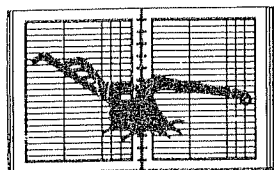


FARM BUSINESS MANAGEMENT

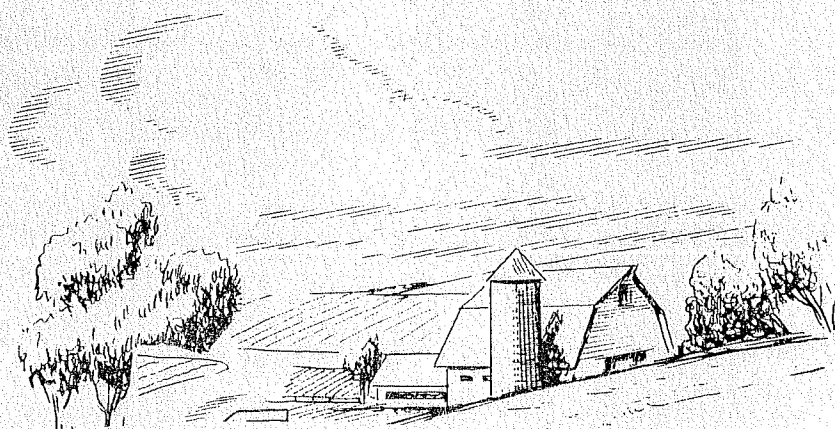


**1978
ANNUAL REPORT**

**AN ADULT
EDUCATIONAL
PROGRAM**

SOUTHWEST MINNESOTA VOCATIONAL AGRICULTURE

**FARM BUSINESS
MANAGEMENT EDUCATION
PROGRAM**



SOUTHWESTERN MINNESOTA
REPORT NO. 9
AREA VOCATIONAL-TECHNICAL
INSTITUTE
JACKSON, MINN.

The map shows the following counties grouped into six regions:

- Region 1:** Norman, Maynomen, Clearwater, Becker, Ottertail, Wilkin, Grant, Douglas, Stevens, Pope, Traverse, Big Stone.
- Region 2:** Marshall, Polk, Pennington, Redlake, Beltrami, Koochiching, Itasca, Cass, Aitkin, Crow Wing, Todd, Wadena, Hubbard, Morrison, Benton, Mille Lacs, Kanabec, Carlton, Pine.
- Region 3:** Swift, Kandiyohi, Chippewa, Lac Qui Parle, Renville, McLeod, Carver, Wright, Sherburne, Isanti, Anoka, Chicago, Washington, Ramsey, Hennepin, Le Sueur, Scott, Rice, Goodhue, Wabasha, Winona, Fillmore, Mower, Brown, Sibley, Nicollet, Blue Earth, Waseca, Steele, Dodge, Olmsted.
- Region 4:** Lincoln, Pipestone, Murray, Nobles, Jackson, Martin, Faribault, Freeborn, Mower, Fillmore, Houston, Cottonwood, Watonwan, Brown, Sibley, Nicollet, Blue Earth, Waseca, Steele, Dodge, Olmsted.
- Region 5:** Lincoln, Pipestone, Murray, Nobles, Jackson, Martin, Faribault, Freeborn, Mower, Fillmore, Houston, Cottonwood, Watonwan, Brown, Sibley, Nicollet, Blue Earth, Waseca, Steele, Dodge, Olmsted.
- Region 6:** Lincoln, Pipestone, Murray, Nobles, Jackson, Martin, Faribault, Freeborn, Mower, Fillmore, Houston, Cottonwood, Watonwan, Brown, Sibley, Nicollet, Blue Earth, Waseca, Steele, Dodge, Olmsted.

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 J. Hodgkins
6. Austin
Donald Walker

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1978 ANNUAL VOCATIONAL AGRICULTURE FARM BUSINESS MANAGEMENT EDUCATION
PROGRAM REPORT OF SOUTHWESTERN MINNESOTA

JOHN MURRAY
AREA VO-AG PROGRAM COORDINATOR

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COLOR CODE EXPLANATION

This farm management summary is color coded for your convenience. Each color refers to a specific area.

WHITE	INTRODUCTION. MISCELLANEOUS INFORMATION, pages 39 thru 44 includes average prices used for home grown foods and an explanation of animal and work units.
GOLDENROD	WHOLE FARM tables include both the landlord and the operator's inventory income and expenses.
BLUE	OPERATOR'S tables include inventories, income and expenses for the operator only. All landlord information is excluded from these tables.
YELLOW	CROP pages include the information for all crops grown on whole farm basis.
PINK	LIVESTOCK includes the information for all livestock purchased and listed on a whole farm basis.

INTRODUCTION

This report for the Vocational Agriculture Farm Business Management Program in Southwestern Minnesota is prepared by the Jackson Area Vocational Technical Institute. The report is prepared in cooperation with the Minnesota Department of Education and the Agricultural Education Department of the University of Minnesota. Since the initiation of the program in Jackson in 1970, nine annual reports have been prepared.

This report is published annually to provide farmers, agriculture instructors, and others with farm record analysis information which will be helpful to them in studying farming operations. The report is set up to show each cooperating farmer's individual figures for his farm, and comparisons with the averages, the high twenty per cent and the low twenty per cent of the farms in the analysis. The report presents each farmer with figures showing his earnings, increase or decrease in net worth, financial standing and a number of efficiency factors on his various enterprises.

The analysis of the records and the preparation of the reports for Southwestern Minnesota are done under the direction of John Murray of the Area Vocational Technical Institute at Jackson. A special thank you is awarded the clerical staff for their patience, perseverance and dedication to the project. The staff this year is: Pat Gervais, Kelly Overaas and Ila Wenzel. We especially recognize Pat Gervais and Ila Wenzel for being with this project since its beginning in 1970.

To efficiently and effectively work with 624 records, the Jackson Analysis Center utilizes satellite analysis centers. This year the following satellites operated: Brewster, Canby A.V.T.I., Pipestone, Lakefield, St. James, and Worthington.

The Farm Management program is supervised locally by Michael Kuntz, Superintendent of Jackson Public Schools and Delbert Schweiger, Director of the Area Vocational Technical Institute, Jackson, Minnesota. The State Department of Vocational Education and Dr. Ed Persons of the University of Minnesota, Department of Agricultural Education have been available as consultants.

This analysis center utilizes the Specialized Data System automatic data processing facilities of Madison, Wisconsin, to streamline its operation.

A total of 624 records were processed with 332 of the total processed included in the averages of this report.

(ii)

Source of Farm Record Analyses
for 1978 Farm Business Summaries for the Jackson Area

Regular Farm Management Education Program

Class Location	Instructor	%Time Adult	Records Processed	No. of Families Served by Records Processed
Brewster	Gerald McConkey	50	15	22
Canby	Maynard Hughes	100	17	21
Fulda	Mel Faltinson	50	13	13
Hills-Beaver Creek	Wendell Erickson	50	18	18
	Brad Sanderson			
Jackson	Charles Asman	100	34	42
	*Doug O'Neil	100	38	46
Lakefield	Harry Gerdes	100	40	48
Luverne	James Ouverson	75	22	22
Pipestone	Heimer Swanson	100	47	52
	Marlin Berg	10	7	7
Slayton	George Crompton	100	36	40
Storden-Jeffers	Richard Spitzner	70	10	12
St. James	*Cliff Vreize	66	10	11
Tracy	Tom Gruendemann	80	6	8
Truman	*Vern Quade	100	12	15
Wabasso	*Adrian Crommert	100	20	22
Worthington	Wayne Flynn	100	52	60

Veterans Farm Training Program

Canby	Craig Bauman	11	17
Edgerton	Robert Vanorny	25	31
Jackson	Charles Lucht	23	25
Luverne	Paul Gardener	16	16
Slayton	John Wittman	18	23
St. James	Lee Todnem	17	20
	James Wassman		
Tracy	Jack Davis	12	12
Tyler H.V.C.C.	Paul Bartz	20	20
	Liz Wagstron	7	7
Westbrook	Keith Hirsch	21	21
Worthington	Gary Lonneman	27	28

Others

Jackson A.V.T.I.	Farm Operations Management	22	22
	Others	8	8

Totals

624

709

*Denotes new instructor

Table 1 - Summary of Farm Inventories* - 1978

Items	Averages of 332 Farms	
1. Size of farm - total acres	417.2	
2. - tillable acres	369.6	
3. Work units - crops	179.10	
4. - livestock	190.73	
5. - other	15.24	
6. Total size of business in work units	385.08	
7. Number of workers	1.52	
8. Farm capital investment per worker	\$	328571
	Jan.1	Dec.31
9. Productive livestock		
10. Dairy cows	2866	3494
11. Other dairy cattle	1277	2316
12. Beef breeding cattle	3726	6231
13. Beef feeder cattle	15510	22113
14. Hogs	12431	18444
15. Sheep (including feeders) & goats	453	438
16. Poultry - all types	7	8
17. Other livestock	47	52
18. Total productive livestock	\$	36318
	53096 *	
19. Crop, seed & feed	45122	
	60063	
20. Power, machinery & equipment		
21. Auto & truck (farm share)	3739	4365
22. Power & machinery	27975	33697
23. Irrigation equipment		
24. Custom work equipment	209	185
25. Livestock equipment	3576	4443
26. Total power, machinery & equipment	\$	35500
	42691 *	
27. Land	311296	318454
28. Buildings - fences - etc.	32450	38831
29. Total farm capital	\$	460686
	513136 *	
30. Increase or decrease in total farm capital	\$	52450 *

* Table 1 lists the categories of farm capital for the averages of 332 farms and for the 66 most profitable and 66 least profitable farms. These averages include the landlord's share of the investment for rented farms.

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

* 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 80 to over 1,200 acres: however, the vast majority of the farms fell in the range of 400 to 640 acres.

Table 1 - Summary of Farm Inventories* - 1978

Items	66 High Profit Farms	
	Jan.1	Dec.31
1. Size of farm - total acres	660.6	
2. - tillable acres	579.8	
3. Work Units - crops	283.95	
4. - livestock	339.35	
5. - other	16.84	
6. Total size of business in work units	640.13	
7. Number of workers	2.08	
8. Farm capital investment per worker \$	381397	
9. Productive livestock		
10. Dairy cows	2008	3056
11. Other dairy cattle	1176	1701
12. Beef breeding cattle	10358	16566
13. Beef feeder cattle	39836	54437
14. Hogs	27868	39743
15. Sheep (incl. feeders) & goats	94	305
16. Poultry - all types	3	3
17. Other livestock		
18. Total productive livestock \$	81342	115811 *
19. Crop, seed & feed	75507	107837
20. Power, machinery & equipment		
21. Auto & truck (farm share)	4766	5942
22. Power & machinery	45813	54119
23. Irrigation equipment		
24. Custom work equipment		
25. Livestock equipment	5284	6712
26. Total power, machinery & equipment	55863	66773 *
27. Land	426352	434206
28. Buildings-fences-etc.	66935	77637
29. Total farm capital \$	706000	802264 *
30. Increase or decrease in total farm capital		\$ 96264 *

Livestock, crops, seed, and feed reflect a conservative market price at the time the inventory was taken.

Table 1 - Summary of Farm Inventories* - 1978

Items	66 Low Profit Farms	
	Jan.1	Dec.31
1. Size of farm - total acres	339.5	
2. - tillable acres	309.5	
3. Work units - crops	148.02	
4. - livestock	87.81	
5. - other	17.42	
6. Total size of business in work units	253.25	
7. Number of workers	1.40	
8. Farm capital investment per worker	\$ 353226	
9. Productive livestock		
10. Dairy cows	2158	2728
11. Other dairy cattle	636	1972
12. Beef breeding cattle	814	1621
13. Beef feeder cattle	2766	2708
14. Hogs	6141	8847
15. Sheep (including feeders) & goats	726	748
16. Poultry - all types	2	1
17. Other livestock	89	96
18. Total productive livestock	\$ 13333	18722 *
19. Crop, seed & feed	40512	45618
20. Power, machinery & equipment		
21. Auto & truck (farm share)	3195	3300
22. Power & machinery	22270	24967
23. Irrigation equipment		
24. Custom work equipment	1042	926
25. Livestock equipment	1820	2291
26. Total power, machinery & equipment	\$ 28327	31483 *
27. Land	367328	380122
28. Buildings-fences-etc.	17572	23552
29. Total farm capital	\$ 467072	499496 *
30. Increase or decrease in total farm capital		\$ 32425 *

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

Items	Average 332	High 66	Low 66
1. Sale of livestock & livestock products			
2. Dairy cows	\$ 991	988	545
3. Dairy products	6168	4923	3633
4. Other dairy cattle	734	521	299
5. Beef breeding cattle	1254	3987	360
6. Beef feeder cattle	33046	81798	4682
7. Hogs complete & mixed	26702	62710	12412
8. Hogs finishing	7245	16125	1071
9. Hogs producing weaning pigs	2031	268	1940
10. Sheep, goats & wool, farm flock	273	33	828
11. Sheep & wool, feeder lambs	415	410	190
12. Chickens (including hens & broilers)	557		1
13. Turkeys			
14. Eggs	34	20	10
15. Other productive livestock & products	8		
16. Other miscellaneous livestock income			
17. Total sales of productive livestock	\$ 79457 *	171783 *	25971 *
18. Sale of crops			
19. Wheat	559	171	793
20. Other small grains	1009	1165	968
21. Corn	18015	27054	20578
22. Soybeans	26195	41778	22394
23. Other row crops	210	383	160
24. Legumes & other forage	354	524	159
25. Grass seed			
26. Fruits & nuts			
27. Vegetable roadside market & specialty			
28. Nursery, timber & other		2	
29. Set aside acres - government payments	1219	1779	1019
30. Total sales from crops	\$ 47560 *	72855 *	46070 *
31. Capital assets sold	3359	5166	909
32. Gas tax refund	139	199	114
33. Income from work off the farm	1243	1743	1238
34. Custom work enterprise income	165		567
35. Patronage refunds	720	1168	527
36. Miscellaneous farm income	1849	3478	1151
37. Total farm sales	\$ 134493 *	256393 *	76546 *
38. Increase in farm capital	52450	96264	32425
39. Family living from the farm	390	742	171
40. Total farm receipts (37)+(38)+(39)	\$ 187333	353399	109142 *

*Operators labor and management earnings represent the return to the operator after all expenses are deducted. (table 2A/40 - Table 2B/46)

Table 2B - Whole Farm Summary of Cash Expense - 1978

Items	Average 332	High 66	Low 66
1. Purchase of livestock			
2. Dairy cows	\$ 388	118	676
3. Other dairy cattle	287	299	568
4. Beef breeding cattle	1048	2763	515
5. Beef feeder cattle	18399	42056	2048
6. Hogs complete & mixed	1949	2477	1976
7. Hogs finishing	3275	7718	208
8. Hogs producing weaning pigs	261	80	541
9. Sheep & goats	50	10	50
10. Sheep, feeder lambs	197	502	15
11. Chickens (incl. hens & broilers)	65		1
12. Turkeys			
13. Other productive livestock	5		
14. Miscellaneous livestock expense	2196	4118	1050
15. Feed bought	17433	36111	7796
16. Fertilizer	6259	10223	5261
17. Chemicals	3079	5334	2735
18. Other crop expense	4729	7774	3720
19. Irrigation operation costs			
20. Custom work enterprise oper.costs,incl.labor	23		36
21. Custom work hired	1975	2545	1571
22. Repair & upkeep of livestock equipment	693	1237	416
23. Repair & upkeep of farm real estate	1029	2011	606
24. Gas, oil & grease bought (farm share)	3209	4842	2659
25. Repair & oper.of mach.,tractor,truck & auto	3911	6030	3591
26. Repair & upkeep of irrigation equipment			
27. Repairs - custom work enterprise	15		42
28. Wages of hired labor	2105	3982	1447
29. Personal property & real estate taxes	3000	4754	2432
30. General farm expense	1449	2529	1053
31. Telephone expense (farm share)	232	259	199
32. Electricity expense (farm share)	718	1198	509
33. Total cash operating expense	\$ 77980 *	148971 *	41722 *
34. Power,crop & gen.mach.bot.(farm share)	14719	22471	9803
35. Irrigation equipment bought			
36. Custom work equipment bought			
37. Livestock equipment bought	1736	2689	880
38. New real estate & improvement	19238	25436	23794
39. Total farm purchases (33) thru (38)	\$ 113674 *	199567 *	76198 *
40. Decrease in farm capital			
41. Interest on farm capital	34084	52789	33830
42. Unpaid family labor	463	546	515
43. Labor charge for partners & other operators			
44. Board furnished hired labor	58	110	45
45. Total farm expense (39) thru (44)	\$ 148279 *	253012 *	110558 *
46. Ret.to oper.labor & mgmt.- single oper.(W.F.) (2A/40) - (45)	\$ 39054 *	100387 *	(-1446)*
47. Number of operators	1	1	1
48. Full time operator equivalents	1.15	1.38	1.14
49. Return to oper.labor & mgmt/full time operator equivalent	34002	78269	(-1234)

Table 3 - Summary of Farm Earnings (Enterprise Statement - Whole Farm) - 1978

Items	Average 332	High 66	Low 66
1. Returns & net increases			
2. Productive livestock			
3. Dairy cows	\$ 6740	6146	3663
4. Other dairy cattle	2460	1879	1615
5. Beef breeding cattle	4234	11423	1001
6. Feeder cattle	19757	50577	2282
7. Hogs, complete & mixed	29348	69721	12011
8. Hog finishing enterprise	4597	10654	874
9. Producing weaning pigs	2656	460	2590
10. Sheep & goats	307	56	902
11. Sheep, feeder lambs	119	89	74
12. Chickens (including hens & broilers)	530	20	12
13. Turkeys			
14. Other productive livestock	8		7
15. Total all productive livestock	\$ 70756 *	151023 *	25030 *
16. Value of feed fed to livestock	33383	71252	12924
17. Return over feed from livestock	37374	79771	12106
18. Crop, seed & feed	64330	116944	44489
19. Cooperative patronage refunds	720	1168	527
20. Miscellaneous farm income	1849	3478	1151
21. Custom work enterprise	103		374
22. Total returns & net increases	\$ 104375 *	201361 *	58647 *
23. Expenses & net decreases			
24. Truck & auto (farm share)	\$ 2961	3237	2832
25. Tractors & crop machinery	12687	19156	11605
26. Irrigation equipment			
27. Electricity	718	1198	509
28. Livestock equipment	1573	2516	836
29. Buildings, fences & tiling	3742	6423	3573
30. Bare land			
31. Miscellaneous livestock expense	2196	4018	1181
32. Labor	2679	4096	2043
33. Labor charge for other operator(s)			
34. Property tax	3000	4754	2432
35. General farm expense & telephone	1681	2788	1252
36. Interest on farm capital	34084	52789	33830
37. Total expenses & net decreases	\$ 65321 *	100975 *	60093 *
38. Return to operators labor & management	\$ 39054	100387	(-1446)
39. Number of farm operators	1	1	1

Table 3 combines table 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 return to operators labor and management is the same as those on page 5, line 46.

Table 4 - Household and Personal Expenses - 1978
For those farms with complete accounts - Operator's share

Items	Average 189	Per Adult Equivalent
1. Number of persons - family	4	
2. Number of adult equivalent - family	3.0	
3. Church & welfare	\$ 791	263.67
4. Medical care & health insurance	1386	462.00
5. Food & meals bought	2788	929.33
6. Operating expense & supplies	870	290.00
7. Furnishings & equipment	1109	369.67
8. Clothing & clothing materials	980	326.67
9. Personal care, personal spending	594	198.00
10. Education	255	85.00
11. Recreation	515	171.67
12. Gifts & special events	404	134.67
13. Personal share truck & auto expense	625	208.33
14. Operator share upkeep on dwelling	224	74.67
14A. Cash rent (personal)		
15. Personal share telephone & electricity exp.	320	106.67
15A. Personal share - general farm expense	24	8.00
16. Total cash living expense	\$ 10885	3628.33 *
17. Personal share new truck & auto	823	274.33
18. New dwelling bought	1678	559.33
19. Taxes & other deductions	1618	539.33
20. Life insur. & other savings & investments	1378	459.33
21. Total household & personal (16) thru (20)	16382	5460.67 *
22. Total family living from the farm (33)	385	128.33
23. Total cash & non-cash exp. (21)+(22)	\$ 16767	5589.00 *

FAMILY LIVING FROM THE FARM

	Quantity	Oper.Share
25.		
26. Milk & cream (quarts)	148	36
27. Beef & buffalo (pounds)	472	242
28. Pork (pounds)	214	102
29. Lamb, mutton, goat (pounds)		1
30. Poultry, all fowl (pounds)		
31. Eggs (dozen)	4	2
32. Vegetables, fruits, spuds, other produce & fuel		2
33. Total family living from the farm	\$	385 *

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. *These farm families spend an average of \$907.08 per month for cash living expense (line 16) and spend a total of \$1365.17 per month on an average for total personal and household expense (line 21).

** Table 4 includes 189 farm families that kept complete household and personal records.

Table 5 - Net Worth Statement - Operator - 1978
For those Farms With a Complete Record of all Assets and Liabilities

Items	Averages of 290 Farms	
	Jan.1	Dec.31
1. Total productive livestock	\$ 32720	48483
2. Crop, seed & feed	42006	56120
3. Total power, machinery & equipment	33311	40291
4. Land	103875	112138
5. Buildings, fences, etc.	28327	35091
6. Total farm capital	\$ 240238	292122 *
7. Non-farm assets	16803	18632
7A. Cash on hand & in bank	4969	5900
8. Dwelling	10914	12694
9. Total assets	\$ 272924	329349
10. Real estate mortgages	54640	62614
11. Chattel mortgages	33640	39669
12. Notes	18031	23484
13. Accounts payable	3183	3145
14. Total liabilities	\$ 109493	128911 *
15. Farmers net worth	\$ 163430	200437 *
16. Gain (or loss) in net worth		\$ 37007 *
	* * *	
17. Supplementary management information		
18. Return to operators labor & mgmt (6B/47)	\$ 37134	
19. Return to capital & family labor (6B/48)	48199	
20. Non-farm income		
21. Outside investment income	520	
22. Other personal income & income tax refund	2101	
22A. Sale of (P.S.) dwelling, auto & truck	14	
23. Total non-farm income	\$ 2636	
24. Total family farm & non-farm income	\$ 50835	
25. Total money borrowed	87760	
26. Total paid on debt (principal)	69119	
27. Total household & pers.cash/non-cash exp.(4/23)	14069	
28. Ratio: Total farm-expenses to receipts (O.S.)	.778	
	Jan.1	Dec.31
29. Ratio: Total-assets to liabilities	2.493	2.555
30. Ratio: Non-real estate-assets to liab.	2.366	2.556
31. Ratio: Real estate-assets to liab.	2.619	2.554
32. Ratio: Net worth to total liabilities	1.493	1.555
33.* Ratio: Cash oper.exp.to adj.total farm sales (O.S.)		.743
34. Ratio: Total farm recpts.to ave. farm capital (W.F.)		.382
35. Ratio: Total farm recpts.to ave. farm capital (O.S.)		.629

*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 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 - Net Worth Statement - Operator - 1978
For Those Farms With a Complete Record of all Assets and Liabilities

Items	55 High Profit Farms	
	Jan.1 - - - -	Dec.31
1. Total productive livestock	\$ 73498	105588
2. Crop, seed & feed	69588	102908
3. Total power, machinery & equipment	51633	64917
4. Land	164346	177507
5. Buildings, fences, etc.	59274	69818
6. Total farm capital	\$ 418339	520740 *
7. Non-farm assets	19514	20940
7A. Cash on hand & in bank	6440	10083
8. Dwelling	14096	16175
9. Total assets	\$ 458389	567938 *
10. Real estate mortgages	74911	86457
11. Chattel mortgages	67725	70676
12. Notes	29638	43084
13. Accounts payable	5144	5806
14. Total liabilities	\$ 177417	206024 *
15. Farmers net worth	\$ 280971	361914 *
16. Gain (or loss) in net worth		\$ 80943 *
* * *		
17. Supplementary management information		
18. Return to operators labor & mgmt (6B/47)	\$ 89439	
19. Return to capital & family labor (6B/48)	109416	
20. Non-farm income		
21. Outside investment income	493	
22. Other personal income & income tax refund	896	
22A. Sale of (P.S.) dwelling, auto & truck		
23. Total non-farm income	\$ 1389	
24. Total family farm & non-farm income	\$ 110805	
25. Total money borrowed	172442	
26. Total paid on debt (principal)	143997	
27. Total household & pers.cash/non-cash exp (4/23)	17379	
28. Ratio: Total farm-expenses to receipts (O.S.)	.731	
	Jan.1	Dec.31
29. Ratio: total-assets to liabilities	2.584	2.757
30. Ratio: non-real estate-assets to liab.	2.153	2.546
31. Ratio: real estate-assets to liab.	3.173	3.048
32. Ratio: net worth to total liabilities	1.584	1.757
33*. Ratio: cash oper.exp.to adj.total farm sales (O.S.)		.721
34. Ratio: total farm recpts.to ave.farm capital (W.F.)		.452
35. Ratio: total farm recpts.to ave.farm capital (O.S.)		.709
*Adjusted 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 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?"

Table 5 - Net Worth Statement - Operator - 1978
 For those farms with a complete record of all assets and liabilities

Items	54 Low Profit Farms	
	Jan.1 - - - - -	Dec.31
1. Total productive livestock	\$ 14714	18689
2. Crop, seed & feed	35846	40159
3. Total power,machinery & equipment	25181	30313
4. Land	138530	145157
5. Buildings, fences, etc.	15130	19498
6. Total farm capital	\$ 229400	253814 *
7. Non-farm assets	16808	18537
7A. Cash on hand & in bank	5175	5783
8. Dwelling	10046	11669
9. Total assets	\$ 261430	289804 *
10. Real estate mortgages	45271	53385
11. Chattel Mortgages	24179	28769
12. Notes	11009	14320
13. Accounts payable	1624	1663
14. Total liabilities	\$ 82083	98136 *
15. Farmers net worth	\$ 179347	191668 *
16. Gain (or loss) in net worth		\$ 12322 *
	* * *	
17. Supplementary management information		
18. Ret.to operators labor & mgmt (6B/47)	\$ 6066	
19. Return to capital & fam.labor (6B/48)	17947	
20. Non-farm income		
21. Outside investment income	670	
22. Other pers.inc.& income tax refund	2589	
22A. Sale of (P.S.) dwelling,auto & truck	15	
23. Total non-farm income	\$ 3274	
24. Total fam.farm & non-farm income	\$ 21221	
25. Total money borrowed	60207	
26. Total paid on debt (principal)	43634	
27. Total Household & pers.cash/non-cash exp. (4/23)	12322	
28. Ratio: Total farm-expenses to receipts (O.S.)	.935	
	Jan.1	Dec.31
29. Ratio: Total-assets to liabilities	3.185	2.953
30. Ratio: non-real estate-assets to liab.	2.655	2.536
31. Ratio: real estate-assets to liab.	3.616	3.303
32. Ratio: net worth to total liabilities	2.185	1.953
33*. Ratio: cash operat.exp.to adj.total farm sales (O.S.)		.740
34. Ratio: total farm recpts.to ave.farm capital (W.F.)		.249
35. Ratio: total farm recpts.to ave.farm capital (O.S.)		.389

*Adjusted farm sales does not include sale of capital assets

**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 assets do I have to cover each dollar of debt?"

Table 6A - Operator's Share of Cash Receipts - 1978

Items	Average 332	High 66	Low 66
1. Sale of livestock & livestock products			
2. Dairy Cows	\$ 868	590	498
3. Dairy products	5909	4385	3295
4. Other dairy cattle	664	371	258
5. Beef breeding cattle	808	1697	197
6. Beef feeder cattle	30774	80594	10668
7. Hogs complete & mixed	25120	61042	12590
8. Hogs finishing	6814	16330	3682
9. Hogs producing weaning pigs	1938	1177	1033
10. Sheep, goats & wool, farm flock	271	45	716
11. Sheep & wool, feeder lambs	415	1382	190
12. Chickens (including hens & broilers)	557		1
13. Turkeys			
14. Eggs	30	50	29
15. Other productive livestock & products	8		
16. Other miscellaneous livestock income			
17. Total sales of productive livestock	\$ 74175	167664 *	33157 *
18. Sale of crops			
19. Wheat	510	255	977
20. Other small grain	711	294	732
21. Corn	12666	16597	13247
22. Soybeans	21026	35057	15494
23. Other row crops	193	383	
24. Legumes & other roughage	214	115	255
25. Grass seed			
26. Fruits & nuts			
27. Vegetables, roadside market & specialty			
28. Nursery, timber & other		2	
29. Set aside acres - government payments	982	1307	1054
30. Total sales from crops	\$ 36303 *	54009 *	31759 *
31. Capital assets sold	1310	414	3367
32. Gas tax refund	135	184	120
33. Income from work off the farm	1160	1617	1055
34. Custom work enterprise income	165		567
35. Patronage refunds	707	1099	501
36. Miscellaneous farm income	1759	2745	1223
37. Total farm sales	\$ 115713 *	227732 *	71750 *
38. Increase in farm capital	50818	98750	19331
39. Family living from the farm	390	690	194
40. Total farm receipts (37)+(38)+(39)	\$ 166921 *	327172 *	91275 *
41. Adjusted total farm sales (37)-(31)	114403	227318	68382
42. Total cash farm operating expense	84969	166134	50771
43. Net cash operating income	\$ 29434 *	61184 *	17611 *

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

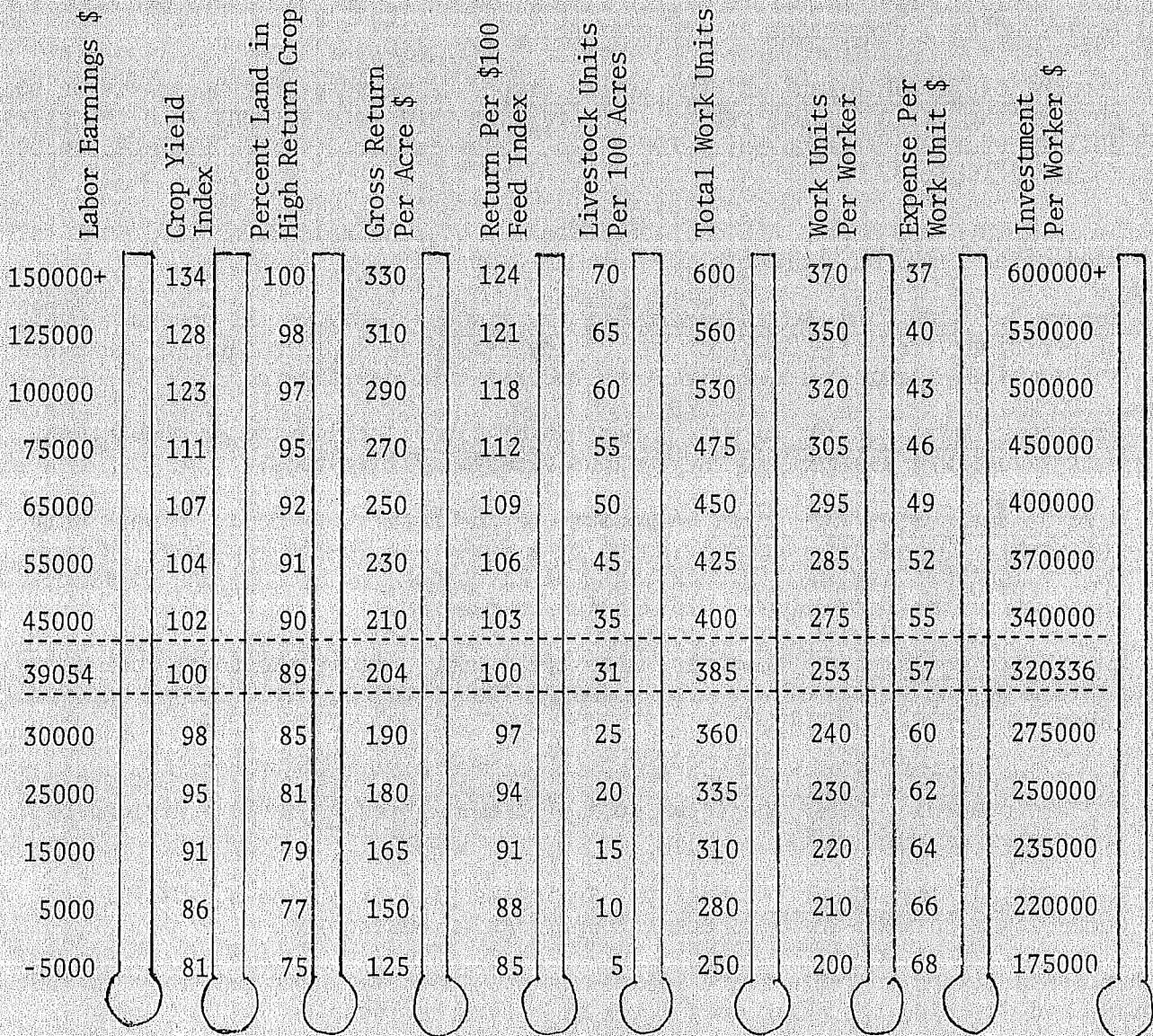
Table 6B - Operator's Share of Cash Expenses - 1978

Items	Average 332	High 66	Low 66
1. Purchase of livestock			
2. Dairy cows	\$ 386	276	311
3. Other dairy cattle	283	337	538
4. Beef breeding cattle	802	1304	338
5. Beef feeder cattle	17332	42545	4790
6. Hogs complete	1796	2382	1947
7. Hogs finishing	3079	8067	1656
8. Hogs producing weaning pigs	242	23	393
9. Sheep, farm flock	50	10	54
10. Sheep, feeder lambs	197	978	15
11. Chickens	65	7	1
12. Turkeys			
13. Other productive livestock	5		
14. Miscellaneous livestock expense	2071	3967	954
15. Feed bought	16578	35962	8050
16. Fertilizer	5349	9001	3748
17. Chemicals	2649	4483	1966
18. Other crop expense	4261	6884	3246
19. Irrigation operation cost			
20. Custom work operator costs, including labor	23		36
21. Custom work hired	1870	2304	1362
22. Repair & upkeep of livestock equipment	659	1125	459
23. Repair & upkeep of farm real estate	955	1787	693
24. Gas,oil,grease bought (farm share)	3047	4611	2579
25. Repair & Operation-mach.,tractor,truck, auto (F.S.)	3731	5574	3455
26. Repair & upkeep of irrigation equipment			
27. Repairs, custom work enterprise	15		42
28. Wages of hired labor	2055	3990	1327
29. Personal property & real estate taxes	1154	1976	1016
30. Cash rent	5989	11855	3989
31. General farm expenses	1364	2148	1077
32. Telephone expense (farm share)	228	260	204
33. Electricity expense (farm share)	679	1121	469
34. Interest expense	8057	13156	6055
35. Total cash operating expense	\$ 84969 *	166134 *	50771 *
36. Power,crop & gen.mach.bot.(farm share)	14129	22514	11590
37. Irrigation equipment bought			
38. Custom work enterprise equipment bought			
39. Livestock equipment bought	1668	2758	936
40. New real estate & improvements	18063	27131	11450
41. Total farm purchases (35) thru (40)	\$ 118828 *	218536 *	74748 *
42. Decrease in farm capital			
43. Interest on farm capital (equity)	10353	18914	10428
44. Unpaid family labor	463	497	472
45. Board furnished hired labor	55	59	22
46. Total farm expense (41) thru (45)	\$ 129699 *	238006 *	85670 *
47. Return to operator labor & mgmt. (O.S.) (6A/40)-(46)	\$ 37222 *	89166 *	5605 *
48. Return to capital & family labor (47)+(44)+(43)	\$ 48038	108578	16505

Return to capital and family labor (line 48) represents the amount available for debt service, living expenses, and savings.

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 the farms included in this summary are located between the dotted lines across the center of the chart.



MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

The following explanations and definitions are for use in interpreting Table 8 on page 15 and the thermometer chart on page 13.

1. Return to Operator's Labor and Management - A measure of the relative financial returns for the operator's labor and management, 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. Explanation on page 40.
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 charts 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 as 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 332	High 66	Low 66
1.	Return to operators labor & management	\$ 39054	100387	(-1446)
2.	Crop yield index	100.0	106.7	101.5
3.	Percent tillable land in high return crops	89.1	91.3	90.0
4.	Gross return per tillable acre (excl.pasture)	203.82	224.69	193.63
5.	Return per \$100 feed fed prod.livstk.index	100.0	100.3	90.5
6*.	Livestock units per 100 acres	30.87	43.26	12.61
7.	Size of business-work units	385.08	640.13	253.25
8.	Work units per worker	253.34	307.75	180.89
9.	Power,mach.,equip.,building exp.worker unit	\$ 56.87	54.72	68.65
10.	Farm capital investment per worker	\$ 320336	362563	345203
11.	Index of return per \$100 feed fed			
12.	6100A beef breed.farm,whole herd,commercial	100.0	107.9	96.2
13.	6140A beef feeders feedlot	100.0	98.2	59.5
14.	6240A chickens,laying flock,commercial	100.0		
15.	6290A dairy cows, commercial general	100.0	114.4	78.4
16.	6310A other dairy,commercial replacements	100.0	103.6	91.1
17.	6470A hogs, farrow,finish,general	100.0	106.0	86.3
18.	6490A hogs, finishing	100.0	104.7	106.1
19.	6510A hogs, weaning pig production	100.0	68.2	84.0
20.	6530A hogs, mixed systems	100.0	101.4	85.9
21.	6570A lambs, feeders	100.0		
22.	6670A sheep, farm, commercial	100.0	248.8	101.3
30.	Number of animal units	114.40	251.08	39.07
31.	Work units			
32.	Crops	179.10	283.95	148.02
33.	Productive livestock	190.73	339.35	87.81
34.	Other productive work units	15.24	16.84	17.42
35.	Expenses per work units			
36.	Tractor & crop machinery expense	\$ 33.01	31.49	42.19
37.	Farm share of auto & truck expense	\$ 7.70	5.84	10.87
38.	Farm share of electric expense	\$ 1.87	1.87	2.02
39.	Livestock equipment expense	\$ 4.09	3.93	3.33
40.	Building,fence & tiling expense	\$ 10.18	11.59	10.24
41.**	Tractor & crop mach.exp.per crop acre	\$ 34.27	34.73	34.23
42.	Farm power & mach.cost alloc.to livestk.	\$ 1491.57	2377.43	1028.08
43.	Bldg.fence & tiling cost alloc.to crops (1)	1695.25	2430.80	1416.46
	BCAF (1)			
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 332 Farms - 1978

<u>Crop</u>	<u>Acres</u>	<u>Crop Rank</u>	<u>Average Yield/Acre</u>	<u>Cost per Unit</u>	<u>Return over Listed Costs per acre</u>
Oats		C	57.3 bu.	1.67	-13.37
Wheat	25.0	C	26.2 bu.	3.85	-26.52
Flax		B	19.8 bu.	4.17	31.05
Corn	167.2	A	113.2 bu.	1.48	32.08
Soybeans	124.5	A	41.3 bu.	3.16	130.32
Corn silage	29.2	A	15.1 ton	10.33	68.67
Alfalfa	29.5	B	4.3 ton	29.67	42.20
Set aside	30.2		81.69	---	8.16
Total non-tillable	11.6				
Total	417.2				

** Refer to table 10's pages 18-26 of high and low farms for above information.

	*	*	*
Supplementary Management Information	Average	High	Low
Percent land tillable	88.6	87.8	91.2
Percent land in high return crops	89.1	91.3	90.0
*Fertilizer cost per acre	15.22	16.60	14.83
*Crop chemicals per acre	8.67	10.19	8.90
*Seed & other costs per acre	13.49	14.07	12.81
*Gas, oil & grease bought per acre	7.04	7.04	7.16
*Tillable land (-) tillable pasture, fallow & idle land			

TABLES 10 - CROPS ANALYSIS

The crop analysis tables for each individual crop show yield, value per production unit, gross return per acre, and other crop income such as straw for oats and flax, insurance loss payments, and disaster aid payments.

Out of pocket costs for fertilizer, chemicals, seed and miscellaneous crop expense, hired labor, and custom work are actual costs that are assigned to each individual crop in the account book. These costs are shown in Table 10, under the heading, Direct Costs, lines 8 thru 13.

Other costs, called Allocated Costs, lines 17 thru 22, 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. Work units are used as a factor in allocating a portion of the total power and machinery expense to each crop. The power and machinery costs are divided into ownership and operation costs. 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 10-0072 Crop Data for Oats - 1978

		AVERAGE 192	HIGH 96	LOW 96
1. Acres		30.8	26.7	34.9
		Per Acre	Per Acre	Per Acre
2. Yield		57.3	72.1	45.9
3. Value per bushel		1.11	1.11	1.10
4. Crop product return	\$	63.57	80.07	50.52
5. Other crop income		18.96	23.60	15.42
6. Total crop return	\$	82.53 *	103.67 *	65.94 *
7. Direct costs				
8. Fertilizer	\$	6.01	6.25	5.82
9. Chemicals		.91	1.16	.72
10. Seed & other		6.56	6.89	6.30
11. Special hired labor		.06	.04	.11
12. Custom work hired		4.61	6.44	3.21
13. Irrigation operation				
14. Total direct costs	\$	18.15	20.78	16.16
15. Return over direct costs	\$	64.38 *	82.89 *	49.78 *
16. Allocated costs				
17. Farm power & machinery - ownership		10.58	11.38	9.97
18. Farm power & machinery - operation		10.37	10.42	10.32
19. Irrigation equipment - ownership				
20. Land costs		53.25	58.88	47.63
21. Miscellaneous costs				
22. *Interest on mach. & equip. invest.		3.55	3.90	3.29
23. Total allocated costs	\$	77.75	84.58	71.21
24. Return over all listed costs	\$	(-13.37)*	(-1.69)*	(-21.43)*
25. Supplementary management information				
26. Work units assigned per acre		.30	.30	.30
27. Power costs allocation factor		.99	.99	.99
28. Total listed cost per bu. of prod.		1.67	1.46	1.90
29. Ret. over listed costs per bushel		(-.23)	(-.02)	(-.47)
30. Breakeven yield/units of production		86.40	94.92	79.43
31. Total listed costs per acre		95.90 *	105.36 *	87.37 *

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

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

Table 10-172 Crop Data for Spring Wheat - 1978

		AVERAGE 30	HIGH 15	LOW 15
1. Acres		30.9	26.1	35.7
		Per Acre	Per Acre	Per Acre
2. Yield		26.2	34.0	20.5
3. Value per bushel		2.64	2.65	2.63
4. Crop product return	\$	69.19	90.08	53.92
5. Other crop income		5.18	8.47	2.75
6. Total crop return	\$	74.37 *	98.55 *	56.67 *
7. Direct costs				
8. Fertilizer	\$	10.65	11.84	9.78
9. Chemicals		.45	.15	.67
10. Seed & other		6.93	5.36	8.10
11. Special hired labor				
12. Custom work hired		3.30	.46	5.35
13. Irrigation operation				
14. Total direct costs	\$	21.33	17.81	23.90
15. Return over direct costs	\$	53.04 *	80.74 *	32.77 *
16. Allocated costs				
17. Farm power & mach.- ownership	\$	12.66	12.41	12.85
18. Farm power & mach.-operation		10.47	11.88	9.44
19. Irrigation equipment -ownership				
20. Land costs		52.47	56.27	48.67
21. Miscellaneous costs				
22. *Int.on mach.& equip.investment		3.96	4.53	3.54
23. Total allocated costs	\$	79.56	85.09	74.50
24. Return over all listed costs	\$	(-26.52)*	(-4.35)*	(-41.73)*
25. Supplementary management information				
26. Work units assigned per acre		.30	.30	.30
27. Power costs allocation factor		1.00	1.00	1.00
28. Total listed cost per bu.of prod.		3.85	3.03	4.80
29. Return over listed costs per bush.		(-1.01)	(-.13)	(-2.04)
30. Breakeven yield/units of prod.		38.22	38.83	37.41
31. Total listed costs per acre	\$	100.89 *	102.90 *	98.40 *

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

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

Table 10-0048 Crop Data for Flax - 1978

	AVERAGE 20	HIGH 10	LOW 10
1. Acres	45.9	40.2	51.5
	Per Acre	Per Acre	Per Acre
2. Yield	19.8	23.9	16.7
3. Value per bushel	5.49	5.50	5.48
4. Crop product return	\$ 108.95	131.62	91.61
5. Other crop income	4.79	7.06	3.05
6. Total crop return	\$ 113.74 *	138.68 *	94.66 *
7. Direct costs			
8. Fertilizer	\$ 3.01	5.95	.72
9. Chemicals	1.83	1.87	1.81
10. Seed & other	9.61	8.03	10.85
11. Special hired labor	.09	.20	
12. Custom work hired	4.44	3.36	5.30
13. Irrigation operation			
14. Total direct costs	\$ 18.98	19.41	18.68
15. Return over direct costs	\$ 94.76 *	119.27 *	75.98 *
16. Allocated costs			
17. Farm power & machinery - ownership	\$ 9.78	11.05	8.80
18. Farm power & machinery - operation	10.03	10.48	9.69
19. Irrigation equipment - ownership			
20. Land costs	40.80	43.20	38.40
21. Miscellaneous costs			
22. *Interest on mach.& equip.investment	3.10	3.33	2.93
23. Total allocated costs	\$ 63.71	68.06	59.82
24. Return over all listed costs	\$ 31.05 *	51.21 *	16.16 *
25. Supplementary management information			
26. Work units assigned per acre	.30	.30	.30
27. Power costs allocation factor	1.00	1.00	1.00
28. Total listed cost per bushel of prod.	4.17	3.65	4.70
29. Return over listed costs per bushel	1.57	2.14	.97
30. Breakeven yield/units of production	15.06	15.90	14.32
31. Total listed costs per acre	\$ 82.69 *	87.47 *	78.50 *

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

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

Table 10 - Crop Data for Sunflowers, Canning Peas & Canning Corn - 1978

	SUNFLOWERS AVERAGE 8	CANNING PEAS AVERAGE 5	CANNING CORN AVERAGE 6
1. Acres	55.0	31.2	58.5
2. Yield	Per Acre	Per Acre	Per Acre
3. Value per production unit	24.1	163.08	198.89
4. Crop product return	10.25	1.00	1.00
5. Other crop income	\$ 246.56	163.08	198.89
6. Total crop return	\$ 246.56 *	163.08 *	235.93 *
7. Direct costs			
8. Fertilizer	\$ 22.75	12.72	30.75
9. Chemicals	14.62	2.12	7.69
10. Seed & other	23.02	2.37	1.38
11. Special hired labor			
12. Custom work hired	7.18	4.74	3.42
13. Irrigation operation			
14. Total direct costs	\$ 67.57	21.95	43.24
15. Return over direct costs	\$ 178.99 *	141.13 *	192.69 *
16. Allocated costs			
17. Farm Power & machinery - ownership	\$ 16.32	19.83	21.95
18. Farm power & machinery - operation	11.77	13.47	17.14
19. Irrigation equipment - ownership			
20. Land costs	72.50	82.60	80.25
21. Miscellaneous costs			
22. *Interest on mach.& equip.investment	4.13	4.83	5.65
23. Total allocated costs	\$ 104.72	120.73	124.99
24. Return over all listed costs	\$ 74.27 *	20.40 *	67.70 *
25. Supplementary management information			
26. Work units assigned per acre	.55	.40	.50
27. Power costs allocation factor	.90	1.00	1.00
28. Total listed cost per unit of production	7.16	.88	.85
29. Return over listed costs per unit	3.09	.13	.34
30. Breakeven yield/units of production	16.81	142.68	168.23
31. Total listed costs per acre	\$ 172.29	142.68	168.23

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

** Line 5 includes value of insurance loss payments, disaster aid and payments, and corn stalks harvested for feed

Table 10-0222 Crop Data for Corn for Grain - 1978

		AVERAGE 332	HIGH 166	LOW 166
1. Acres		167.2	174.7	159.8
2. Yield		Per Acre 113.2	Per Acre 130.8	Per Acre 93.7
3. Value per bushel		1.76	1.76	1.75
4. Crop product return	\$	199.16	230.27	164.04
5. Other crop income		.42	.27	.58
6. Total crop return	\$	199.58 *	230.54 *	164.62 *
7. Direct costs				
8. Fertilizer	\$	26.81	31.91	21.21
9. Chemicals		10.70	11.98	9.30
10. Seed & other		17.12	18.81	15.26
11. Special hired labor		.25	.25	.24
12. Custom work hired		3.14	2.41	3.93
13. Irrigation operation				
14. Total direct costs	\$	58.02	65.36	49.94
15. Return over direct costs	\$	141.56 *	165.18 *	114.68 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	21.31	24.39	17.94
18. Farm power & machinery - operation		18.55	18.41	18.67
19. Irrigation equipment - ownership				
20. Land costs		62.61	74.61	50.60
21. Miscellaneous costs		.08	.03	.13
22. *Interest on mach. & equip. investment	\$	6.93	7.05	6.80
23. Total allocated costs	\$	109.48	124.49	94.14
24. Return over all listed costs	\$	32.08 *	40.69 *	20.54 *
25. Supplementary management information				
26. Work units assigned per acre		.55	.55	.55
27. Power costs allocation factor		1.00	1.00	1.00
28. Total listed cost per bush. of production		1.48	1.45	1.54
29. Return over listed costs per bushel		.28	.31	.22
30. Breakeven yield/units of production		95.17	107.87	82.33
31. Total listed costs per acre	\$	167.50 *	189.85 *	144.08 *

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

**Line 5 includes value of insurance loss payments, disaster aid and payments, and corn stalks harvested for feed

Table 10-0291 Crop Data for Soybeans - 1978

		AVERAGE 332	HIGH 166	LOW 166
1. Acres		124.5	140.7	107.7
		Per Acre	Per Acre	Per Acre
2. Yield		41.3	46.6	34.3
3. Value per bushel		6.25	6.25	6.25
4. Crop product return	\$	258.02	291.39	214.57
5. Other crop income		2.63	1.04	4.72
6. Total crop return	\$	260.65 *	292.43 *	219.29 *
7. Direct costs				
8. Fertilizer	\$	1.55	2.16	.74
9. Chemicals		8.54	8.33	8.84
10. Seed & other		11.08	11.72	10.25
11. Special hired labor		.80	.86	.70
12. Custom work hired		2.32	2.35	2.21
13. Irrigation operation				
14. Total direct costs	\$	24.29	25.42	22.74
15. Return over direct costs	\$	236.36 *	267.01 *	196.55 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	18.31	20.11	16.06
18. Farm power & machinery - operation		14.73	15.29	13.97
19. Irrigation equipment - ownership				
20. Land costs		67.38	75.48	59.29
21. Miscellaneous costs		.03	.05	
22. *Interest on mach.& equip.investment		5.59	5.87	5.23
23. Total allocated costs	\$	106.04	116.80	94.55
24. Return over all listed costs	\$	130.32 *	150.21 *	102.00 *
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 bushel of production		3.16	3.05	3.42
29. Return over listed costs per bushel		3.16	3.22	2.97
30. Breakeven yield/units of production		20.85	22.76	18.77
31. Total listed costs per acre	\$	130.33 *	142.22 *	117.29 *

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

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

Table 10- 0720 Crop Data for Corn Silage - 1978

		AVERAGE 151	HIGH 75	LOW 75
1. Acres		29.2	30.6	28.1
		Per Acre	Per Acre	Per Acre
2. Yield		15.1	18.4	11.5
3. Value per ton		14.87	14.96	14.78
4. Crop product return	\$	224.59	275.72	169.36
5. Other crop income		.14	.26	
6. Total crop return	\$	224.73 *	275.98 *	169.36 *
7. Direct costs				
8. Fertilizer	\$	24.32	30.03	18.08
9. Chemicals		9.86	11.37	8.22
10. Seed & other		14.69	14.71	12.85
11. Special hired labor		.17	.07	.28
12. Custom work hired		2.57	2.65	2.49
13. Irrigation operation		.03		.11
14. Total direct costs	\$	51.64	58.83	42.03
15. Return over direct costs	\$	173.09 *	217.15 *	127.33 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	21.35	23.15	19.61
18. Farm power & machinery - operation		20.91	21.52	20.24
19. Irrigation equipment - ownership				
20. Land costs		55.18	61.32	49.24
21. Miscellaneous costs				
22. *Interest on mach.& equip.investment		6.98	6.97	6.95
23. Total allocated costs	\$	104.42	112.96	96.04
24. Return over all listed costs	\$	68.67 *	104.19 *	31.29 *
25. Supplementary management information				
26. Work units assigned per acre		.60	.60	.60
27. Power costs allocation factor		1.00	1.00	1.00
28. Total listed cost per ton of production		10.33	9.32	12.05
29. Return over listed costs per ton		4.55	5.65	2.73
30. Breakeven yield/units of production		10.49	11.48	9.34
31. Total listed costs per acre	\$	156.06 *	171.79 *	138.07 *

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

**Line 5 includes insurance loss payments and disaster aid payments

Table 10-0750 - Crop Data for Oats Silage & Set Aside Acres - 1978

		OATS SILAGE AVERAGE 43	SET ASIDE ACRES AVERAGE 158
1. Acres		24.1	30.2
		Per Acre	Per Acre
2. Yield		5.9	77.8
3. Value per production unit		14.26	.99
4. Crop product return	\$	84.02	77.02
5. Other crop income		.66	4.67
6. Total crop return	\$	84.68 *	81.69 *
7. Direct costs			
8. Fertilizer	\$	6.31	.17
9. Chemicals		.50	.14
10. Seed & other		7.55	1.76
11. Special hired labor			.07
12. Custom work hired		2.24	.66
13. Irrigation operation			
14. Total direct costs	\$	16.60	2.80
15. Return over direct costs	\$	68.08 *	78.89 *
16. Allocated costs			
17. Farm power & machinery - ownership	\$	12.44	6.36
18. Farm power & machinery - operation		12.11	5.82
19. Irrigation equipment - ownership			
20. Land costs		48.56	56.35
21. Miscellaneous costs			
22. *Interest on mach. & equip.investment		4.30	2.20
23. Total allocated costs	\$	77.41	70.73
24. Return over all listed costs	\$	(-9.33) *	8.16 *
25. Supplementary management information			
26. Work units assigned per acre		.40	.19
27. Power costs allocation factor		1.00	.88
28. Total listed cost per unit of production		15.96	.92
29. Return over listed costs per unit		(-1.58)	.14
30. Breakeven yield/units of production		6.59	76.59
31. Total listed costs per acre	\$	94.01 *	73.53 *

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

Table 10-0401 Crop Data for Alfalfa Hay - 1978

	AVERAGE 202	HIGH 101	LOW 101
1. Acres	29.5	25.6	33.4
2. Yield	Per Acre 4.3	Per Acre 5.7	Per Acre 3.3
3. Value per ton	39.68	40.00	39.37
4. Crop product return	\$ 170.81	228.13	128.47
5. Other crop income			
6. Total crop return	\$ 170.81 *	228.13 *	128.47 *
7. Direct costs			
8. Fertilizer	\$ 7.61	9.45	6.18
9. Chemicals	.27	.39	.18
10. Seed & other	8.94	9.84	8.24
11. Special hired labor	.38	.43	.30
12. Custom work hired	7.54	10.27	5.42
13. Irrigation operation			
14. Total direct costs	\$ 24.74	30.38	20.32
15. Return over direct costs	\$ 146.07 *	197.75 *	108.15 *
16. Allocated costs			
17. Farm power & machinery - ownership	\$ 21.14	24.65	18.42
18. Farm power & machinery - operation	21.90	22.19	21.68
19. Irrigation equipment - ownership			
20. Land costs	53.96	59.52	48.40
21. Miscellaneous costs			
22. *Interest on mach.& equip. investment	6.87	7.60	6.30
23. Total allocated costs	\$ 103.87	113.96	94.80
24. Return over all listed costs	\$ 42.20 *	83.79 *	13.35 *
25. Supplementary management information			
26. Work units assigned per acre	.59	.60	.59
27. Power costs allocation factor	.98	.99	.98
28. Total listed cost per ton of production	29.67	25.31	35.19
29. Return over listed costs per ton	10.01	14.69	4.55
30. Breakeven yield/units of production	3.26	3.61	2.95
31. Total listed costs per acre	\$ 128.61 *	144.34 *	115.12 *

*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. Table 11 through 17A pertain to the major livestock and poultry 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 the livestock enterprises. The return over feed and supplemental costs, 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 return 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 feed purchased from off the farm. An average price is charged for each kind of farm grown feed. Farm grown feed prices are listed on page 39.

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 are computed on an animal basis. Thus, with feeder enterprises, inventories of feeder animals are involved. In most 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 months period, most of which were animals on hand at the beginning of the year.

Table 11A - 6470 - Hogs Farrow to Finish - 1978

		AVERAGE 119	HIGH 24	LOW 24
1. Pounds of hogs produced		114652	86818	81377
		Per Cwt.	Per Cwt.	Per Cwt.
2. Net increase in value of hogs	\$	52.09	57.17	44.65
3. Other miscellaneous hog income				
4. Total value produced	\$	52.09 *	57.17 *	44.65 *
5. Pounds of feed fed				
6. Corn		295.4	276.6	323.6
7. Small grain		20.0	29.6	20.5
8. Complete ration		25.0	13.1	32.0
9. Protein, salt & mineral & milk		78.4	62.3	94.5
10. Total concentrates		418.8	381.6	470.6
11. Forages		1.5	2.8	.8
12. Feed cost				
13. Grains		10.70	10.34	12.03
14. Complete ration		2.57	1.28	2.51
15. Protein, salt & mineral & milk		9.91	7.90	12.22
16. Forages		.03	.06	.02
17. Pasture				
18. Total feed costs	\$	23.21	19.58	26.78
19. Return over feed costs	\$	28.88 *	37.59 *	17.87 *
20. Other direct costs				
21. Miscellaneous livestock expense		.96	.96	1.16
22. Veterinary expense		.80	1.02	.77
23. Custom work		.28	.35	.39
24. Special hired labor		.20	.02	.07
25. Total other direct costs	\$	2.24	2.35	2.39
26. Return over feed & other direct costs	\$	26.64 *	35.24 *	15.48 *
27. Allocated costs				
28. Power & machinery costs (PCAF 1.00)		.99	1.01	.97
29. Livestock equipment costs (ECAAF 1)		1.02	1.08	.91
30. Building & fences (BCAF 1)		1.66	1.61	1.29
31. Total allocated costs	\$	3.67	3.70	3.17
32. Return over all listed costs	\$	22.97 *	31.54 *	12.31 *
33. Supplementary management information				
34. Return for \$100 feed fed		224.41	291.97	166.72
35. Price received per cwt.all animals		48.87	50.80	46.95
36. Price received per cwt.sold mkt.only		49.06	50.18	47.77
37. Number of litters farrowed		68	46	38
38. Number of pigs born per litter		9.6	11.5	9.3
39. Number of pigs weaned per litter		7.9	9.5	7.2
40. Percent death loss		13.5	13.2	14.1
41. Average weight of all hogs sold		229.6	229.7	239.8
42. Average weight of mkt.hogs sold		226.8	221.5	227.4
43. Price per cwt.concentrate fed		5.53	5.12	5.69
44. Price per cwt.protein, salt & mineral		12.63	12.68	12.94
45. Pounds of pork purchased		3495	2208	5501
46. Total listed costs per cwt.pork prod.\$		29.12 *\$	25.63 * \$	32.34

*Farms included in table 11A carried out a complete program of farrowing and marketing their own hogs. Purchases were primarily breeding stock. The feed costs include feed for the breeding herd and market animals. Only those farms producing more than 5,000 pounds of pork were included in the averages.

Table 11B 6490 Hogs, Finishing Enterprise - 1978

	AVERAGE 46	HIGH 15	LOW 15
1. Average number of pigs on hand	188.3	165.9	174.9
2. Pounds of hogs produced	86575	79886	79884
	Per Cwt.	Per Cwt.	Per Cwt.
3. Net increase in value of hogs	\$ 37.26	42.99	32.39
4. Other miscellaneous hog income			
5. Total value produced	\$ 37.26 *	42.99 *	32.39 *
6. Pounds of feed fed			
7. Corn	284.2	269.7	341.8
8. Small grain	14.4	11.8	22.3
9. Complete ration	37.1	19.6	17.5
10. Protein,salt & mineral & milk	61.2	59.7	65.3
11. Total concentrates	396.9	360.8	446.9
12. Forages	.3	.2	.9
13. Feed cost			
14. Grains	10.16	9.51	12.42
15. Complete ration	2.50	1.80	1.28
16. Protein,salt & mineral & milk	8.12	7.92	9.59
17. Forages	.01		.02
18. Pasture			
19. Total feed costs	\$ 20.79	19.23	23.31
20. Return over feed costs	\$ 16.47 *	23.76 *	9.08 *
21. Other direct costs			
22. Miscellaneous livestock expense	.54	.37	.43
23. Veterinary expense	.24	.26	.31
24. Custom work	.37	.09	.43
25. Special hired labor	.03	.10	
26. Total other direct costs	\$ 1.18	.82	1.17
27. Return over feed & other direct costs	\$ 15.29 *	22.94 *	7.91 *
28. Allocated costs			
29. Power & machinery costs (PCAF 1.00)	.56	.71	.48
30. Livestock equipment costs (ECAAF 1)	.81	1.33	.54
31. Building & fences (BCAF 1)	.70	.89	.69
32. Total allocated costs	\$ 2.07	2.93	1.71
33. Return over all listed costs	\$ 13.22 *	20.01 *	6.20 *
34. Supplementary management information			
35. Return for \$100 feed fed	179.23	223.55	138.95
36. Price received per cwt.	48.30	48.25	48.02
37. Average weight of pigs sold	228.7	231.1	228.7
38. Average price paid per pig bought	47.81	35.36	51.50
39. Average weight per pig bought	45.3	40.5	46.8
40. Number of pigs purchased	474	369	487
41. No.pigs transferred in	39	60	9
42. Average weight of pigs transferred in	28.9	24.4	41.1
43. Pounds of pork purchased	21450	14946	22796
44. Percent death loss	3.6	2.0	6.8
45. Price per cwt.concentrate fed	5.24	5.33	5.21
46. Price per cwt.protein,salt & mineral fed	13.27	13.28	14.68
47. Effect.daily gain-pounds per day per pig	1.26	1.32	1.25
48. Tot.listed cost per cwt.pork produced	24.04 * \$	22.98 * \$	26.19 *

*Farms included in table 11B purchased all hog fed. None of these farms maintained breeding herds. Only those farms producing over 5,000 lbs. of pork were included in the averages.

Table 11C 6510 Hogs, Weaning Pig Production - 1978

	AVERAGE 24
1. Number of litters farrowed	83
2. Net increase in value of hogs	Per Litter 455.75
3. Other miscellaneous weaning pigs income	
4. Total value produced	\$ 455.75 *
5. Pounds of feed fed	
6. Corn	1240.8
7. Small grain	289.1
8. Complete ration	733.2
9. Protein, salt & mineral, & milk	321.4
10. Total concentrates	2584.5
11. Forages	13.7
12. Feed cost	
13. Grains	51.25
14. Complete ration	58.67
15. Protein, salt & mineral & milk	47.53
16. Forages	.29
17. Pasture	.12
18. Total feed costs	\$ 157.86
19. Return over feed costs	\$ 297.89 *
20. Other direct costs	
21. Miscellaneous livestock expense	14.52
22. Veterinary expense	12.31
23. Custom work	2.58
24. Special hired labor	5.05
25. Total other direct costs	\$ 34.46
26. Return over feed & other direct costs	\$ 263.43 *
27. Allocated costs	
28. Power & machinery costs (PCAF 1.00)	10.50
29. Livestock equipment costs (ECAAF 1)	17.80
30. Building & fences (BCAF 1)	20.50
31. Total allocated cost	\$ 48.80
32. Return over all listed costs	\$ 214.63 *
33. Supplementary management information	
34. Return for \$100 feed fed	288.71
35. Average price received per animal sold	56.79
36. Average price per pig sold or transferred	47.40
37. Average weight per pig sold or transferred	44.5
38. Number of pigs produced	636
39. Number of pigs born per litter	9.8
40. Number of pigs weaned per litter	7.8
41. Percent death loss	17.9
42. Price per cwt. concentrate fed	6.09
43. Price per cwt. protein, salt & mineral fed	14.79
44. Feed & supplemental costs per pig produced	25.10
45. Total listed costs per litter	\$ 241.12

The information presented includes costs of maintaining the breeding herd and raising the pigs to weaning weight.

Value produced includes the net change in value of the breeding herd as well as feeder pig sales.

Table 12-6290 - Dairy Cows - 1978

	AVERAGE 47	HIGH 16	LOW 16
1. Average number of cows	38.5	42.8	32.6
	Per Cow	Per Cow	Per Cow
2. Pounds of milk	11644	12843	9913
3. Pounds of butterfat	393.7	443.4	308.2
4. Percent of butterfat in milk			
5. Value of produce			
6. Dairy products sold	\$ 1113.69	\$ 1243.32	\$ 928.40
7. Dairy products used in home	4.78	5.14	6.17
8. Milk fed to livestock	10.13	8.53	16.60
9. Net increases in value of cows	79.53	201.78	(-23.04)
10. Other miscellaneous dairy income			
11. Total value produced	\$ 1208.13 *	1458.77 *	928.13 *
12. Pounds of feed fed			
13. Corn	6229.8	4757.5	4568.8
14. Small grain	684.8	783.6	581.9
15. Complete ration	384.6	377.3	122.3
16. Protein, salt & mineral	685.0	416.9	932.3
17. Total concentrates	7984.2	6335.3	6205.3
18. Legume hay	5687.6	6055.2	5999.6
19. Other hay & dry roughage	413.4	616.2	625.0
20. Silage	10522.1	10171.4	12010.0
21. Feed costs			
22. Grains	171.79	188.50	169.75
23. Complete ration	21.92	23.39	5.86
24. Protein, salt & mineral	82.47	54.51	93.99
25. All hay & dry roughage	133.12	141.68	149.57
26. Silage	81.27	78.93	94.33
27. Pasture	7.27	4.77	8.87
28. Total feed costs	\$ 497.84	491.78	522.37
29. Return over feed cost	\$ 710.29 *	966.99 *	405.76 *
30. Other direct costs			
31. Miscellaneous livestock expense	51.14	58.01	40.37
32. Veterinary expense	16.52	18.53	9.66
33. Custom work hired	43.30	46.26	36.41
34. Special hired labor	.96	2.55	
35. Total other direct costs	\$ 111.92	125.35	86.44
36. Return over feed & other direct costs	\$ 598.37 *	841.64 *	319.32 *
37. Allocated costs			
38. Power & machinery costs (PCAF 1.00)	49.47	50.37	52.15
39. Livestock equipment costs (ECAAF 1)	43.35	54.34	37.35
40. Building & fences (BCAF 1)	46.55	49.23	35.87
41. Total allocated costs	\$ 139.37	153.94	125.37
42. Return over all listed costs	\$ 459.00 *	687.70 *	193.95 *
43. Supplementary management information			
44. Return for \$100 feed fed	242.67	296.63	177.68
45. Feed cost per cwt. milk	4.28	3.83	5.27
46. Feed cost per pound of butterfat	1.26	1.11	1.69
47. Pounds of milk per pound of concentrate	1.46	2.03	1.60
48. Aver. price per cwt. milk sold	9.70	9.79	9.61
49. Aver. price per pound of butterfat	2.87	2.84	3.09
50. Tot. listed costs per cwt. milk produced	6.43	6.00	7.41
51. Dairy cow turnover percentage	39.0	46.7	39.9
52. Total listed costs per cow	\$ 749.13 *	\$ 771.07 *	\$ 734.18 *

Table 13-6310 - Other Dairy - 1978

		AVERAGE 47	HIGH 16	LOW 16
1.	Number of head	49.6	51.5	39.1
		Per head	Per head	Per head
2.	Net increase in value	\$ 336.29	240.12	454.58
3.	Other miscellaneous income			
4.	Total income	\$ 336.29 *	240.12 *	454.58 *
5.	Pounds of feed fed			
6.	Corn	1209.4	1109.0	656.5
7.	Small grain	220.0	216.7	151.0
8.	Complete ration	9.5		23.9
9.	Protein, salt & minerals	142.3	179.6	142.8
10.	Hay & dry roughage	1959.4	2420.7	1304.3
11.	Silage	4491.6	6958.2	2864.5
12.	Milk	86.6	90.7	40.0
13.	Feed cost			
14.	Grains	37.70	46.70	27.26
15.	Complete ration	.65		1.46
16.	Protein, salt & minerals	20.24	22.25	21.94
17.	Hay & dry roughage	41.31	50.82	27.44
18.	Silage	34.38	54.64	21.43
19.	Milk	7.64	8.58	2.94
20.	Pasture	7.20	4.60	5.24
21.	Total feed costs	\$ 149.12	187.59	107.71
22.	Return over feed costs	\$ 187.17 *	52.53 *	346.87 *
23.	Other direct costs			
24.	Miscellaneous expense	4.54	4.85	4.76
25.	Veterinary expense	1.90	1.71	2.99
26.	Custom work hired	1.90	2.21	1.10
27.	Special hired labor	.38	1.11	
28.	Total other direct costs	\$ 8.72	9.88	8.85
29.	Return over feed & other direct costs	178.45 *	42.65 *	338.02 *
30.	Allocated costs			
31.	Power & machinery costs (PCAF 1.00)	9.13	8.85	10.52
32.	Livestock equipment costs (ECAAF 1)	8.20	8.03	9.62
33.	Building & fences (BCAF 1)	8.97	7.60	12.54
34.	Total allocated costs	\$ 26.30	24.48	32.68
35.	Return over all listed costs	\$ 152.15 *	18.17 *	305.34 *
36.	Supplementary management information			
37.	Return for \$100 feed fed	225.53	128.00	422.09
38.	Percent death loss - total	11.1	12.5	9.7
39.	Percent calf death loss	23.7	24.4	23.3
40.	Total listed costs per head	\$ 184.14 *	\$ 221.95 *	\$ 149.24 *

Table 14 - All Dairy Cattle - 1978

		AVERAGE 47	HIGH 16	LOW 16
1.	Average number of cows	38.5	42.8	32.6
		Per Cow	Per Cow	Per Cow
2.	Value of dairy products	\$ 1119.87	1225.56	1033.51
3.	Net increase in value	484.28	725.99	296.67
4.	Miscellaneous dairy income			
5.	Total value produced	\$ 1604.15 *	1951.55 *	1330.18 *
6.	Pounds of feed fed			
7.	Grains	8550.2	7151.9	6006.0
8.	Complete rations	385.1		686.9
9.	Protein,salt & min.incl.milk equiv.	872.2	686.9	1072.8
10.	Hay & dry roughage	8456.9	8311.1	9614.4
11.	Silage	15852.5	19130.3	15664.2
12.	Feed cost			
13.	Grains	215.14	243.79	200.55
14.	Complete rations	22.19		37.04
15.	Protein,salt & minerals,inc.milk	116.87	101.92	138.01
16.	Hay & dry roughage	182.85	176.03	214.20
17.	Silage	122.04	144.26	124.60
18.	Pasture costs	15.64	16.56	13.03
19.	Total feed costs	\$ 674.73	682.56	727.43
20.	Return over feed costs	\$ 929.42 *	1268.99 *	602.75 *
21.	Other direct costs			
22.	Miscellaneous livestock expense	56.40	59.98	50.50
23.	Veterinary expense	18.72	21.02	16.02
24.	Custom work	45.30	43.04	42.84
25.	Special hired labor	1.46		4.05
26.	Total other direct costs	\$ 121.88	124.04	113.41
27.	Return over feed & other direct costs	807.54 *	1144.95 *	489.34 *
28.	Allocated costs			
29.	Power & machinery costs	59.38	59.64	62.84
30.	Livestock equipment costs	51.80	59.05	43.36
31.	Building & fences	55.34	75.95	39.83
32.	Total allocated costs	\$ 166.52	194.64	146.03
33.	Return over all listed costs	\$ 641.02 *	950.31 *	343.31 *
34.	Supplementary management information			
35.	Return for \$100 feed fed	237.75	285.91	182.86
36.	Total listed costs per cow	\$ 963.13 *	\$ 1001.24 *	986.87 *

Table 14 presents a picture of the costs and returns from the whole dairy herd on a per cow basis. Return above feed cost (table 12) was the factor used to determine these high and low average dairy herds.

Table 15A - 6100 - Beef Breeding Cattle - 1978

		AVERAGE 55	HIGH 11	LOW 11
1.	Average number of beef cows	48.0	32.2	54.5
2.	Average number of other beef animals & bulls	29.1	31.5	30.8
3.	Pounds of beef produced	18589	15872	20092
4.	Net increase in value	Per Cow	Per Cow	Per Cow
5.	Other miscellaneous beef income	\$ 424.40	656.46	269.72
6.	Total value produced	\$ 424.40 *	656.46 *	269.72 *
7.	Pounds of feed fed			
8.	Grain	130.2	192.8	135.4
9.	Protein, salt & mineral	86.2	114.2	52.7
10.	Legume hay	2012.5	2561.3	2572.1
11.	Other hay & dry roughage	1357.4	246.7	1313.1
12.	Silage	3966.1	2738.6	4655.5
13.	Feed Cost			
14.	Grain	5.15	8.51	6.42
15.	Protein, salt & mineral	9.40	8.91	6.57
16.	Legume hay	43.40	55.87	54.95
17.	Other hay & dry roughage	12.21	2.17	15.65
18.	Silage	29.79	21.30	36.28
19.	Pasture	27.44	28.48	25.94
20.	Total feed costs	\$ 127.39	125.24	145.81
21.	Return over feed cost	\$ 297.01 *	531.22 *	123.91 *
22.	Other direct costs			
23.	Miscellaneous livestock expense	4.71	7.80	3.67
24.	Veterinary expense	5.15	5.37	5.52
25.	Custom work	3.90	1.77	6.90
26.	Special hired labor	.04		
27.	Total other direct costs	\$ 13.80	14.94	16.09
28.	Return over feed & other direct costs	\$ 283.21 *	516.28 *	107.82 *
29.	Allocated costs			
30.	Power & machinery costs ((PCAF 1.00)	12.77	14.08	12.66
31.	Livestock equipment costs (ECAAF 1)	10.47	11.08	7.90
32.	Building & fences (BCAF 1)	16.29	10.13	23.63
33.	Total allocated costs	\$ 39.53	35.29	44.19
34.	Return over all listed costs	\$ 243.68 *	480.99 *	63.63 *
35.	Supplementary management information			
36.	Return for \$100 feed fed	333.13	524.13	184.98
37.	Price per cwt. sold	45.98	52.77	41.00
38.	Price per cwt. calves sold or transferred	53.56	69.01	64.63
39.	Average weight per head sold	709.7	627.5	967.0
40.	Average weight per calf sold or trans.	565.5	476.9	428.0
41.	Percent death loss	4.1	4.2	5.0
42.	Percent calf crop	96.0	97.4	94.6
43.	Total listed costs per cow	\$ 180.72 *	\$ 175.47 *	\$ 206.09 *

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 Beef Feeders Feedlot 1978

		CALVES 500 LBS.OR LESS AVERAGE 55	YEARLINGS 500 - 700 LBS. AVERAGE 49
1.	Average number of beef feeders	119.5	136.4
2.	Pounds of beef produced	76509	69278
		Per Cwt	Per Cwt
3.	Net increase in value of animals	\$ 64.91	59.69
4.	Other miscellaneous beef income		
5.	Total value produced	\$ 64.91 *	59.69 *
6.	Pounds of feed fed		
7.	Grain	471.7	554.6
8.	Protein, salt & mineral	48.4	49.6
9.	Legume hay	152.2	109.3
10.	Other hay & dry roughage	14.0	8.3
11.	Silage	975.5	833.1
12.	Feed cost		
13.	Grain	16.46	19.41
14.	Protein, salt & mineral	6.22	6.37
15.	Legume hay	3.23	2.31
16.	Other hay & dry roughage	.19	.09
17.	Silage	7.43	6.34
18.	Pasture	.06	.07
19.	Total feed cost	\$ 33.59	34.52
20.	Return over feed cost	\$ 31.32 *	25.17 *
21.	Other direct costs		
22.	Miscellaneous livestock expense	.49	.39
23.	Veterinary expense	.93	.86
24.	Custom work hired	.73	.66
25.	Special hired labor		
26.	Total other direct costs	\$ 2.15	1.91
27.	Return over feed & other direct costs	\$ 29.17 *	23.28 *
28.	Allocated costs		
29.	Power & machinery costs (PCAF 1.00)	.84	.75
30.	Livestock equipment costs (ECAF 1)	.94	.84
31.	Buildings & fences (BCAF 1)	1.43	1.55
32.	Total allocated costs	\$ 3.21	3.14
33.	Return over all listed costs	\$ 25.96 *	20.14 *
34.	Supplementary management information		
35.	Return for \$100 feed fed	193.26	190.48
36.	Price per cwt. sold	50.81	50.27
37.	Average weight per head sold	1003.3	1103.5
38.	Price per cwt.bought	64.83	59.52
39.	Average weight per head bought	439.3	602.7
40.	Number of head bought	121	164
41.	Percent death loss	2.2	1.0
42.	Effective daily gain - pounds/head/day	1.75	1.91
43.	Total listed cost per cwt. produced	\$ 38.95 *	\$ 39.57 *

Farms producing more than 5,000 lbs. of beef from a cattle feeding enterprise are included in table 15B. This page compares calves with yearlings that are purchased to feed out.

16 A - 6670 - Sheep Farm - Commercial Flock

AVERAGE 20

1.	Average number of ewes	68.1
2.	Pounds of lamb & mutton produced	5094
3.	Pounds of wool produced	621
	Per Ewe	
4.	Value of produce	
5.	Wool	\$ 8.55
6.	Net increase in value of animals	66.23
7.	Other miscellaneous sheep income	
8.	Total value produced	\$ 74.78 *
9.	Pounds of feed fed	
10.	Grain	368.1
11.	Protein, salt & mineral	29.3
12.	Legume hay	656.4
13.	Other hay & dry roughage	16.3
14.	Silage	616.7
15.	Feed cost	
16.	Grain	13.58
17.	Protein, salt & mineral	3.80
18.	Legume hay	14.90
19.	Other hay & dry roughage	.19
20.	Silage	4.52
21.	Pasture	1.69
22.	Total feed costs	\$ 38.68
23.	Return over feed costs	\$ 36.10 *
24.	Other direct costs	
25.	Miscellaneous livestock expense	4.21
26.	Veterinary expense	1.47
27.	Custom work	1.44
28.	Special hired labor	
29.	Total other direct costs	\$ 7.12
30.	Return over feed & other direct costs	\$ 28.98 *
31.	Allocated costs	
32.	Power & machinery costs (PCAF 1.00)	6.66
33.	Livestock equipment costs (ECAAF 1)	6.63
34.	Building & fences (BCAF 1)	7.32
35.	Total allocated costs	\$ 20.61
36.	Return over all listed costs	\$ 8.37 *
37.	Supplementary management information	
38.	Return for \$100 feed fed	193.32
39.	Price per cwt.lamb & mutton sold	60.80
40.	Price per cwt.lamb sold or transferred	62.45
41.	Aver.wght.of lambs sold or transferred	104.2
42.	Pounds of wool per sheep sheared	11.3
43.	Number of ewes kept for lambing	62
44.	Percent lamb crop	138.7
45.	Percent death loss	11.9
46.	Total listed costs per ewe	\$ 66.41 *

Table 16B - 6570 Lambs, Feeders

	AVERAGE 5
1. Average number of lambs	90.3
2. Pounds of lamb produced	10352
3. Pounds of wool produced	460
	Per Cwt.
4. Value of produce	
5. Wool	3.49
6. Net increase in value of animals	73.01
7. Other miscellaneous lamb income	
8. Total value produced	\$ 76.50 *
9. Pounds of feed fed	
10. Grain	641.8
11. Protein, salt & mineral	86.4
12. Legume hay	189.3
13. Other hay & dry roughage	
14. Silage	
15. Feed cost	
16. Grain	23.90
17. Protein, salt & mineral	9.00
18. Legume hay	4.26
19. Other hay & dry roughage	
20. Silage	
21. Pasture	
22. Total feed costs	\$ 37.16
23. Return over feed cost	\$ 39.34 *
24. Other direct costs	
25. Miscellaneous livestock expense	1.22
26. Veterinary expense	1.48
27. Custom work	1.88
28. Special hired labor	
29. Total other direct costs	\$ 4.58
30. Return over feed & other direct costs	\$ 34.76 *
31. Allocated costs	
32. Power & machinery costs (PCAF 1.00)	2.08
33. Livestock equipment costs (ECAAF 1)	2.29
34. Building & fences (BCAF 1)	.14
35. Total allocated costs	\$ 4.51
36. Return over all listed costs	\$ 30.25 *
37. Supplementary management information	
38. Return for \$100 feed fed	205.85
39. Price per cwt. sold	63.39
40. Pounds of wool per sheep sheared	
41. Average weight of lambs sold	113.7
42. Price per cwt. bought	68.99
43. Average weight of lambs bought	85.6
44. Percent death loss	2.2
45. Effective daily gain - pounds/head/day	.31
46. Total listed costs per cwt. produced	\$ 46.25 *

Selected Livestock Data - for 332 Farms - 1978

	<u>Feed Cost</u>	<u>Return over Feed Costs</u>	<u>Return per \$100 Feed Fed</u>	<u>Amount of Feed Needed</u>
Cwt.Hogs farrowed to finish	23.21	28.88	224.41	418 lbs.
Cwt. Hogs finishing only	20.79	16.47	179.23	397 lbs.
Hogs - Weaning per litter	157.86	297.89	288.71	2597 lbs.
Dairy cow	497.84	710.29	242.67	7984 lbs. conc. 16623 lbs. rough.
Other Dairy	149.12	187.17	225.53	1581 lbs. conc. 6450 lbs. rough.
Beef Cow - calf to weaning	127.39	297.01	333.13	216 lbs. conc. 13786 lbs. rough.
Cwt.Feeder cattle calves purchased	33.59	31.32	193.86	520 lbs. conc. 1142 lbs. rough.
Cwt. Feeder cattle yearlings purchased	34.52	25.17	190.48	604 lbs. conc. 951 lbs. rough.
Ewe	38.68	36.10	193.32	397 lbs. conc. 1289 lbs. rough.
	<u>* Ave.price Received</u>	<u>* * Ave.wt/head mk't.sold</u>	<u>* Ave.purchase price paid</u>	<u>Total listed cost</u>
Hogs - farrow to finish	49.06/cwt	229.6	- - -	\$ 29.12/cwt.
Hogs-finishing	48.30/cwt	228.7	47.81/head	24.04/cwt.
Feeder pigs	47.40/head	44.5	- - -	25.10/head
Dairy cow	9.70/cwt.milk	- -	- - -	749.13/cow
Beef-calves sold	53.56/cwt.	565.5	- - -	180.72/cow
Feeder cattle-calves	50.81/cwt.	1003.3	64.83/cwt.	38.95/cwt.
Feeder cattle-yearlings	50.27/cwt.	1103.5	50.27/cwt.	39.57/cwt.
Ewes - lambs sold	62.45/cwt.	104.2	- - -	66.41/ewe

AVERAGE PRICES FOR 1978 FARM GROWN FEEDSGrain

Corn	\$1.90 per bu.
Oats	\$1.10 per bu.
Barley	\$1.50 per bu.
Mixed grain	3½¢ per lb.

Hay

Alfalfa	\$45.00 per ton
Mixed	\$45.00 per ton
Wild	\$40.00 per ton

Other Roughages

Corn silage	\$15.00 per ton
Grass silage	\$14.00 per ton
Legume haylage	\$20.00 per ton
Green crop	\$13.30 per ton
Oats straw75 per bale
Corn stacks	8.00 per ton

Pasture

Cows	\$.60 per head per month
Young cattle	\$.30 per head per month
Hogs40 per head per month
Sheep	\$1.00 per head per month
Lambs50 per head per month

OTHER NON-CASH COSTS

Unpaid family labor	\$20.00 per day
Board furnished hired labor . . .	\$ 5.00 per day
Second operator's labor	\$800.00 per month
Interest on farm capital	7%

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.

UNITS FOR EACH CLASS OF LIVESTOCK & EACH ACRE OF CROP

Item	No. of Work Units	Item	No. of Work Units/Acre
Dairy Cows	7.0/cow	Barley, Wheat, Oats, Rye	.30/acre
Other Dairy Cattle	1.2 head*	Flax	.30/acre
Beef Breeding Cows	1.5/head	Oat Silage	.40/acre
Beef Feeders	.12/cwt.	Corn for Seed	.60/acre
Hogs - Complete	.12/cwt.	Corn for Grain	.55/acre
Hogs - Finishing	.06/cwt.	Soybeans	.45/acre
Hogs - Wean. pigs	1.4/litter	Corn & Cane Silage	.60/acre
Sheep, Farm Flock	.60/head	Alfalfa Hay	.60/acre
Lambs, Feeder	.30/cwt.	Other Leg. & Mix. Hay	.40/acre
Chickens, Laying Flock	5.0/100	Tame Grass Hay	.20/acre
Broilers	.20/cwt.	Annual Hay	.30/acre
Labor off the Farm	1.0/\$20	Tillable land - Idle	.05/acre
		Sorghum for grain	.50/acre
		Sunflowers	.55/acre

*One animal unit represents: one dairy cow or bull, two other dairy cattle, 1-1/4 beef cows or bulls, 1 feeder steer or heifer, 3-1/3 other beef cattle, 7 sheep, 14 lambs, 2-1/2 hogs, 5 pigs or 50 hens.

SELECTED FARM MANAGEMENT DATA - 1974-78

	1974	1975	1976	1977	1978
Farm size	408	398	406	413	417
Labor earnings (whole farm)	19438	17550	3012	18241	39054
Return to capital & family labor	23378	22378	11698	23442	48038
Aver.investment/farm business	316432	329186	372861	388344	486911
Cash sales/farm business (T2A-37)	110373	97819	103017	96581	134493
Cash expense/farm business (T2B-39)	78382	75817	91412	83702	113674
Expenses/dollar of income (T5-28)	.87	.86	.97	.85	.78
Ratio of assets to liabilities (T5-L29)	3.24:1	3.16:1	2.68:1	2.42:1	2.55:1
Gain in net worth (T5-L16)	11783	12062	2678	14827	37007
Size of business (work units) (T1-L6)	389	371	381	365	385
Tractor & crop mach.expense per crop acre (T8-L41)	26.18	29.45	28.03	29.07	34.27

SOURCE OF INCOME CASH RECEIPTS

Income from livestock	57%	60%	61%	55%	59%
Income from crops	39%	35%	32%	38%	35%
Miscellaneous farm income	4%	5%	7%	7%	6%

FAMILY LIVING EXPENSES

Per year (T4-L23)	12125	12876	14780	14796	16767
Per month	976	1073	1231	1233	1397

(42)

	1974	1975	1976	1977	1978
<u>Return Above Feed Cost Per:</u>					
Dairy cow	241	242	421	501	710
Beef cow	(-146)	(-43)	(-6)	17	297
Cwt.feeder cattle produced	(-20.24)	13.25	(-1.25)	2.07	30.00
Cwt. hogs produced	6.30	24.57	12.65	17.19	28.88
Cwt. feeder lambs produced	2.34	28.91	24.56	---	39.34
Ewe	(-16.96)	(-13.63)	(-2.57)	29.44	36.10
<u>Yield Per Acre</u>					
Corn, bu.	63.5	77.4	57.0	98.1	113.2
Soybeans, bu.	27.2	34.5	23.4	36.3	41.3
Flax, bu.	13.4	14.7	12.0	19.5	19.8
Oats, bu.	65.5	70.4	50.6	74.7	57.3
Corn silage, ton	10.1	11.4	6.5	13.4	15.1
Alfalfa, ton	3.7	3.4	2.4	3.3	4.3
Wheat, bu.	36.7	36.9	38.7	48.8	26.2
<u>Return Over Total Costs Per Acre</u>					
Corn	89.68	44.89	(-4.68)	30.96	32.08
Soybeans	127.54	69.86	34.61	74.10	130.32
Flax	95.86	48.04	17.82	16.66	31.05
Oats	46.59	41.56	8.00	1.61	(-13.37)
Corn silage	89.99	67.61	(-9.13)	50.28	68.67
Alfalfa	92.21	95.96	52.86	47.65	42.20
Wheat	74.91	72.84	44.72	18.80	(-26.52)

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 2-10-78Address 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.

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