23.62	\$ 40.49	\$ 10.77
28. RETURN OVER FEED AND OTHER DIRECT COSTS	\$ 235.33	\$ 345.06	\$ 151.87
29. ALLOCATED COSTS			
30. Power and Machinery Costs	\$ 19.15	\$ 22.64	\$ 16.47
31. Livestock Equipment Costs	29.89	27.37	31.38
32. Building and Fences	38.21	59.93	22.35
33. TOTAL ALLOCATED COSTS	\$ 87.25	\$ 109.94	\$ 70.20
34. RETURN OVER ALL LISTED COSTS	\$ 148.08	\$ 235.12	\$ 81.67
35. SUPPLEMENTARY MANAGEMENT INFORMATION			
36. Return for \$100 Feed Fed	\$ 306.53	\$ 327.26	\$ 277.74
37. Price per Cwt. Sold	45.19	47.26	43.55
38. Price per Cwt. Calves Sold or Trans.	54.74	52.23	58.14
39. Average Weight per Head Sold	713.3	877.2	620.8
40. Average Weight per Calf Sold or Trans.	466.3	745.5	322.5
41. Percent Death Loss	6.3	3.4	7.1
42. Percent Calf Crop	100.0	117.6	90.0
43. TOTAL LISTED COSTS PER COW	\$ 236.25	\$ 320.10	\$ 172.48

Table 15A includes only those farms with ten or more cows in the beef breeding herd. Net increase in value includes the value of calves whether sold or transferred to the feed lot.

TABLE 15B - COST AND RETURNS FROM FEEDER CATTLE - 1978

Items	Average of 90 Farms	18 Highest in Return above Feed	18 Lowest in Return above Feed
1. Average Number of Beef Feeders	84.6	50.3	56.5
2. Pounds of Beef Produced	55,437	29,229	36,403
	per Cwt.	per Cwt.	per Cwt.
3. Net Increase in Value of Animals	\$ 64.31	\$ 90.54	\$ 50.39
4. Other Miscellaneous Beef Income			
5. TOTAL VALUE PRODUCED	\$ 64.31	\$ 90.54	\$ 50.39
6. POUNDS OF FEED FED			
7. Grain	576.9	629.1	560.3
8. Protein, Salt and Mineral	49.0	43.2	55.4
9. Legume Hay	147.7	161.6	160.8
10. Other Hay and Dry Roughage	48.7	14.1	141.8
11. Silage	937.7	592.5	1,614.9
12. FEED COST			
13. Grain	\$ 19.80	\$ 22.62	\$ 19.11
14. Protein, Salt and Mineral	5.17	4.39	6.65
15. Legume Hay	2.58	2.72	3.01
16. Other Hay and Dry Roughage	.60	.15	.95
17. Silage	7.53	4.89	13.09
18. Pasture			
19. TOTAL FEED COST	\$ 35.68	\$ 34.77	\$ 42.81
20. RETURN OVER FEED COST	\$ 28.63	\$ 55.77	\$ 7.58
21. OTHER DIRECT COSTS			
22. Miscellaneous Livestock Expense	\$.89	\$ 1.39	\$ 1.01
23. Veterinary Expense	.99	1.23	.47
24. Custom Work Hired	1.48	3.54	.60
25. Special Hired Labor			
26. TOTAL OTHER DIRECT COSTS	\$ 3.36	\$ 6.16	\$ 2.08
27. RETURN OVER FEED AND OTHER DIRECT COSTS	\$ 25.27	\$ 49.61	\$ 5.50
28. ALLOCATED COSTS			
29. Power and Machinery Costs	\$ 1.30	\$ 1.38	\$ 1.98
30. Livestock Equipment Costs	1.92	2.46	2.14
31. Buildings and Fences	1.72	2.67	2.47
32. TOTAL ALLOCATED COSTS	\$ 4.94	\$ 6.51	\$ 6.59
33. RETURN OVER ALL LISTED COSTS	\$ 20.33	\$ 43.10	\$ (-1.09)
34. SUPPLEMENTARY MANAGEMENT INFORMATION			
35. Return for \$100 Feed Fed	\$ 180.23	\$ 260.40	\$ 117.72
36. Price per Cwt. Sold	50.86	54.23	47.14
37. Average Weight per Head Sold	1,020.4	1,020.5	1,059.3
38. Price per Cwt. Bought	\$ 61.76	\$ 62.55	\$ 67.16
39. Average Weight per Head Bought	558.7	564.1	474.2
40. Number of Head Bought	121	84	71
41. Percent Death Loss	1.9	1.3	2.1
42. Effective Daily Gain-lbs. per head per Day	1.80	1.59	1.77
43. TOTAL LISTED COST PER CWT. PRODUCED	\$ 43.98	\$ 47.44	\$ 51.48

Farms producing more than 5,000 pounds of beef from a cattle feeding enterprise are included in Table 15B. The figures presented are calculated from the annual record; thus inventories as well as purchases and sales are included in the production and cost figures.

TABLE 16A - SHEEP - FARM, COMMERCIAL AND PUREBRED - 1978

Items	Average of 14 Farms	7 Highest in Return above Feed	7 Lowest in Return above Feed
1. Average Number of Ewes	46.7	49.3	44.1
2. Pounds of Lamb and Mutton Produced	4,821	6,033	3,608
3. Pounds of Wool Produced	316	422	210
	per Ewe	per Ewe	per Ewe
4. VALUE OF PRODUCE			
5. Wool	\$ 6.19	\$ 7.08	\$ 5.19
6. Net Increase in Value of Animals	56.62	72.94	38.37
7. Other Miscellaneous Sheep Income			
8. TOTAL VALUE PRODUCED	\$ 62.81	\$ 80.02	\$ 43.56
9. POUNDS OF FEED FED			
10. Grain	327.8	364.3	287.1
11. Protein, Salt and Mineral	81.0	40.8	125.9
12. Legume Hay	744.0	767.9	717.2
13. Other Hay and Dry Roughage	9.2		19.4
14. Silage	78.0	86.9	68.0
15. FEED COST			
16. Grain	\$ 11.52	\$ 12.70	\$ 10.20
17. Protein, Salt and Mineral	9.10	7.14	11.32
18. Legume Hay	13.36	13.71	12.97
19. Other Hay and Dry Roughage	.09		.20
20. Silage	.71	.87	.54
21. Pasture	.09		.16
22. TOTAL FEED COSTS	\$ 34.87	\$ 34.42	\$ 35.39
23. RETURN OVER FEED COSTS	\$ 27.94	\$ 45.60	\$ 8.17
24. OTHER DIRECT COSTS			
25. Miscellaneous Livestock Expense	\$ 3.04	\$ 3.35	\$ 2.68
26. Veterinary Expense	2.06	2.60	1.43
27. Custom Work	1.41	1.62	1.16
28. Special Hired Labor			
29. TOTAL OTHER DIRECT COSTS	\$ 6.51	\$ 7.57	\$ 5.27
30. RETURN OVER FEED AND OTHER DIRECT COSTS	\$ 21.43	\$ 38.03	\$ 2.90
31. ALLOCATED COSTS			
32. Power and Machinery Costs	\$ 7.31	\$ 9.52	\$ 4.48
33. Livestock Equipment Costs	10.93	16.68	4.54
34. Building and Fences	10.35	14.70	5.40
35. TOTAL ALLOCATED COSTS	\$ 28.59	\$ 40.90	\$ 14.42
36. RETURN OVER ALL LISTED COSTS	\$ (-7.16)	\$ (-2.87)	\$ (-11.52)
37. SUPPLEMENTARY MANAGEMENT INFORMATION			
38. Return for \$100 Feed Fed	\$ 180.16	\$ 232.47	\$ 123.06
39. Price per Cwt. Lamb and Mutton Sold	57.62	56.58	63.76
40. Price per Cwt. Lamb Sold or Transferred	62.03	61.00	63.76
41. Average Weight of Lambs Sold or Transferred	98.3	103.0	94.2
42. Pounds of Wool per Sheep Sheared	9.0	8.4	10.5
43. Number of Ewes Kept for Lambing	32	35	30
44. Percent Lamb Crop	171.9	194.3	136.7
45. Percent Death Loss	10.7	9.0	14.1
46. TOTAL LISTED COSTS PER EWE	\$ 69.97	\$ 82.89	\$ 55.08

AVERAGE PRICES FOR FARM GROWN FEEDS

Grain

Corn	\$ 1.90 Per Bu.
Oats	1.15 Per Bu.

Hay

Alfalfa	\$ 35.00 Per Ton
Other Legume Hay	30.00 Per Ton
Wild Hay	25.00 Per Ton

Other Roughages

Corn Silage	\$ 15.00 Per Ton
Grass Silage	12.00 Per Ton
Legume Haylage	17.50 Per Ton
Straw	.35 Per Bale

OTHER NON-CASH COSTS

Unpaid Family Labor	\$500.00 Per Month (25 days per Month)
Board Furnished Hired Labor	\$ 3.00 - 5.00 Per Day
Second Operator's Labor	\$ 10,000 Per Year
Interest on Farm Capital	7 Percent
Milk Used in Home	\$.205 Per Quart

EXPLANATION OF WORK UNITS AND ANIMAL 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. The number of work units for each class of livestock and each acre of crop are presented below.

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

Item	No. of Work Units	Item	No. of Work Units/Acre
Dairy Cow	7.0/cow	Barley, Wheat, Oats, Rye	.30/acre
Other Dairy Cattle	1.2/head*	Canning Peas	.40/acre
Beef Breeding Cows	1.5/head	Oat Silage	.40/acre
Beef Feeders	.12/cwt.	Canning Corn	.50/acre
Hogs - Complete	.12/cwt.	Corn for Grain	.55/acre
Hogs - Finishing	.06/cwt.	Soybeans	.45/acre
Hogs - Weaning Pigs	1.4/litter	Corn and Cane Silage	.60/acre
Sheep - Farm Flock	.60/head	Alfalfa Hay	.60/acre
Lambs - Feeder	.30/cwt.	Other Legume and Mixed Hay	.40/acre
Chickens - Laying Flock	5.0/100	Tame Grass Hay	.30/acre
Broilers	.20/cwt.	Annual Hay	.40/acre
Turkeys - Laying Flock	25.0/100	Legume and Grass Silage	.40/acre
Turkey Poults	.12/cwt.	Legume and Grass Seed	.50/acre
Labor off the Farm	1.0/\$25	Summer Fallow Tilled	.20/acre
		Wild Hay	.20/acre
		Diverted Acres	.20/acre

"Animal units" indicate density of livestock on a farm. Feed Requirement is the basis for assigning unit value to the various classes of livestock as follows:

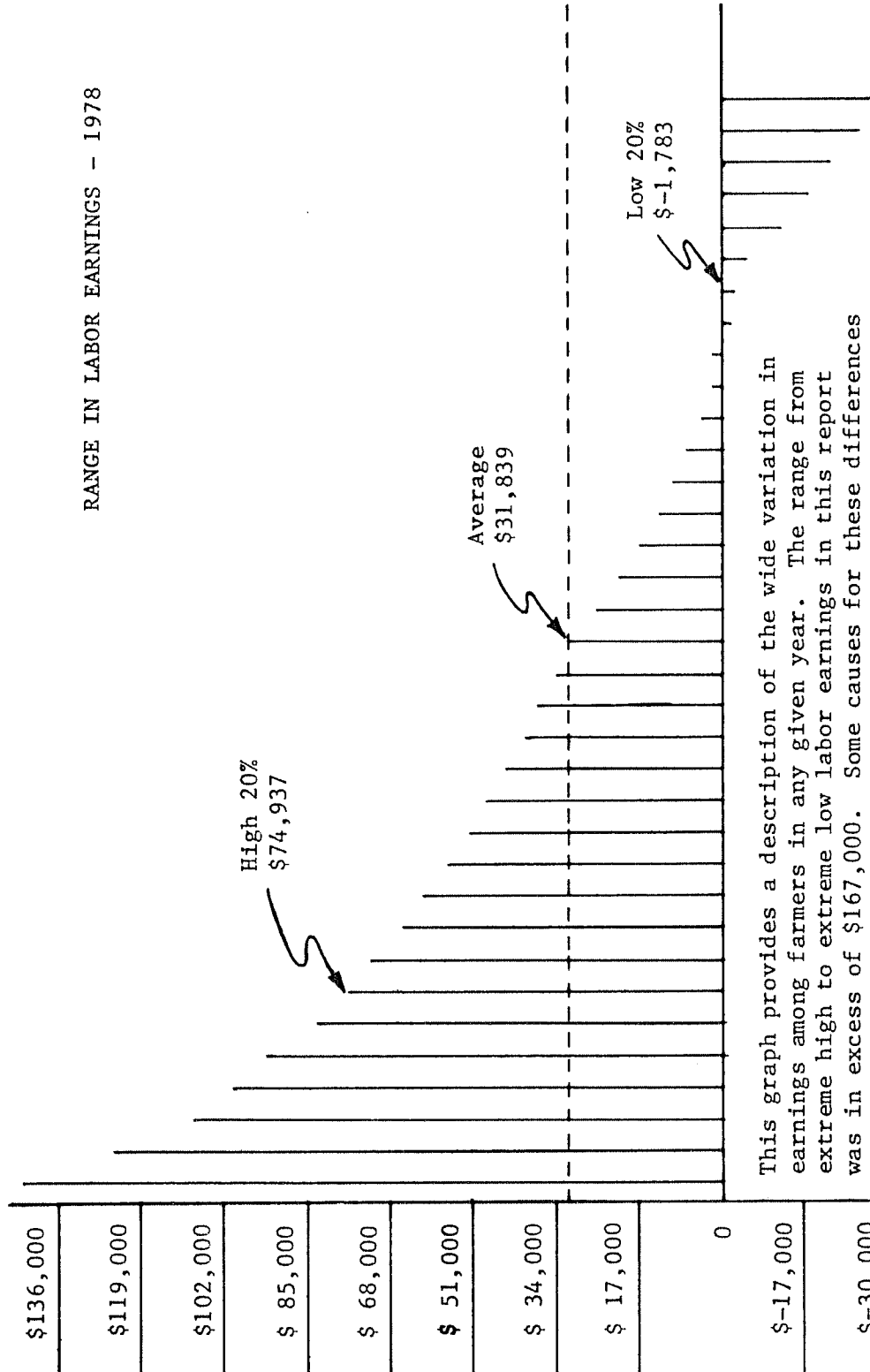
Dairy Cow	1.0 unit per cow
Other Dairy Cattle	.5 unit per head
Beef Breeding Cows and Bulls	.8 unit per cow
Other Beef Breeding	.3 unit per head
Feeder Steers and Heifers	1.0 unit per head
Hogs (swine over 6 months old)	.4 unit per hog
Pigs (swine less than 6 months old)	.2 unit per pig
Sheep (6 months or older)	.143 unit per head
Lambs (under 6 months)	.071 unit per head
Laying Hens	.005 unit per head
Broilers	.003 unit per head

SUMMARY OF MISCELLANEOUS ITEMS BY YEARS

Items	1973	1974	1975	1976	1977
Number of Records	589	644	720	671	567
Average Labor Earnings	\$ 48,438	\$ 29,955	\$ 9,200	\$ 16,283	\$ 22,265
Total Farm Sales	\$ 79,418	\$ 104,976	\$ 93,278	\$ 100,892	\$ 100,344
Total Cash Operating Expense	\$ 45,366	\$ 51,906	\$ 51,822	\$ 53,017	\$ 56,633
<u>RETURN ABOVE FEED COST PER:</u>					
Dairy Cow	\$ 381.63	\$ 330.11	\$ 272.31	\$ 493.45	\$ 574.64
Cwt. Feeder Cattle Prod.	\$ 12.00	\$ (-24.07)	\$ 15.04	\$ (-5.23)	\$ 5.45
Cwt. Hogs Produced	\$ 23.24	\$ 7.91	\$ 24.67	\$ 12.96	\$ 18.66
<u>FEED COST PER:</u>					
Dairy Cow	\$ 372.73	\$ 602.97	\$ 597.96	\$ 618.18	\$ 540.91
Cwt. Feeder Cattle Prod.	\$ 26.87	\$ 51.85	\$ 42.77	\$ 39.30	\$ 36.23
Cwt. Hogs Produced	\$ 19.92	\$ 25.99	\$ 25.71	\$ 24.86	\$ 23.82
<u>MISC. LIVESTOCK INFORMATION</u>					
Number of Dairy Cows	33.7	36.6	36.8	38.1	38.5
Pounds of Feeder Cattle Prod.	62,138	62,303	56,099	44,279	49,920
Pounds of Hogs Produced	89,167	105,969	102,480	117,361	131,159
Pounds of Butterfat per Cow	424.1	478.2	433.8	453.2	470.6
<u>PRICE RECEIVED PER:</u>					
Pound Butterfat in Milk	\$ 1.75	\$ 2.00	\$ 2.11	\$ 2.49	\$ 2.45
Cwt. Fat Cattle	\$ 43.05	\$ 41.23	\$ 41.28	\$ 36.87	\$ 38.08
Cwt. Hogs Sold	\$ 40.34	\$ 34.99	\$ 47.75	\$ 42.42	\$ 40.10
<u>PRICE OF FEED</u>					
Corn, Bushel	\$ 1.65	\$ 3.23	\$ 2.65	\$ 2.40	\$ 2.00
Oats, Bushel	\$.87	\$ 1.62	\$ 1.50	\$ 1.50	\$ 1.00
Alfalfa Hay, Ton	\$ 25.00	\$ 60.00	\$ 65.00	\$ 80.00	\$ 50.00
Corn Silage, Ton	\$ 12.00	\$ 19.75	\$ 18.50	\$ 18.00	\$ 17.00
<u>ACRES PER FARM</u>					
Total Tillable Land	308.6	336.3	320.2	315.6	320.5
Total Acres in Farm	347.5	375.9	359.1	349.7	355.2
<u>YIELDS PER ACRE</u>					
Canning Peas	\$ 109.08	\$ 177.04	\$ 150.14	\$ 141.32	\$ 195.10
Oats, Bushel	74.5	74.7	68.3	61.9	86.4
Corn Grain, Bushel	111.2	83.4	89.1	82.9	121.3
Sweet Corn	\$ 84.74	\$ 172.47	\$ 164.17	\$ 154.05	\$ 171.51
Soybeans, Bushel	38.1	26.9	32.4	32.7	43.6
Corn Silage, Ton	16.2	14.4	13.7	11.2	17.8
Alfalfa Hay, Ton	4.2	4.2	4.4	3.0	4.8

RANGE IN EARNINGS

RANGE IN LABOR EARNINGS - 1978



This graph provides a description of the wide variation in earnings among farmers in any given year. The range from extreme high to extreme low labor earnings in this report was in excess of \$167,000. Some causes for these differences such as weather, may be beyond the control of the farmer. Other factors are within his control. Management factors affecting earnings are presented elsewhere in this report

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 next page is an example of the written goals of one family 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 John Jones Family Date 2-10-78

Address Anywhere, Minnesota

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.

		<u>This year</u>	<u>Later</u>
<u>FOR A PROFITABLE FARM BUSINESS:</u>			
6	Buy a new tractor to replace old John Deere A	X	
1	Raise the production of the dairy herd by 500 lbs milk per cow.	X	
8	Raise the production of the dairy herd from 11000 lbs. to 15000 lbs. per cow in 10 yrs.		X
2	Increase hay yield by 1 ton/acre in 3 yrs.	X	X
<u>FOR SATISFYING LIVING:</u>			
5	Install kitchen cabinets	X	
10	Build new family room on west side of house.	X	
11	Paint exterior of home.	X	
12	Landscape yard.		X
<u>FOR DEVELOPMENT OF FAMILY MEMBERS:</u>			
9	Provide opportunity for son, Dave, to attend college in two years.		X
7	Provide money for Dad to attend National Convention for a week this winter.	X	
4	Provide time and money for Dan to attend camp this summer.	X	
<u>FOR LONG-TERM FINANCIAL SECURITY:</u>			
3	Improve net worth by 20%/year.	X	X

