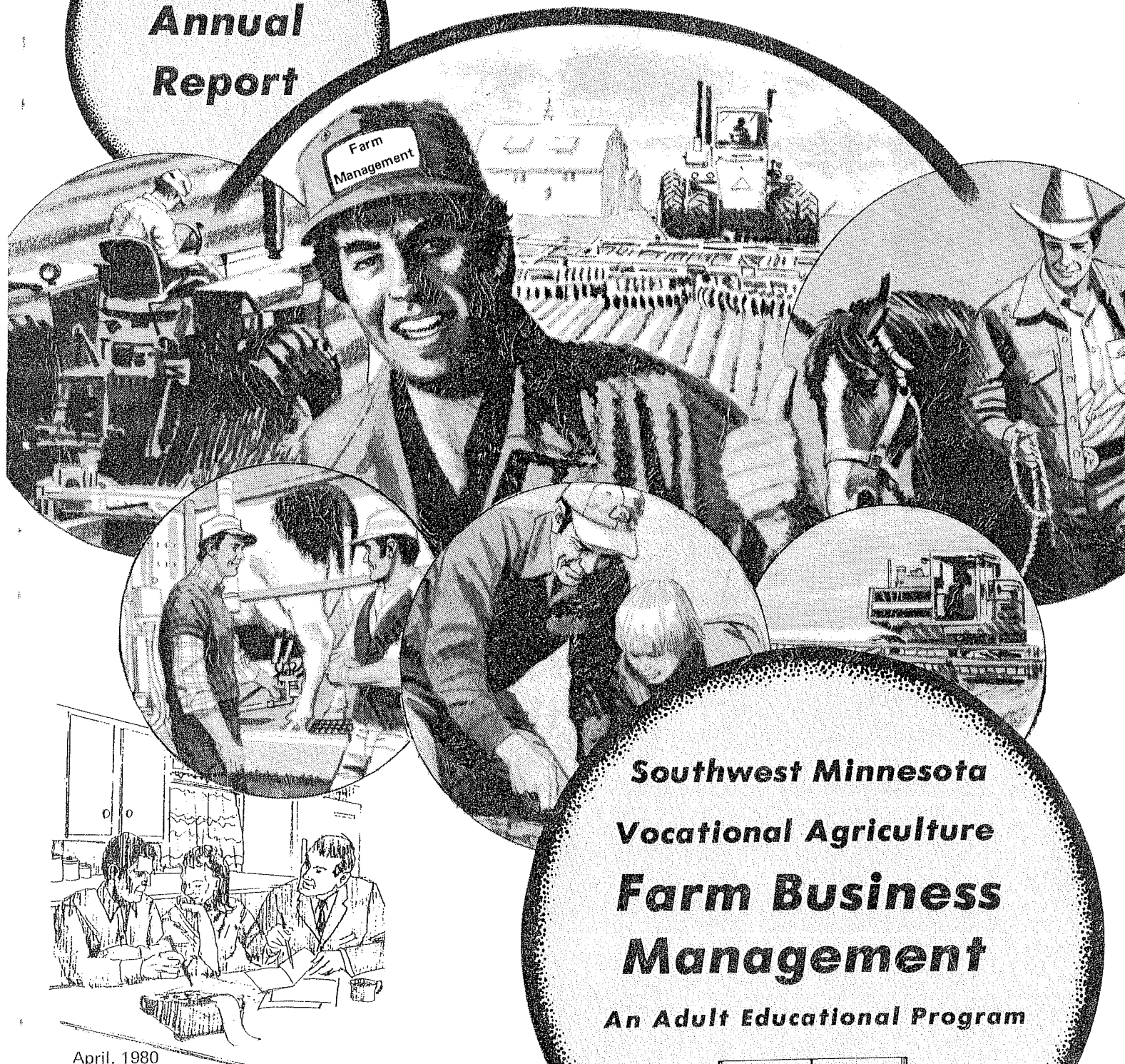
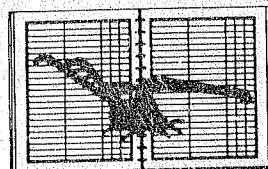


**1979
Annual
Report**



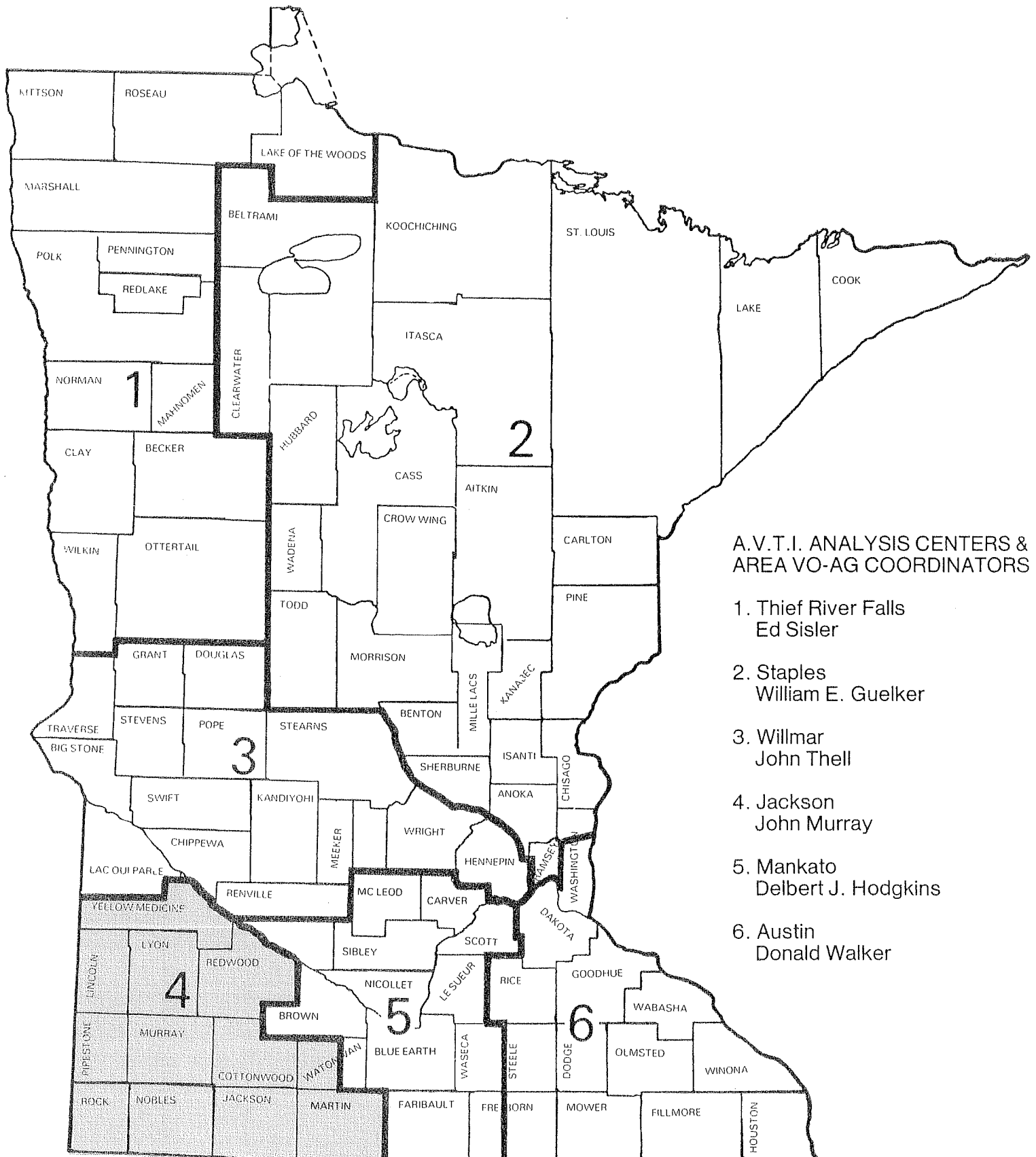
**Southwest Minnesota
Vocational Agriculture
Farm Business
Management**

An Adult Educational Program



April, 1980
Southwestern Minnesota
Report No. 10
In co-operation with
Vocational Division
Minnesota Department of Education
University of Minnesota
Department of Agricultural Education
Jackson Area Vocational Technical Institute

VO-AG FARM MANAGEMENT AREAS



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1979 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

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 tenth assigned to the Jackson Center. The analysis of the records and preparation for the Jackson Area is done under the direction of the Area Vo-Ag Program Coordinator at the Jackson Area Vocational Technical Institute. Directing in a supervisory capacity is Mr. Del Schweiger, Director, Jackson A.V.T.I; Mr. Michael Kuntz, Superintendent of Schools; Mr. Odell Barduson and Mr. David McCullough of State Department of Education; Dr. Edgar Persons, Dr. R. Paul Marvin of University of Minnesota Agricultural Education Department. Data processing was done by Specialized Data Systems, Inc., Madison, Wisconsin.

Source of Farm Record Analyses
for 1979 Farm Business Summaries for the Jackson Area

Regular Farm Management Education Program

Class Location	Instructor	Records Processed
Brewster	Gerald McConkey *	15
Canby	Maynard Hughes	24
Fulda	Mel Faltinson *	17
Hills-Beaver Creek	Wendell Erickson *	17
	Tim Sonnek *	
Jackson	Charles Asman	32
	Doug O'Neil	34
Lakefield	Harry Gerdes	40
Luverne	James Ouverson *	25
Marshall	Dennis Schroeder *	4
Pipestone	Heimer Swanson	50
	Marlin Berg *	5
Slayton	George Crompton	36
Storden-Jeffers	Richard Spitzner *	12
St. James	Cliff Vreize *	18
Tracy	Dean Hanson *	3
Truman	Vern Quade	19
Tyler H.V.C.C.	Paul Bartz *	3
Wabasso	Adrian Crommert	25
Worthington	Wayne Flynn	50

* part-time farm business management instructor

Veterans Farm Training Program

Canby	Larry Oraskovich	12
Edgerton	Robert Vanorny	24
Jackson	Jim Lilleberg	22
Luverne	James Ouverson	12
St. James	Lee Todnem	14
Tracy	Jack Davis	11
Tyler H.V.C.C.	Paul Bartz	12
Westbrook	Keith Hirsch	13
Worthington	Gary Lonneman	22

Others

Jackson A.V.T.I.	Farm Operations Management	15
Pipestone A.V.T.I.	Apprentice Farming	4
	Others	11

Totals

601

Table 1 - Summary of Farm Inventories* - 1979

Items	Averages of 330 Farms	
1. Size of farm - total acres	413.7	
2. - tillable acres	363.9	
3. Work units - crops	179.67	
4. - livestock	203.21	
5. - other	12.92	
6. Total size of business in work units	395.80	
7. Number of workers	1.62	
8. Farm capital investment per worker	\$ 366457	
	Jan.1	Dec.31
9. Productive livestock		
10. Dairy cows	3686	4782
11. Other dairy cattle	2669	3658
12. Beef breeding cattle	6329	7398
13. Beef feeder cattle	22245	31132
14. Hogs	18800	15360
15. Sheep (including feeders) & goats	418	735
16. Poultry - all types	51	21
17. Other livestock	317	324
18. Total productive livestock	\$ 54515	63409 *
19. Crop, seed & feed	55796	62147
20. Power, machinery & equipment		
21. Auto & truck (farm share)	4213	5054
22. Power & machinery	31639	37292
23. Irrigation equipment		
24. Custom work equipment	128	166
25. Livestock equipment	5247	6839
26. Total power, machinery & equipment	\$ 41227	49350 *
27. Land	330742	338004
28. Buildings-fences-etc.	39997	50743
29. Total farm capital	\$ 522277	563653 *
30. Increase or decrease in total farm capital		\$ 41377 *

*Table 1 on this page lists the categories of farm capital for the averages of 330 farms. Pages 2 and 3 list the same information for the 66 most profitable and 66 least profitable farm businesses. Table 1 includes the landlord's share of the investment for rented farms.

*Other measures of farm size listed in lines 1 through 8 are helpful in describing the farms included in this 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* - 1979

Items	66 High Profit Farms	
	Jan.1	Dec.31
1. Size of farm - total acres	534.9	
2. - tillable acres	448.3	
3. Work units - crops	223.84	
4. - livestock	325.69	
5. - other	13.03	
6. Total size of business in work units	562.56	
7. Number of workers	1.78	
8. Farm capital investment per worker	\$ 343841	
9. Productive livestock		
10. Dairy cows	8813	12583
11. Other dairy cattle	6181	9491
12. Beef breeding cattle	14396	15726
13. Beef feeder cattle	41097	55426
14. Hogs	15613	13131
15. Sheep (including feeders) & goats	179	558
16. Poultry - all types	5	11
17. Other livestock	156	185
18. Total productive livestock	\$ 86439	107112 *
19. Crop, seed & feed	66079	86561
20. Power, machinery & equipment		
21. Auto & truck (farm share)	4543	5718
22. Power & machinery	36522	45392
23. Irrigation equipment		
24. Custom work equipment	15	279
25. Livestock equipment	5980	8156
26. Total power, machinery & equipment	47060	59545 *
27. Land	308313	316107
28. Buildings - fences - etc.	46646	58433
29. Total farm capital	\$ 554537	627758 *
30. Increase or decrease in total farm capital		\$ 73221

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

Market livestock, crops for sale or feed are valued at market price at time of inventory was taken. Purchased and raised breeding livestock is valued at time put into useful production and carry some value for their useful life.

Table 1 - Summary of Farm Inventories* - 1979

Items	66 Low Profit Farms	
	Jan.1	Dec.31
1. Size of farm - total acres	447.7	
2. - tillable acres	411.6	
3. Work units - crops	203.87	
4. - livestock	212.49	
5. - other	10.57	
6. Total size of business in work units	426.93	
7. Number of workers	1.58	
8. Farm capital investment per worker	\$ 490960	
9. Productive livestock		
10. Dairy cows	184	446
11. Other dairy cattle	21	95
12. Beef breeding cattle	2515	2405
13. Beef feeder cattle	26942	40154
14. Hogs	34120	24839
15. Sheep (including feeders) & goats	670	790
16. Poultry - all types		
17. Other livestock	320	316
18. Total productive livestock	\$ 64773	69044 *
19. Crop, seed & feed	78700	78317
20. Power, machinery & equipment		
21. Auto & truck (farm share)	5681	6446
22. Power & machinery	37907	42221
23. Irrigation equipment		
24. Custom work equipment		
25. Livestock equipment	7820	9194
26. Total power, machinery & equipment	\$ 51408	57860 *
27. Land	503013	515589
28. Buildings - fences - etc.	53599	70039
29. Total farm capital	\$ 751494	790849 *
30. Increase or decrease in total farm capital		\$ 39355 *

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 - 1979

Items	Average 330	High 66	Low 66
1. Sale of livestock & livestock products			
2. Dairy cows	\$ 963	2650	10
3. Dairy products	7187	20064	334
4. Other dairy cattle	1302	2198	6
5. Beef breeding cattle	2108	4814	673
6. Beef feeder cattle	40936	73439	50898
7. Hogs complete & mixed	28283	22362	51146
8. Hogs finishing	9585	14615	11833
9. Hogs producing weaning pigs	1678	4089	1913
10. Sheep, goats & wool, farm flock	273	61	65
11. Sheep & wool, feeder lambs	167		684
12. Chickens (including hens & broilers)	36	46	
13. Turkeys			
14. Eggs	142	229	
15. Other productive livestock & products	70	73	70
16. Other miscellaneous livestock income	30	79	73
17. Total sales of productive livestock	\$ 92760 *	144720 *	117706 *
18. Sale of crops			
19. Wheat	338	435	111
20. Other small grains	1116	1883	496
21. Corn	18096	17189	21250
22. Soybeans	27109	31266	31928
22A. Sunflowers	331	481	406
23. Other row crops	204	539	42
24. Legumes & other forage	264	245	96
25. Grass seed			
26. Fruits & nuts			
27. Vegetable roadside market & specialty			
28. Nursery, timber & other	142	173	152
29. Set aside acres - government payments	235	457	203
30. Total sales from crops	\$ 47834 *	52668 *	54683 *
31. Capital assets sold	5170	4762	3653
32. Gas tax refund	121	157	129
33. Income from work off the farm	1059	1301	847
34. Custom work enterprise income	42	134	
35. Patronage refunds	949	1273	950
36. Miscellaneous farm income	1591	1832	1923
37. Total farm sales	\$ 149526 *	206846 *	179891 *
38. Increase in farm capital	41376	73221	39356
39. Family living from the farm	426	768	295
40. Total farm receipts (37)+(38)+(39)	\$ 191328 *	280835 *	219542 *

*Operators labor and management earnings, page 5, line 46, represent the return to the operator after all expenses are deducted. The calculation is determined by subtracting table 2B line 46 from line 40 table 2A.

Table 2B - Whole Farm Summary of Cash Expense - 1979

Items	Average 330	High 66	Low 66
1. Purchase of livestock			
2. Dairy cow	\$ 540	841	267
3. Other dairy cattle	787	2418	42
4. Beef breeding cattle	1197	1931	80
5. Beef feeder cattle	31047	51710	43151
6. Hogs complete & mixed	2265	775	6669
7. Hogs finishing	3892	6490	5027
8. Hogs producing weaning pigs	131	76	165
9. Sheep & goats	62	262	4
10. Sheep, feeder lambs	319		651
11. Chickens (including hens & broilers)	12	33	
12. Turkeys			
13. Other productive livestock	20		17
14. Miscellaneous livestock expense	2710	4039	3442
15. Feed bought	19838	22977	32438
16. Fertilizer	6377	7572	7957
17. Chemicals	3653	4263	4839
18. Other crop expense	5702	6381	6849
19. Irrigation operation costs	4	21	
20. Custom work enterprise oper.costs,incl.labor		2	
21. Custom work hired	2613	3281	3355
22. Repair & upkeep of livestock equipment	904	1037	1222
23. Repair & upkeep of farm real estate	1206	1687	1799
24. Gas, oil & grease bought (farm share)	4391	5749	4685
25. Repair & oper.of mach.,tractor,truck & auto	4484	5470	5191
26. Repair & upkeep of irrigation equipment			
27. Repairs - custom work enterprise	5	7	
28. Wages of hired labor	2223	2881	2794
29. Personal property & real estate taxes	3261	3789	4036
30. General farm expense	1604	1943	2117
31. Telephone expense (farm share)	254	299	279
32. Electricity expense (farm share)	917	1162	1153
33. Total cash operating expense	\$ 100421 *	137097 *	138229 *
34. Power,crop & gen.mach.bot.(farm share)	15670	21175	16883
35. Irrigation equipment bought			
36. Custom work equipment bought	57	284	
37. Livestock equipment bought	2837	3664	2870
38. New real estate & improvement	25975	27108	37541
39. Total farm purchases (33) thru (38)	\$ 144959	189329	195522 *
40. Decrease in farm capital			
41. Interest on farm capital	38008	41380	53982
42. Unpaid family labor	466	508	554
43. Labor charge for partners & other operators	140	2	364
44. Board furnished hired labor	50	63	55
45. Total farm expense (39) thru (44)	183622 *	231281 *	250476 *
46. Ret.to oper.labor & mgmt. - single oper. (W.F.) (2A/40) - (45)	7706 *	49554 *	(-30936) *
47. Number of operators	1	2	1
48. Full time operator equivalents	1.15	1.37	1.16
49. Return to oper.labor & mgmt/full time operator equivalent	6026	38178	(-27523)

Table 3 - Summary of Farm Earnings (enterprise Statement - Whole Farm) - 1979

Items	Average 330	High 66	Low 66
1. Returns & net increases			
2. Productive livestock			
3. Dairy cows	\$ 7519	21915	329
4. Other dairy cattle	3107	8310	59
5. Beef breeding cattle	3581	7797	876
6. Feeder cattle	17190	32014	20724
7. Hogs, complete & mixed	23586	20432	37389
8. Hog finishing enterprise	4718	7452	5120
9. Producing weaning pigs	1637	3533	1444
10. Sheep & goats	295	178	29
11. Sheep, feeder lambs	83		186
12. Chickens (including hens & broilers)	125	249	
13. Turkeys			
14. Other productive livestock	69	103	49
15. Total all productive livestock	\$ 61910 *	101983 *	66207 *
16. Value of feed fed to livestock	40325	53085	54200
17. Return over feed from livestock	21585	48898	12007
18. Crop, seed & feed	58833	84660	56408
19. Cooperative patronage refunds	949	1273	950
20. Miscellaneous farm income	1591	1832	1923
21. Custom work enterprise	17	105	
22. Total returns & net increases	\$ 82975 *	136768 *	71288 *
23. Expenses & net decreases			
24. Truck & auto (farm share)	\$ 3580	4009	4601
25. Tractors & crop machinery	15031	18633	18250
26. Irrigation equipment			
27. Electricity	917	1162	1153
28. Livestock equipment	2128	2540	2742
29. Buildings, fences & tiling	4632	5841	7154
30. Bare land			
31. Miscellaneous livestock expense	2710	4039	3442
32. Labor	3006	3576	4104
33. Labor charge for other operator(s)	140	2	364
34. Property tax	3261	3789	4036
35. General farm expense & telephone	1858	2241	2397
36. Interest on farm capital	38008	41380	53982
37. Total expenses & net decreases	\$ 75269 *	87214 *	102224 *
38. Return to operators labor & management	\$ 7706	49554	(-30936)
39. Number of farm operators	1	2	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 - 1979
For those farms with complete accounts - Operator's share

Items	Average 202	Per Adult Equivalent
1. Number of persons - family	4	
2. Number of adult equivalent - family	2.9	
3. Church & welfare	\$ 732	252.41
4. Medical care & health insurance	1469	506.55
5. Food & meals bought	2927	1009.31
6. Operating expense & supplies	954	328.97
7. Furnishings & equipment	1238	426.90
8. Clothing & clothing materials	1010	348.28
9. Personal care, personal spending	565	194.83
10. Education	294	101.38
11. Recreation	609	210.00
12. Gifts & special events	577	198.97
13. Personal share truck & auto expense	713	245.86
14. Operator share upkeep on dwelling	734	253.10
14A. Cash rent (personal)	5	1.72
15. Personal share telephone & electricity exp.	375	129.31
15A. Personal share-general farm expense	15	5.17
16. Total cash living expense	\$ 12219	4213.45 *
17. Personal share new truck & auto	512	176.55
18. New dwelling bought	2815	970.69
19. Taxes & other deductions	3089	1065.17
20. Life insur. & other savings & investments	1563	538.97
21. Total household & personal (16) thru (20)	\$ 20198	6964.83 *
22. Total family living from the farm (33)	412	142.07
23. Total cash & non-cash expenses (21)+(22)	\$ 20610	7106.90 *

Family living from the farm

	Quantity	Oper. Share
25.		
26. Milk & cream (quarts)	207	54
27. Beef & buffalo (pounds)	381	254
28. Pork (pounds)	241	98
29. Lamb, mutton, goat (pounds)	2	1
30. Poultry, all fowl (pounds)	1	1
31. Eggs (dozen)	3	2
32. Vegetables, fruits, spuds, other produce & fuel		
33. Total family living from the farm		\$ 412 *

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 \$1018.25 per month for cash living expense (line 16) and spend a total of \$1683.73 per month on an average for total personal and household expense (line 21).

** Table 4 includes 202 farm families that kept complete household and personal records.

Table 5 - Net Worth Statement - Operator - 1979
For those Farms With a Complete Record of all Assets and Liabilities

Items	Averages of 302 Farms	
	Jan.1	Dec.31
1. Total productive livestock	\$ 50920	60190
2. Crop, seed & feed	51173	56822
3. Total power, machinery & equipment	39483	47471
4. Land (acres owned 162.5) (tillable 138.1)	104460	113016
5. Buildings, fences, etc.	34913	46103
6. Total farm capital	\$ 280948	323602 *
7. Non-farm assets	19803	22874
7A. Cash on hand & in bank	6039	5520
8. Dwelling	13295	16206
9. Total assets	\$ 320085	368203 *
10. Real estate mortgages	60740	72943
11. Chattel mortgages	39521	58324
12. Notes	21148	26244
13. Accounts payable	3638	4197
14. Total liabilities	\$ 125046	161708 *
15. Farmers net worth	\$ 195038	206495 *
16. Gain (or loss) in net worth		\$ 11457 *
	*	* *
17. Supplementary management information		
18. Return to operators labor & mgmt (6B/47)	\$ 9472	
19. Return to capital & family labor (6B/48)	20750	
20. Non-farm income		
21. Outside investment income	642	
22. Other Personal inc. & income tax refund	2820	
22A. Sale of (P.S.) dwelling, auto & truck	60	
23. Total non-farm income	\$ 3523	
24. Total family farm & non-farm income	\$ 24273	
25. Total money borrowed	117717	
26. Total paid on debt (principal)	81637	
27. Total household & pers.cash/non-cash exp. (4/23)	18406	
28. Ratio: total farm-expenses to receipts (O.S.)	.946	
	Jan.1	Dec.31
29. Ratio: total-assets to liabilities	2.560	2.277
30. Ratio: non-real estate-assets to liab.	2.603	2.173
31. Ratio: real estate-assets to liab.	2.513	2.404
32. Ratio: net worth to total liabilities	1.560	1.277
33* Ratio: cash oper.exp.to adj.total farm sales (O.S.)		.857
34. Ratio: total farm recpts.to ave.farm capital (W.F.)		.357
35. Ratio: total farm recpts.to ave.farm capital (O.S.)		.582

*Adjusted farm sales does not include sale of capital assets

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

Table 5 - Net Worth Statement - Operator - 1979
For Those Farms With a Complete Record of all Assets and Liabilities

Items	60 High Profit Farms	
	Jan.1 - - - -	Dec.31
1. Total productive livestock	\$ 64279	82332
2. Crop, seed & feed	51414	67384
3. Total power, machinery & equipment	44422	54838
4. Land (acres owned 187.1) (tillable 153.2)	100392	111610
5. Buildings, fences, etc.	38405	51469
6. Total farm capital	\$ 298912	367635 *
7. Non-farm assets	23159	27735
7A. Cash on hand & in bank	8772	7451
8. Dwelling	13078	16533
9. Total assets	\$ 343921	419354 *
10. Real estate mortgages	71208	82990
11. Chattel mortgages	38443	60604
12. Notes	21085	28236
13. Accounts payable	6442	5510
14. Total liabilities	\$ 137177	177340 *
15. Farmers net worth	\$ 206744	242014 *
16. Gain (or loss) in net worth		\$ 35270 *
* * *		
17. Supplementary management information		
18. Return to operators labor & mgmt (6B/47)	\$ 41959	
19. Return to capital & family labor (6B/48)	54766	
20. Non-farm income		
21. Outside investment income	1269	
22. Other personal income & income tax refund	2057	
22A. Sale of (P.S.) dwelling, auto & truck	206	
23. Total non-farm income	\$ 3531	
24. Total family farm & non-farm income	\$ 58297	
25. Total money borrowed	121566	
26. Total paid on debt (principal)	82826	
27. Total household & pers.cash/non/cash exp (4/23)	21443	
28. Ratio: total farm-expenses to receipts (O.S.)	.818	
	Jan.1	Dec.31
29. Ratio: total-assets to liabilities	2.507	2.365
30. Ratio: non-real estate - assets to liab.	2.911	2.541
31. Ratio: real estate - assets to liab.	2.133	2.164
32. Ratio: net worth to total liabilities	1.507	1.365
33* Ratio: cash operating exp.to adj.total farm sales (O.S.)		.786
34. Ratio: total farm recpts.to ave.farm capital (W.F.)		.443
35. Ratio: total farm recpts.to ave.farm capital (O.S.)		.692
*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 presented are based on the operator's share of the farm business.

*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 - 1979
 For those farms with a complete record of all assets and liabilities

Items	61 Low Profit Farms	
	Jan.1 - - - - -	Dec.31
1. Total productive livestock	\$ 63401	69020
2. Crop, seed & feed	68970	69826
3. Total power,machinery & equipment	45588	51897
4. Land (acres owned 203.1) (tillable 184.1)	186733	193023
5. Buildings, fences, etc.	50171	59751
6. Total farm capital	\$ 414863	443518 *
7. Non-farm assets	20526	24900
7A Cash on hand & in bank	6670	7618
8. Dwelling	18550	21661
9. Total assets	\$ 460608	497696 *
10. Real estate mortgages	86453	93089
11. Chattel mortgages	58231	95109
12. Notes	22113	22638
13. Accounts payable	1830	1968
14. Total liabilities	\$ 168627	212805 *
15. Farmers net worth	\$ 291981	284891 *
16. Gain (or loss) in net worth		\$ (-7090)*
	* * *	
17. Supplementary management information		
18. Ret.to operators labor & mgmt (6B/47)	\$ (-23439)	
19. Ret.to capital & family labor (6B/48)	(-7626)	
20. Non-farm income		
21. Outside investment income	650	
22. Other pers.inc.& income tax refund	4956	
22A Sale of (P.S.) dwelling,auto & truck		
23. Total non-farm income	\$ 5606	
24. Total family farm & non-farm income	(-2020)	
25. Total money borrowed	160059	
26. Total paid on debt (principal)	116095	
27. Total household & pers.cash/non-cash exp. (4/23)	19437	
28. Ratio: Total farm-expenses to receipts (O.S.)	1.119	
	Jan.1	Dec.31
29. Ratio: Total-assets to liabilities	2.732	2.339
30. Ratio: Non-real estate-assets to liab.	2.497	1.865
31. Ratio: Real estate-assets to liab.	2.955	2.948
32. Ratio: net worth to total liabilities	1.732	1.339
33* Ratio: cash oper.exp.to adj.total farm sales (O.S.)		.975
34. Ratio: total farm recpts.to ave.farm capital (W.F.)		.319
35. Ratio: total farm recpts.to ave.farm capital (O.S.)		.460

*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 - 1979

Items	Average 330	High 66	Low 66
1. Sale of livestock & livestock products			
2. Dairy cows	\$ 933	2214	10
3. Dairy products	6992	18096	334
4. Other dairy cattle	1226	2706	168
5. Beef breeding cattle	1666	2896	575
6. Beef feeder cattle	38759	54449	51344
7. Hogs complete & mixed	27340	27602	44492
8. Hogs finishing	9267	10581	13254
9. Hogs producing weaning pigs	1678	829	2355
10. Sheep, goats & wool, farm flock	272	125	16
11. Sheep & wool, feeder lambs	167		
12. Chickens (including hens & broilers)	20	1	
13. Turkeys			
14. Eggs	141	35	
15. Other productive livestock & products	65	67	49
16. Other miscellaneous livestock income	30		15
17. Total sales of productive livestock	\$ 88555 *	119603 *	112614 *
18. Sale of crops			
19. Wheat	297	479	188
20. Other small grain	957	1774	620
21. Corn	13220	13981	13045
22. Soybeans	22115	24263	24864
22A. Sunflowers	287	722	406
23. Other row crops	176	448	66
24. Legumes & other roughage	227	305	99
25. Grass seed			
26. Fruits & nuts			
27. Vegetables, roadside market & specialty			
28. Nursery, timber & other	142		152
29. Set aside acres - government payments	219	549	143
30. Total sales from crops	\$ 37640 *	42521 *	39583 *
31. Capital assets sold	1297	2248	1255
32. Gas tax refund	116	133	120
33. Income from work off the farm	1008	1245	633
34. Custom work enterprise income	42	134	
35. Patronage refunds	915	1205	979
36. Miscellaneous farm income	1517	1782	1754
37. Total farm sales	\$ 131090 *	168872 *	156937 *
38. Increase in farm capital	44035	74703	26960
39. Family living from the farm	426	621	303
40. Total farm receipts (37)+(38)+(39)	\$ 175551 *	244196 *	184200 *
41. Adjusted total farm sales (37) - (31)	129792	166623	155682
42. Total cash farm operating expense	110628	132506	149091
43. Net cash operating income	\$ 19164 *	34117 *	6591 *

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

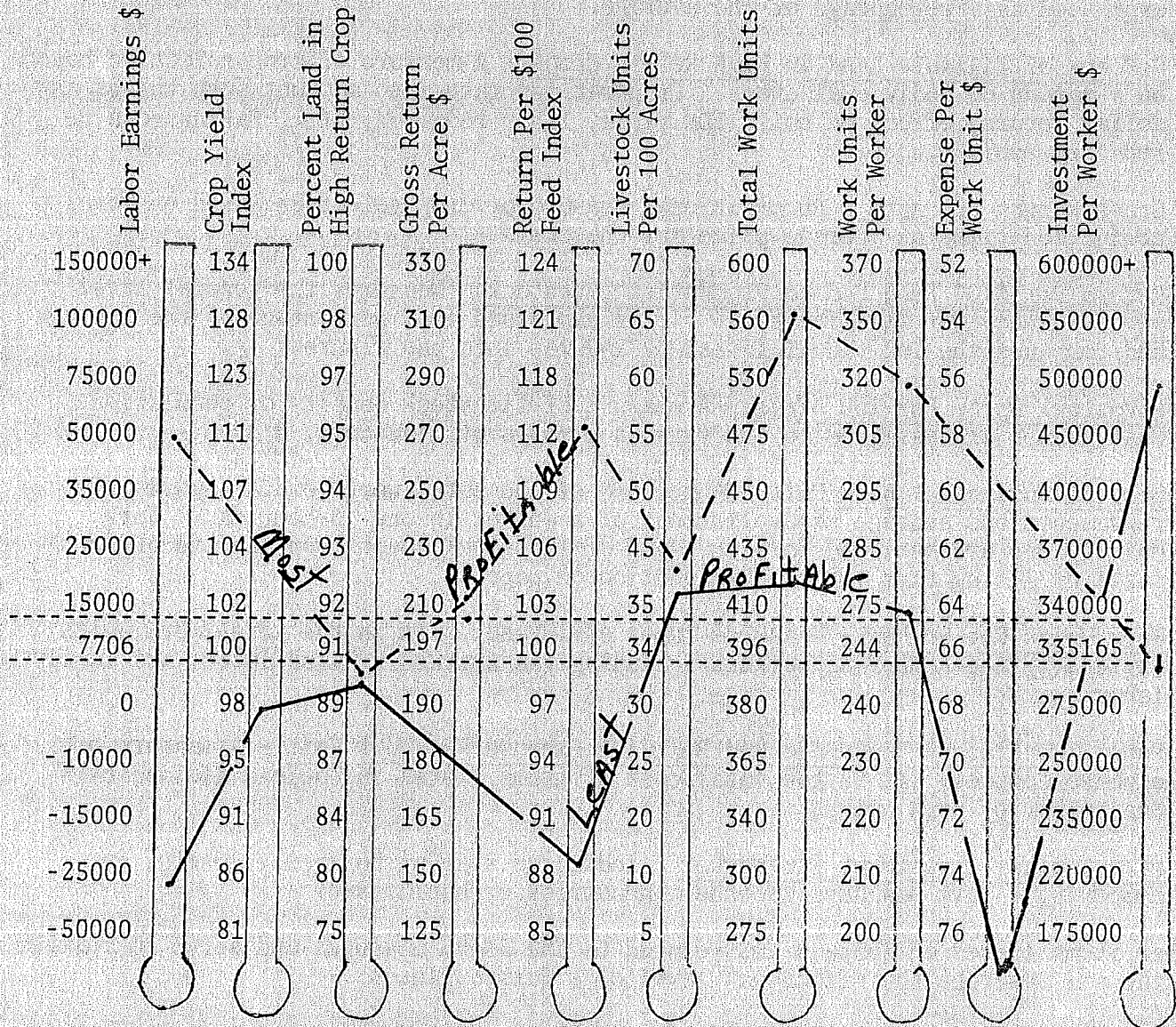
Table 6B - Operator's Share of Cash Expenses - 1979

Items	Average 330	High 66	Low 66
1. Purchase of livestock			
2. Dairy cows	\$ 540	898	267
3. Other dairy cattle	783	3270	42
4. Beef breeding cattle	1062	1742	80
5. Beef feeder cattle	30035	37551	43962
6. Hogs complete	2220	676	3407
7. Hogs finishing	3780	4485	5047
8. Hogs producing weaning pigs	131	20	370
9. Sheep, farm flock	60	256	4
10. Sheep, feeder lambs	319		
11. Chickens	10	2	
12. Turkey			
13. Other productive livestock	20		2
14. Miscellaneous livestock expense	2603	3204	3510
15. Feed bought	19280	21527	31679
16. Fertilizer	5517	6658	6509
17. Chemicals	3201	3841	4022
18. Other crop expense	5258	5852	5865
19. Irrigation operation cost		2	
20. Custom work operator costs, including labor		2	
21. Custom work hired	2560	2901	3230
22. Repair & upkeep of livestock equipment	883	1145	1088
23. Repair & upkeep of farm real estate	1142	1292	1833
24. Gas, oil, grease bought (farm share)	4237	5377	4237
25. Repair & Operation-mach., tractor, truck, auto (F.S.)	4298	4639	4896
26. Repair & upkeep of irrigation equipment			
27. Repairs, custom work enterprise	5	7	
28. Wages of hired labor	2173	2555	2590
29. Personal property & real estate taxes	1293	1461	1728
30. Cash rent	6139	8410	6996
31. General farm expenses	1512	1601	1879
32. Telephone expense (farm share)	242	249	269
33. Electricity expense (farm share)	880	1000	1064
34. Interest expense	10446	11883	14515
35. Total cash operating expense	\$ 110628 *	132506 *	149091 *
36. Power, crop & gen. mach. bot. (farm share)	15193	18965	16339
37. Irrigation equipment bought			
38. Custom work enterprise equip. bought	57	284	
39. Livestock equipment bought	2823	3252	2664
40. New real estate & improvements	25698	33043	23482
41. Total farm purchases (35) thru (40)	\$ 154399 *	188051 *	191576 *
42. Decrease in farm capital			
43. Interest on farm capital (equity)	10560	11522	15314
44. Unpaid family labor	466	460	645
45. Board furnished hired labor	50	54	54
46. Total farm expense (41) thru (45)	\$ 165474 *	200087 *	207587 *
47. Return to operator labor & mgmt. (O.S.) (6A/40)-(46)	\$ 10077 *	44109 *	(-23387) *
48. Return to capital & family labor (47)+(44)+(43)	\$ 21102	56091	(-7429)

Return to capital and family labor, line 48 on this page 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 - 1979

Items	Average 330	High 66	Low 66
1. Return to operators labor & management	\$ 7706	49554	(-30936)
3. Crop yield index	100.0	102.9	97.9
3. Percent tillable land in high return crops	91.0	88.5	95.2
4. Gross return per tillable acre (excl.pasture)	196.77	202.55	198.01
5. Return per \$100 feed fed prod.livstk.index	100.0	112.2	88.6
6* Livestock units per 100 acres	33.71	39.71	36.27
7. Size of business-work units	395.80	562.56	426.93
8. Work units per worker	244.32	316.04	270.21
9. Power,mach.,equip.,building exp.worker unit	\$ 66.44	57.26	79.40
10. Farm capital investment per worker	\$ 335164	332106	488083
11. Index of return per \$100 feed fed			
12. 6100A beef breeding farm,whole herd,commercial	100.0	104.0	58.7
13. 6140A beef feeders feedlot	100.0	114.4	90.9
14. 6240A chickens, laying flock, commercial	100.0	150.8	
15. 6260A chickens, broilers	100.0		
16. 6290A dairy cows, commercial, general	100.0	112.4	109.1
17. 6310A other dairy, commercial, replacements	100.0	108.7	64.7
18. 6470A hogs, farrow, finish, general	100.0	123.9	85.0
19. 6490A hogs, finishing	100.0	123.7	76.9
20. 6510A hogs, weaning pig production	100.0	103.3	85.2
21. 6530A hogs, mixed systems	100.0	127.5	94.8
22. 6550A horses	100.0		
23. 6570A lambs, feeders	100.0		85.3
24. 6670A sheep, farm, commercial	100.0	147.7	64.0
30. Number of animal units	122.94	178.18	150.09
31. Work units			
32. Crops	179.67	223.84	203.87
33. Productive livestock	203.21	325.69	212.49
34. Other productive work units	12.92	13.03	10.57
35. Expenses per work units			
36. Tractor & crop machinery expense	\$ 37.99	33.15	42.75
37. Farm share of auto & truck expense	\$ 9.05	7.13	10.78
38. Farm share of electric expense	\$ 2.32	2.07	2.70
39. Livestock equipment expense	\$ 5.38	4.52	6.42
40. Building, fence & tiling expense	\$ 11.71	10.39	16.76
41** Tractor & crop mach.exp.per crop acre	\$ 41.27	41.53	44.33
42. Farm power & mach.cost alloc.to lvstock	\$ 1776.92	2899.52	2047.32
43. Bldg.fence & tiling cost alloc.to crops BCAF (1)	\$ 2105.45	2360.87	3290.70
44. *Acres include all tillable land, non-tillable hay & pasture			
45. **Acres include all tillable land plus acres in non-tillable hay			
46. Marketing index	100.00	99.12	99.43

Table 9 - Crop Data for 330 Farms - 1979

<u>Crop</u>	<u>Crop Rank</u>	<u>Average Yield/Acre</u>	<u>Cost per unit of Production</u>	<u>Return over Listed Costs per acre</u>
Oats	D	55.0 bu.	1.93	(-10.88)
Wheat	C	28.7 bu.	3.83	9.01
Flax	B	19.5 bu.	4.70	35.65
Corn	A	104.8 bu.	1.82	19.82
Soybeans	A	32.6 bu.	4.41	57.29
Corn silage	A	15.7 ton	11.88	85.01
Alfalfa	B	4.6 ton	29.84	36.11
Sunflowers	C	12.1 cwt.	9.64	(-10.70)
Oats silage	D	7.9 ton	14.23	(-2.64)

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

* * *

Supplementary Management Information	Average 330	High 66	Low 66
Percent land tillable	88.0	83.8	91.9
Percent land in high return crops	91.0	88.5	95.2
*Fertilizer cost per acre	16.91	16.24	20.38
*Crop chemicals per acre	9.89	8.82	11.90
*Seed & other costs per acre	17.25	15.28	18.68
*Gas, oil & grease bought per acre	9.48	10.65	8.70
*Tillable land (-) tillable pasture, fallow & idle land			

CROP TABLES - CROPS ANALYSIS

The Crop Analysis Table for each individual crop show the yield, value per unit, crop product return, other crop income and total crop return.

Costs such as fertilizer, chemicals, seed and other, hired labor and custom work are costs that can be assigned to each individual crop in the account book. These costs are shown in the Crop Tables under the heading "Direct Costs", line 8 thru 13.

"Allocated Costs", lines 17 thru 22, are a combination of cash and non-cash expenses and may be either calculated or assigned. A proportion of the total ownership and operation costs of power and machinery is calculated for each crop by using the work unit value for that crop. The farmer may modify this cost by assigning a specific power cost allocation factor (PCAF) for each crop. Land cost used is the fair rental value for land of similar type in the local area.

Some of the more difficult expenses to assign or distribute to various enterprises within the farm business are items such as electricity, telephone, general farm expense and interest. However, if one wishes to distribute these costs to the crop and livestock enterprises within the business, the spaces provided at the bottom of each individual crop printout provides for this.

Table 10-0072 Crop Data for Oats - 1979

		AVERAGE 169	HIGH 34	LOW 34
1. Acres		24.2	20.7	26.6
		Per Acre	Per Acre	Per Acre
2. Yield		55.0	84.9	28.2
3. Value per bushel		1.10	1.10	1.10
4. Crop product return	\$	60.50	93.43	30.98
5. Other crop income		34.79	42.37	33.76
6. Total crop return	\$	95.29 *	135.80 *	64.74 *
7. Direct costs				
8. Fertilizer	\$	6.28	\$ 7.49	\$ 4.55
9. Chemicals		.70	.39	1.54
10. Seed & other		7.60	8.41	6.88
11. Special hired labor		.04	.10	.04
12. Custom work hired		4.75	8.84	3.05
13. Irrigation operation				
14. Total direct costs	\$	19.37	25.23	16.06
15. Return over direct costs	\$	75.92 *	110.57 *	48.68 *
16. Allocated costs				
17. Farm power & machinery - ownership		11.05	\$ 11.74	\$ 11.03
18. Farm power & machinery - operation		12.84	11.99	12.34
19. Irrig.equip ownrship				
20. Land costs		59.18	62.03	65.24
21. Miscellaneous costs				
22. *Interest on mach.& equip.investment		3.73	3.74	3.16
23. Total allocated costs	\$	86.80	89.50	91.77
24. Return over all listed costs	\$	(-10.88)*	21.07 *	(-43.09)*
25. Supplementary management information				
26. Work units assigned per acre		.30	.30	.30
27. Power costs allocation factor		1.00	1.00	.99
28. Total listed cost per bushel		1.93	1.35	3.83
29. Return over listed costs per bushel		(-.20)	.25	(-1.53)
30. Breakeven yield/units of production		96.52	104.30	98.03
30A Estimated total machine costs/acre		32.37	36.31	29.58
31. Total listed costs per acre		106.17 *	\$ 114.73 *	\$ 107.83 *

*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 10-0172 Crop Data for Spring Wheat - 1979

		AVERAGE 26	HIGH 13	LOW 13
1.	Acres	28.2	25.5	31.0
		Per Acre	Per Acre	Per Acre
2.	Yield	28.7	35.4	23.1
3.	Value per bushel	3.86	3.83	3.89
4.	Crop product return	\$ 110.89	135.61	89.84
5.	Other crop income	8.16	14.35	3.03
6.	Total crop return	\$ 119.05 *	149.96 *	92.87 *
7.	Direct costs			
8.	Fertilizer	\$ 14.50	\$ 15.45	\$ 13.68
9.	Chemicals	1.31	1.84	.90
10.	Seed & other	8.94	7.61	9.97
11.	Special hired labor	.35	.75	
12.	Custom work hired	3.12	3.29	2.94
13.	Irrigation operation			
14.	Total direct costs	\$ 28.22	28.94	27.49
15.	Return over direct costs	\$ 90.83 *	121.02 *	65.38 *
16.	Allocated costs			
17.	Farm power & machinery - ownership	13.09	\$ 13.81	\$ 12.46
18.	Farm power & machinery - operation	10.04	10.26	9.82
19.	Irrig.equip ownrship			
20.	Land costs	52.46	57.31	47.62
21.	Miscellaneous costs	2.52		4.55
22.	*Interest on mach.& equip.investment	3.71	3.21	4.11
23.	Total allocated costs	\$ 81.82	84.59	78.56
24.	Return over all listed costs	\$ 9.01 *	36.43 *	(-13.18)*
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	3.83	3.21	4.59
29.	Return over listed costs per bushel	.31	1.03	(-.57)
30.	Breakeven yield/units of production	28.51	29.64	27.26
30A	Estimated total mach.costs/acre	29.96	30.57	29.33
31.	Total listed costs per acre	\$ 110.04 *	\$ 113.53 *	\$ 106.05 *

*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 - 1979

		AVERAGE 16	HIGH 8	LOW 8
1. Acres		52.2	47.2	57.2
		Per Acre	Per Acre	Per Acre
2. Yield		19.5	23.8	16.0
3. Value per bushel		6.13	6.12	6.15
4. Crop product return	\$	119.66	145.87	98.16
5. Other crop income		7.74	1.46	12.94
6. Total Crop return	\$	127.40 *	147.33 *	111.10 *
7. Direct costs				
8. Fertilizer	\$	5.34	\$ 6.69	\$ 4.23
9. Chemicals		1.53	1.31	1.71
10. Seed & other		10.25	10.23	10.24
11. Special hired labor				
12. Custom work hired		2.47	1.65	3.15
13. Irrigation operation				
14. Total direct costs	\$	19.59	19.88	19.33
15. Return over direct costs	\$	107.81 *	127.45 *	91.77 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	8.67	11.36	6.45
18. Farm power & machinery - operation		11.45	11.02	11.81
19. Irrig. equip.ownrship				
20. Land costs		49.50	48.13	50.88
21. Miscellaneous costs				
22. *Interest on mach.& equip.investment		2.54	2.84	2.29
23. Total allocated costs	\$	72.16	73.35	71.43
24. Return over all listed costs	\$	35.65 *	54.10 *	20.34 *
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		4.70	3.91	5.69
29. Return over listed costs per bushel		1.83	2.27	1.27
30. Breakeven yield/bu.of production		14.97	15.23	14.76
30A Estimated total machine costs/acre		25.13	26.87	23.70
31. Total listed costs per acre	\$	91.75 *	\$ 93.23 *	\$ 90.76 *

* 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 - 1979

		SUNFLOWERS AVERAGE 23	CANNING PEAS AVERAGE 5	CANNING CORN AVERAGE 3
1. Acres		90.8	32.8	63.0
		Per Acre	Per Acre	Per Acre
2. Yield		12.1	204.33	166.30
3. Value per production unit		8.62	1.00	1.00
4. Crop product return	\$	104.61	204.33	166.30
5. Other crop income		1.66		
6. Total crop return	\$	106.27 *	204.33 *	166.30 *
7. Direct Costs				
8. Fertilizer	\$	12.63	\$ 5.18	\$ 15.79
9. Chemicals		6.50	.91	2.52
10. Seed & other		12.21	2.59	2.19
11. Special hired labor		.01		
12. Custom work hired		2.73	.98	.98
13. Irrigation operation				
14. Total direct costs	\$	34.08	9.66	21.48
15. Return over direct costs	\$	72.19 *	194.67 *	144.82 *
16. Allocated costs				
17. Farm Power & machinery - ownership	\$	13.15	\$ 18.94	\$ 18.13
18. Farm power & machinery - operation		15.30	13.80	17.77
19. Irrig. equip ownrship				
20. Land costs		50.52	104.40	86.00
21. Miscellaneous costs		.01		
22. *Interest on mach.& equip.investment		3.91	4.67	6.03
23. Total allocated costs	\$	82.89	141.81	127.93
24. Return over all listed costs	\$	(-10.70)*	52.86 *	16.89 *
25. Supplementary management information				
26. Work units assigned per acre		.40	.40	.50
27. Power costs allocation factor		1.00	1.00	1.00
28. Total listed cost per unit of production		9.64	.74	.90
29. Return over listed costs per unit		(-.88)	.26	.10
30. Breakeven yield/units of production		13.57	151.47	149.41
30A. Estimated total machine costs/acre		35.09	38.39	42.91
31. Total listed costs per acre	\$	116.97 *	\$ 151.47 *	\$ 149.41 *

*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 - 1979

	AVERAGE 330	HIGH 66	LOW 66
1. Acres	123.3	135.4	88.8
	Per Acre	Per Acre	Per Acre
2. Yield	104.8	135.8	61.2
3. Value per bushel	1.99	2.00	1.98
4. Crop product return	\$ 208.65	271.55	121.16
5. Other crop income	1.58	.71	7.16
6. Total crop return	\$ 210.23 *	272.26 *	128.32 *
7. Direct costs			
8. Fertilizer	\$ 30.97	\$ 40.15	\$ 22.00
9. Chemicals	11.85	13.32	10.42
10. Seed & other	22.67	27.21	18.00
11. Special hired labor	.28	.30	.09
12. Custom work hired	4.03	3.46	5.02
13. Irrigation operation			
14. Total direct costs	\$ 69.80	84.44	55.53
15. Return over direct costs	\$ 140.43 *	187.82 *	72.79 *
16. Allocated costs			
17. Farm power & machinery - ownership	\$ 23.85	\$ 30.82	\$ 21.98
18. Farm power & machinery - operation	23.35	25.05	22.42
19. Irrig. equip ownrship			
20. Land costs	65.57	80.53	50.72
21. Miscellaneous costs	.15	.09	.46
22. *Interest on mach.& equip.investment	7.69	8.12	6.40
23. Total allocated costs	\$ 120.61	144.61	101.98
24. Return over all listed costs	\$ 19.82 *	43.21 *	(-29.19)*
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 bushel	1.82	1.69	2.57
29. Return over listed costs per bushel	.19	.32	(-.48)
30. Breakeven yield/bu.of production	95.68	114.53	79.55
30A Estimated total machine costs/acre	58.92	67.45	55.82
31. Total listed costs per acre	\$ 190.41 *	\$ 229.05 *	\$157.51 *

*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 - 1979

		AVERAGE 300	HIGH 60	LOW 60
1. Acres		120.9	113.6	114.4
		Per Acre	Per Acre	Per Acre
2. Yield		32.6	41.0	22.5
3. Value per bushel		5.98	5.99	6.00
4. Crop product return	\$	195.08	245.61	135.21
5. Other crop income		5.99	1.59	18.21
6. Total crop return	\$	201.07 *	247.20 *	153.42 *
7. Direct costs				
8. Fertilizer	\$	2.02	\$ 2.25	\$ 2.33
9. Chemicals		10.26	10.92	10.16
10. Seed & other		14.24	12.37	15.79
11. Special hired labor		1.06	1.04	1.21
12. Custom work hired		2.24	2.01	2.29
13. Irrigation operation				
14. Total direct costs	\$	29.82	28.59	31.78
15. Return over direct costs	\$	171.25 *	218.61 *	121.64 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	20.02	\$ 21.28	\$ 17.02
18. Farm power & machinery - operation		19.20	18.80	18.02
19. Irrig.equip ownrship				
20. Land Costs		68.28	74.12	59.77
21. Miscellaneous costs		.08		.34
22. *Interest on mach.& equip.investment		6.38	6.43	5.44
23. Total allocated costs	\$	113.96	120.63	100.59
24. Return over all listed costs	\$	57.29 *	97.98 *	21.05 *
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		4.41	3.64	5.87
29. Return over listed costs per bushel		1.76	2.39	.93
30. Breakeven yield/bu.of production		24.04	24.91	22.06
30A Estimated total machine costs/acre		48.24	48.52	42.77
31. Total listed costs per acre	\$	143.78 *	\$ 149.22 *	\$ 132.37 *

*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 - 1979

		AVERAGE 135	HIGH 27	LOW 27
1. Acres		30.7	30.5	25.7
		Per Acre	Per Acre	Per Acre
2. Yield		15.7	22.7	9.1
3. Value per ton		17.26	16.97	17.59
4. Crop product return	\$	270.98	385.02	160.86
5. Other crop income		.62	.46	2.92
6. Total crop return	\$	271.60 *	385.48 *	163.78 *
7. Direct costs				
8. Fertilizer	\$	33.49	\$ 36.33	\$ 18.95
9. Chemicals		11.37	10.98	9.84
10. Seed & other		15.37	17.28	13.31
11. Special hired labor		.07	.23	
12. Custom work hired		3.84	.98	4.82
13. Irrigation operation				
14. Total direct costs	\$	64.14	65.80	46.92
15. Return over direct costs	\$	207.46 *	319.68 *	116.86 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	26.96	\$ 31.90	\$ 19.35
18. Farm power & machinery - operation		26.56	27.21	24.00
19. Irrig.equip.ownrship				
20. Land costs		60.53	65.70	50.33
21. Miscellaneous costs				
22. *Interest on mach.& equip.investment		8.40	7.95	6.64
23. Total allocated costs	\$	122.45	132.76	100.32
24. Return over all listed costs	\$	85.01 *	186.92 *	16.54 *
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		11.88	8.75	16.10
29. Return over listed costs per ton		5.41	8.24	1.81
30. Breakeven yield/ton of production		10.81	11.70	8.37
30A. Estimated total machine costs/acre		65.76	68.04	54.81
31. Total listed costs per acre	\$	186.59	\$ 198.56	*\$147.24 *

*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 Date for Oats Silage - 1979

		AVERAGE 27
1.	Acres	23.7
2.	Yield	Per Acre 7.9
3.	Value per ton	13.89
4.	Crop product return	\$ 110.17
5.	Other crop income	
6.	Total crop return	\$ 110.17
7.	Direct costs	
8.	Fertilizer	\$ 8.99
9.	Chemicals	3.16
10.	Seed & other	7.13
11.	Special hired labor	
12.	Custom work hired	1.14
13.	Irrigation operation	
14.	Total direct costs	\$ 20.42
15.	Return over direct costs	\$ 89.75 *
16.	Allocated costs	
17.	Farm power & machinery - ownership	\$ 15.21
18.	Farm power & machinery - operation	16.40
19.	Irrig.equip ownrship	
20.	Land costs	55.48
21.	Miscellaneous costs	
22.	*Interest on mach.& equip.investment	5.30
23.	Total allocated costs	\$ 92.39
24.	Return over all listed costs	\$ (-2.64)*
25.	Supplementary management information	
26.	Work units assigned per acre	.40
27.	Power costs allocation factor	.96
28.	Total listed cost per ton	14.23
29.	Return over listed costs per ton	(-.34)
30.	Breakeven yield/ton of production	8.12
30A	Estimated total machine costs/acre	38.05
31.	Total listed costs per acre	\$ 112.81 *

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

Table 10-0401 Crop Data for Alfalfa Hay - 1979

		AVERAGE 213	HIGH 43	LOW 43
1. Acres		28.1	33.1	21.4
		Per Acre	Per Acre	Per Acre
2. Yield		4.6	7.0	2.1
3. Value per ton		38.22	38.95	32.33
4. Crop product return	\$	174.09	274.17	69.49
5. Other crop income		.43		2.38
6. Total crop return	\$	174.52 *	274.17 *	71.87 *
7. Direct costs				
8. Fertilizer	\$	8.84	\$ 8.01	\$ 6.02
9. Chemicals		.04		.37
10. Seed & other		6.63	6.74	5.71
11. Special hired labor		.83	.57	1.05
12. Custom work hired		9.09	9.88	6.86
13. Irrigation operation				
14. Total direct costs	\$	25.43	25.20	20.01
15. Return over direct costs	\$	149.09	248.97 *	51.86 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	22.59	24.39	\$ 19.46
18. Farm power & machinery - operation		26.56	24.70	23.76
19. Irrig.equip ownrship				
20. Land costs		56.19	61.16	43.02
21. Miscellaneous costs				
22. *Interest on mach.& equip.investment		7.64	8.33	6.19
23. Total allocated costs	\$	112.98	118.58	92.43
24. Return over all listed costs	\$	36.11 *	130.39 *	(-40.57)*
25. Supplementary management information				
26. Work units assigned per acre		.60	.60	.60
27. Power costs allocation factor		.95	.98	.80
28. Total listed cost per ton		29.84	20.42	46.70
29. Return over listed costs per ton		8.47	18.52	(-13.26)
30. Breakeven yield/ton of production		3.66	3.69	3.58
30A. Estimated total machine costs/acre		65.88	67.30	56.27
31. Total listed costs per acre	\$	138.41 *	\$ 143.78 *	\$112.44 *

*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 - 1979

		AVERAGE 124	HIGH 25	LOW 25
1.	Pounds of hogs produced	130362	107883	94238
		Per Cwt.	Per Cwt.	Per Cwt.
2.	Net increase in value of hogs	\$ 35.28	41.36	29.07
3.	Other miscellaneous hog income	.01		
4.	Total value produced	\$ 35.29 *	41.36 *	29.07 *
5.	Pounds of feed fed			
6.	Corn	300.1	268.4	386.6
7.	Small grain	20.4	18.5	18.8
8.	Complete ration	17.5	12.3	10.8
9.	Protein,salt & mineral & milk	81.7	67.3	99.5
10.	Total concentrates	419.7	366.5	515.7
11.	Forages	1.1	.9	1.1
12.	Feed cost			
13.	Grains	11.67	10.78	14.70
14.	Complete ration	1.74	1.48	1.30
15.	Protein,salt & mineral & milk	12.15	8.75	14.43
16.	Forages	.02	.02	.02
17.	Pasture			
18.	Total feed costs	\$ 25.58	21.03	30.45
19.	Return over feed costs	\$ 9.71 *	20.33 *	(-1.38)*
20.	Other direct costs			
21.	Miscellaneous livestock expense	1.10	.96	1.50
22.	Veterinary expense	.82	.82	.72
23.	Custom work	.27	.30	.25
24.	Special hired labor	.24	.30	.05
25.	Total other direct costs	\$ 2.43	2.38	2.52
26.	Return over feed & other direct costs	\$ 7.28 *	17.95 *	(-3.90)*
27.	Allocated costs			
28.	Power & machinery costs (PCAF 1.00)	1.06	1.11	1.13
29.	Livestock equipment costs (ECAAF 1)	1.47	1.41	2.28
30.	Building & fences (BCAF 1)	1.57	1.53	1.93
31.	Total allocated costs	\$ 4.10	4.05	5.34
32.	Return over all listed costs	\$ 3.18 *	13.90 *	(-9.24)*
33.	Supplementary management information			
34.	Return for \$100 feed fed	137.95	196.66	95.47
35.	Price received per cwt.all animals	41.90	44.55	40.21
36.	Price received per cwt.sold mkt.only	42.27	42.33	40.75
37.	Number of litters farrowed	72	66	50
37A	Litters/bearing female/year			
38.	Number of pigs born per litter	9.8	9.5	8.2
39.	Number of pigs weaned per litter	7.7	7.8	6.2
40.	Percent death loss	14.6	13.9	14.1
41.	Average weight of all hogs sold	234.7	230.2	251.5
42.	Average weight of mkt.hogs sold	228.9	223.8	241.1
43.	Price per cwt.concentrate fed	6.09	5.73	5.90
44.	Price per cwt.protein,salt & mineral	14.88	12.99	14.49
45.	Pounds of pork purchased	3700	3510	5356
46.	Total listed costs per cwt.pork prod.\$	32.11 *	\$ 27.46 *	\$ 38.31 *

*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.

Table 11B 6490 Hogs, Finishing Enterprise - 1979

	AVERAGE 62	HIGH 12	LOW 12
1. Average number of pigs on hand	235.3	187.7	255.3
2. Pounds of hogs produced	108340	87416	101998
	Per Cwt.	Per Cwt.	Per Cwt.
3. Net increase in value of hogs	\$ 25.02	29.65	20.23
4. Other miscellaneous hog income	.08		
5. Total value produced	\$ 25.10 *	29.65 *	20.23 *
6. Pounds of feed fed			
7. Corn	316.8	247.8	401.4
8. Small grain	7.5	13.3	7.4
9. Complete ration	9.8	4.7	1.7
10. Protein,salt & mineral & milk	73.1	101.9	79.0
11. Total concentrates	407.2	367.7	489.5
12. Forages			
13. Feed cost			
14. Grains	11.90	9.52	15.10
15. Complete ration	.76	.36	.33
16. Protein,salt & mineral & milk	10.72	9.54	15.20
17. Forages			
18. Pasture			
19. Total feed costs	\$ 23.38	19.42	30.63
20. Return over feed costs	\$ 1.72 *	10.23 *	(-10.40)*
21. Other direct costs			
22. Miscellaneous livestock expense	.46	.41	.68
23. Veterinary expense	.28	.54	.25
24. Custom work	.26	.17	.31
25. Special hired labor	.02		.02
26. Total other direct costs	1.02	1.12	1.26
27. Return over feed & other direct costs	\$.70 *	9.11 *	(-11.66)*
28. Allocated costs			
29. Power & machinery costs (PCAF 1.00)	.64	.53	.63
30. Livestock equipment costs (ECAAF 1)	.94	.46	1.17
31. Building & fences (BCAF 1)	.94	.88	.92
32. Total allocated costs	\$ 2.52	1.87	2.72
33. Return over all listed costs	\$ (-1.82)*	7.24 *	(-14.38)*
34. Supplementary management information			
35. Return for \$100 feed fed	107.34	152.69	66.04
36. Price received per cwt.	41.35	42.58	40.57
37. Average weight of pigs sold	226.3	228.9	226.0
38. Average price paid per pig bought	40.87	38.65	43.36
39. Average weight per pig bought	45.8	46.3	47.1
40. Number of pigs purchased	574	416	644
41. No.pigs transferred in	50	80	6
42. Average weight of pigs transferred in	40.0	21.2	117.7
43. Pounds of pork purchased	26306	19247	30327
44. Percent death loss	3.3	3.3	4.2
45. Price per cwt.concentrate fed	5.74	5.28	6.26
46. Price per cwt.protein,salt & mineral fed	14.67	9.37	19.22
47. Effective daily gain-pounds/day/pig	1.26	1.28	1.09
48. Total listed cost per cwt.pork prod.	26.92 * \$	22.41 * \$	34.61 *

*Farms included in table 11B are purchased feeder pigs that are fed to market weight. None of these farms maintained breeding herds. Only those farms producing over 5,000 lbs.of pork are included in tables 11A and 11B.

Table 11C 6510 Hogs, Weaning Pig Production - 1979

		AVERAGE 18
1.	Number of litters farrowed	112
		Per Litter
2.	Net increase in value of hogs	\$ 272.54
3.	Other miscellaneous weaning pigs income	
4.	Total value produced	\$ 272.54 *
5.	Pounds of feed fed	
6.	Corn	1301.4
7.	Small grain	102.7
8.	Complete ration	229.1
9.	Protein, salt & mineral & milk	511.2
10.	Total concentrates	2144.4
11.	Forages	.6
12.	Feed Cost	
13.	Grains	51.88
14.	Complete ration	22.79
15.	Protein, salt & mineral & milk	76.71
16.	Forages	.01
17.	Pasture	
18.	Total feed costs	\$ 151.39
19.	Return over feed costs	\$ 121.15 *
20.	Other direct costs	
21.	Miscellaneous livestock expense	12.89
22.	Veterinary expense	13.84
23.	Custom work	3.34
24.	Special hired labor	1.91
25.	Total other direct costs	\$ 31.98
26.	Return over feed & other direct costs	\$ 89.17 *
27.	Allocated costs	
28.	Power & machinery costs (PCAF 1.00)	12.32
29.	Livestock equipment costs (ECAF 1)	15.45
30.	Building & fences (BCAF 1)	15.66
31.	Total allocated cost	\$ 43.43
32.	Return over all listed costs	\$ 45.74 *
33.	Supplementary management information	
34.	Return for \$100 feed fed	180.02
35.	Average price received per animal sold	47.14
36.	Average price per pig sold or transferred	38.34
37.	Average weight per pig sold or transferred	44.1
38.	Number of pigs produced	826
39.	Number of pigs born per litter	10.0
40.	Number of pigs weaned per litter	7.5
41.	Percent death loss	21.4
42.	Price per cwt.concentrate fed	7.06
43.	Price per cwt.protein,salt & mineral fed	15.01
44.	Feed & supplemental costs per pig produced	24.86
45.	Total listed costs per litter	\$ 226.80 *

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 - 1979

	AVERAGE 49	HIGH 10	LOW 10
1. Average number of cows	39.2	38.0	41.7
	Per Cow	Per Cow	Per Cow
2. Pounds of milk	11302	14131	9046
3. Pounds of butterfat	407.8	507.3	326.7
4. Percent of butterfat in milk			
5. Value of produce			
6. Dairy products sold	\$ 1252.91	\$ 1604.92	\$ 994.29
7. Dairy products used in home	6.91	6.42	4.65
8. Milk fed to livestock	17.83	15.42	15.16
9. Net increases in value of cows	32.63	221.34	(-76.16)
10. Other miscellaneous dairy income			
11. Total value produced	\$ 1310.28 *	1848.10 *	937.94 *
12. Pounds of feed fed			
13. Corn	4586.1	4364.5	5316.8
14. Small grain	386.4	344.8	296.6
15. Complete ration	460.2	840.0	
16. Protein, salt & mineral	797.9	970.8	1015.7
17. Total concentrates	6230.6	6520.1	6629.1
18. Legume hay	5756.4	5706.8	6188.0
19. Other hay & dry roughage	53.6		81.5
20. Silage	9381.3	12542.6	8597.6
21. Feed costs			
22. Grains	185.36	175.42	209.86
23. Complete ration	28.01	49.95	
24. Protein/salt/minrl (cost/cwt fed 13.81)	110.18	117.89	125.76
25. All hay & dry roughage	126.45	121.39	137.29
26. Silage	73.29	96.00	71.68
27. Pasture	7.22	11.34	6.14
28. Total feed costs	\$ 530.51	571.99	550.73
29. Return over feed cost	\$ 779.77 *	1276.11 *	387.21 *
30. Other direct costs			
31. Miscellaneous livestock expense	60.54	88.47	62.73
32. Veterinary expense	21.81	26.87	19.62
33. Custom work hired	44.92	61.11	35.47
34. Special hired labor	9.03		20.89
35. Total other direct costs	\$ 136.30	176.45	138.71
36. Return over feed & other direct costs	\$ 643.47 *	1099.66 *	248.50 *
37. Allocated costs			
38. Power & machinery costs (PCAF 1.00)	56.39	70.43	49.45
39. Livestock equipment costs (ECAAF 1)	47.35	51.07	44.37
40. Building & fences (BCAF 1)	56.52	74.68	38.16
41. Total allocated costs	\$ 160.26	196.18	131.98
42. Return over all listed costs	\$ 483.21 *	903.48 *	116.52 *
43. Supplementary management information			
44. Return for \$100 feed fed	246.98	323.10	170.31
45. Feed cost per cwt. milk	4.70	4.05	6.09
46. Feed cost per pound of butterfat	1.30	1.13	1.69
47. Pounds of milk per pound of concentrate	1.81	2.17	1.36
48. Average price per cwt. milk sold	11.30	11.51	11.22
49. Average price per pound of butterfat	3.13	3.21	3.10
50. Total listed costs per cwt. milk produced	7.32	6.68	9.08
51. Dairy cow turnover percentage	30.6	28.9	33.6
52. Total listed costs per cow	\$ 827.07 *	\$ 944.62 *	\$ 821.42 *

Table 13-6310 - Other Dairy/Replacement - 1979

		AVERAGE 49	HIGH 10	LOW 10
1. Number of head		49.4	33.9	53.2
		Per Head	Per Head	Per Head
2. Net increase in value	\$	387.37	625.07	207.33
3. Other miscellaneous income				
4. Total income	\$	387.37 *	625.07 *	207.33 *
5. Pounds of feed fed				
6. Corn		1104.2	694.4	1594.3
7. Small grain		180.7	267.1	118.3
8. Complete ration		37.3	85.8	18.5
9. Protein, salt & minerals		185.3	222.4	242.0
10. Hay & dry roughage		1988.6	1746.3	1914.2
11. Silage		4012.3	3472.2	1575.2
12. Milk		115.4	197.7	114.9
13. Feed cost				
14. Grains		47.81	35.31	63.72
15. Complete ration		3.68	4.28	1.77
16. Protein, salt & minerals		24.82	27.73	26.20
17. Hay & dry roughage		41.03	39.56	40.19
18. Silage		26.31	26.41	11.90
19. Milk		12.81	22.27	12.11
20. Pasture		7.59	7.32	7.67
21. Total feed costs	\$	170.29	162.78	163.56
22. Return over feed costs	\$	217.08 *	462.29 *	43.77 *
23. Other direct costs				
24. Miscellaneous expense		6.90	6.11	7.65
25. Veterinary expense		3.54	3.10	3.01
26. Custom work hired		1.60	.59	2.50
27. Special hired labor				
28. Total other direct costs	\$	12.04	9.80	13.16
29. Return over feed & other direct costs	\$	205.04 *	452.49 *	30.61 *
30. Allocated costs				
31. Power & machinery costs (PCAF 1.00)		10.50	10.49	8.50
32. Livestock equipment costs (ECAAF 1)		9.07	9.81	5.85
33. Building & fences (BCAF 1)		10.43	11.02	6.70
34. Total allocated costs	\$	30.00	31.32	21.05
35. Return over all listed costs	\$	175.04 *	421.17 *	9.56 *
36. Supplementary management information				
37. Return for \$100 feed fed		227.48	384.02	126.77
38. Percent death loss - total		12.8	13.0	18.1
39. Percent calf death loss		30.6	22.2	50.0
40. Total listed costs per head	\$	212.33 * \$	203.90 * \$	197.77 *

Table 14 - All Dairy Cattle - 1979

		AVERAGE 49	HIGH 10	LOW 10
1.	Average number of cows	38.8	39.3	41.7
		Per Cow	Per Cow	Per Cow
2.	Value of dairy products	\$ 1269.95	1567.68	1014.08
3.	Net increase in value	523.32	903.66	207.94
4.	Miscellaneous dairy income			
5.	Total value produced	\$ 1793.27 *	2471.34 *	1222.02 *
6.	Pounds of feed fed			
7.	Grains	6658.8	6039.5	7431.7
8.	Complete rations	506.9	1429.5	
9.	Protein,salt & minerals,incl.milk equiv.	1053.8	1174.7	1178.7
10.	Hay & dry roughage	8251.6	7633.6	8754.9
11.	Silage	14365.4	18427.5	11554.0
12.	Feed cost			
13.	Grains	248.17	225.62	277.46
14.	Complete rations	32.81	88.14	
15.	Protein,salt & minerals,incl.milk	159.72	161.53	164.24
16.	Hay & dry roughage	177.99	164.33	191.22
17.	Silage	113.99	141.42	95.08
18.	Pasture costs	16.78	18.60	17.87
19.	Total feed costs	\$ 749.46	799.64	745.87
20.	Return over feed costs	\$ 1043.81 *	1671.70 *	476.15 *
21.	Other direct costs			
22.	Miscellaneous livestock expense	68.71	110.48	72.25
23.	Veterinary expense	25.98	31.42	20.72
24.	Custom work	46.26	58.09	37.31
25.	Special hired labor	8.94		20.89
26.	Total other direct costs	\$ 149.89	199.99	151.17
27.	Return over feed & other direct costs	\$ 893.92 *	1471.71 *	324.98 *
28.	Allocated costs			
29.	Power & machinery costs	68.63	86.79	57.45
30.	Livestock equipment costs	57.89	66.48	51.54
31.	Building & fences	68.76	95.85	44.33
32.	Total allocated costs	\$ 195.28	249.12	153.32
33.	Return over all listed costs	\$ 698.64 *	1222.59 *	171.66 *
34.	Supplementary management information			
35.	Return for \$100 feed fed	239.28	309.06	163.84
36.	Total listed costs per cow	\$ 1094.63 *	1248.75 *	\$ 1050.36 *

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 - 1979

	AVERAGE 59	HIGH 12	LOW 12
1. Average number of beef cows	44.4	39.0	33.1
2. Average number of other beef animals & bulls	24.8	22.4	18.3
3. Pounds of beef produced	15028	15999	6575
4. Net increase in value	Per Cow \$ 353.65	Per Cow 561.79	Per Cow 181.72
5. Other miscellaneous beef income			
6. Total value produced	\$ 353.65 *	561.79 *	181.72 *
7. Pounds of feed fed			
8. Grain	174.4	390.0	263.8
9. Protein, salt & mineral	80.4	50.2	81.2
10. Legume hay	2725.0	1995.7	3539.3
11. Other hay & dry roughage	1108.0	1141.9	1803.6
12. Silage	4497.6	6225.6	6141.0
13. Feed cost			
14. Grain	6.82	14.46	9.76
15. Protein, salt & mineral	10.88	7.15	5.56
16. Legume hay	59.95	44.26	80.39
17. Other hay & dry roughage	9.30	10.64	11.39
18. Silage	34.75	50.21	48.37
19. Pasture	30.09	20.69	25.86
20. Total feed costs	\$ 151.79	147.41	181.33
21. Return over feed cost	\$ 201.86 *	414.38 *	.39 *
22. Other direct costs			
23. Miscellaneous livestock expense	5.83	8.33	4.65
24. Veterinary expense	5.70	8.46	6.86
25. Custom work	2.12	1.41	4.59
26. Special hired labor	.05		
27. Total other direct costs	\$ 13.70	18.20	16.10
28. Return over feed & other direct costs	\$ 188.16 *	396.18 *	(-15.71)*
29. Allocated costs			
30. Power & machinery costs (PCAF 1.00)	16.15	14.88	22.76
31. Livestock equipment costs (ECAAF 1)	17.51	13.27	27.06
32. Building & fences (BCAF 1)	16.93	11.02	18.04
33. Total allocated costs	\$ 50.59	39.17	67.86
34. Return over all listed costs	\$ 137.57 *	357.01 *	(-83.57)*
35. Supplementary management information			
36. Return for \$100 feed fed	233.00	381.11	100.22
37. Price per cwt. sold	73.34	76.32	61.62
38. Price per cwt. calves sold or transferred	87.82	94.65	82.64
39. Average weight per head sold	677.8	741.1	754.3
40. Average weight per calf sold or trans.	429.3	440.0	453.2
41. Percent death loss	5.7	4.3	8.9
42. Percent calf crop	92.1	97.8	91.3
43. Total listed costs per cow	\$ 216.08 *	\$ 204.78 *	\$ 265.29 *

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 sold or transferred to the feed lot.

*Table 15B Beef Feeders Feedlot - 1979

	CALVES 500 lbs./less AVERAGE 52	YEARLINGS 500-700 lbs. AVERAGE 50	TWO YEAR OLDS 700 lbs./more AVERAGE 18
1. Average number of beef feeders	67.9	181.3	142.8
2. Pounds of beef produced	43138	122835	85289
	Per Cwt.	Per Cwt.	Per Cwt.
3. Net increase in value of animals	\$ 63.95	50.51	63.00
4. Other miscellaneous beef income			
5. Total value produced	\$ 63.95 *	50.51 *	63.00 *
6. Pounds of feed fed			
7. Grain	501.3	530.7	647.4
8. Protein, salt & mineral	43.7	51.0	46.5
9. Legume hay	222.7	147.7	124.0
10. Other hay & dry roughage	21.9	7.4	7.2
11. Silage	847.1	936.1	1077.0
12. Feed cost			
13. Grain	18.13	20.24	24.74
14. Protein, salt & mineral	5.52	5.38	5.94
15. Legume hay	4.65	3.16	2.68
16. Other hay & dry roughage	.26	.07	.05
17. Silage	6.63	7.33	8.15
18. Pasture	.13		.06
19. Total feed cost	\$ 35.32	36.18	41.62
20. Return over feed cost	\$ 28.63 *	14.33*	21.38 *
21. Other direct costs			
22. Miscellaneous livestock expense	.50	.30	.78
23. Veterinary expense	.95	.99	.79
24. Custom work hired	.56	1.75	1.15
25. Special hired labor		.02	
26. Total other direct costs	\$ 2.01	3.06	2.72
27. Return over feed & other direct costs	26.62 *	11.27*	18.66 *
28. Allocated costs			
29. Power & machinery costs (PCAF 1.00)	1.07	.93	1.09
30. Livestock equipment costs (ECAAF 1)	1.30	.96	1.57
31. Buildings & fences (BCAF 1)	1.19	1.40	1.67
32. Total allocated costs	\$ 3.56	3.29	4.33
33. Return over all listed costs	\$ 23.06 *	7.98*	14.33 *
34. Supplementary management information			
35. Return for \$100 feed fed	181.06	139.60	151.37
36. Price per cwt. sold	65.98	63.83	64.39
37. Average weight per head sold	973.2	1047.8	1139.9
38. Price per cwt. bought	84.37	84.08	78.38
39. Average weight per head bought	453.1	597.8	731.3
40. Number of head bought	69	268	184
41. Percent death loss	1.3	1.1	.8
42. Effective daily gain-pounds/head/day	1.74	1.86	1.64
43. Total listed cost per cwt. produced	40.89 *	\$ 42.53*	\$ 48.67 *

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

16A - 6670 - Sheep Farm - Commercial Flock - 1979

	AVERAGE 15
1. Average number of ewes	97.0
2. Pounds of lamb & mutton produced	13517
3. Pounds of wool produced	993
	Per Ewe
4. Value of produce	
5. Wool	\$ 12.32
6. Net increase in value of animals	94.54
7. Other miscellaneous sheep income	
8. Total value produced	\$ 106.86 *
9. Pounds of feed fed	
10. Grain	393.7
11. Protein, salt & mineral	69.0
12. Legume hay	1021.5
13. Other hay & dry roughage	24.4
14. Silage	562.6
15. Feed cost	
16. Grain	14.27
17. Protein, salt & mineral	7.23
18. Legume hay	21.52
19. Other hay & dry roughage	.48
20. Silage	4.24
21. Pasture	1.06
22. Total feed costs	\$ 48.80
23. Return over feed costs	\$ 58.06 *
24. Other direct costs	
25. Miscellaneous livestock expense	2.73
26. Veterinary expense	1.81
27. Custom work	3.42
28. Special hired labor	
29. Total other direct costs	\$ 7.96
30. Return over feed & other direct costs	\$ 50.10 *
31. Allocated costs	
32. Power & machinery costs (PCAF 1.00)	7.40
33. Livestock equipment costs (BCAF 1)	5.00
34. Building & fences (BCAF 1)	8.85
35. Total allocated costs	\$ 21.25
36. Return over all listed costs	\$ 28.85 *
37. Supplementary management information	
38. Return for \$100 feed fed	218.95
39. Price per cwt.lamb & mutton sold	59.33
40. Price per cwt.lamb sold or transferred	66.10
41. Average weight of lambs sold or transferred	107.4
42. Pounds of wool per sheep sheared	7.2
43. Number of ewes kept for lambing	108
44. Percent lamb crop	136.1
45. Percent death loss	8.2
46. Total listed costs per ewe	\$ 78.01 *

Table 16B - 6570 Lambs, Feeders - 1979

		AVERAGE 3
1.	Average number of lambs	225.0
2.	Pounds of lamb produced	20813
3.	Pounds of wool produced	
		Per Cwt.
4.	Value of produce	
5.	Wool	
6.	Net increase in value of animals	43.71
7.	Other miscellaneous lamb income	
8.	Total value produced	\$ 43.71 *
9.	Pounds of feed fed	
10.	Grain	533.7
11.	Protein, salt & mineral	85.8
12.	Legume hay	115.6
13.	Other hay & dry roughage	
14.	Silage	849.5
15.	Feed cost	
16.	Grain	19.82
17.	Protein, salt & mineral	9.23
18.	Legume hay	2.60
19.	Other hay & dry roughage	
20.	Silage	6.37
21.	Pasture	.54
22.	Total feed costs	\$ 38.56
23.	Return over feed cost	\$ 5.15 *
24.	Other direct costs	
25.	Miscellaneous livestock expense	.05
26.	Veterinary expense	1.79
27.	Custom work	6.46
28.	Special hired labor	
29.	Total other direct costs	\$ 8.30
30.	Return over feed & other direct costs	\$ (-3.15) *
31.	Allocated costs	
32.	Power & machinery costs (PCAF 1.00)	2.61
33.	Livestock equipment costs (ECAAF 1)	1.61
34.	Building & fences (BCAF 1)	2.66
35.	Total allocated costs	\$ 6.88
36.	Return over all listed costs	\$ (-10.03) *
37.	Supplementary management information	
38.	Return for \$100 feed fed	113.37
39.	Price per cwt. sold	61.82
40.	Pounds of wool per sheep sheared	
41.	Average weight of lambs sold	119.0
42.	Price per cwt. bought	73.21
43.	Average weight of lambs bought	78.7
44.	Percent death loss	1.2
45.	Effective daily gain - pounds/head/day	.25
46.	Total listed costs per cwt. produced	53.74 *

Selected Livestock Data - for 330 Farms - 1979

	<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	25.58	9.71	137.95	419 lbs.
Cwt.Hogs finishing only	23.38	1.72	107.34	407 lbs.
Hogs - Weaning per litter	151.39	121.15	180.02	2145 lbs.
Dairy cow	530.51	779.77	246.98	6230 lbs.conc. 15191 lbs.rough.
Other Dairy	170.29	217.08	227.48	1506 lbs.conc. 6001 lbs.rough.
Beef Cow - calf to weaning	151.79	201.86	233.00	255 lbs.conc. 8330 lbs.rough.
Cwt.Feeder cattle calves purchased	35.32	28.63	181.06	545 lbs.conc. 1092 lbs.rough.
Cwt. Feeder cattle yearlings purchased	36.18	14.33	139.60	582 lbs.conc. 1091 lbs.rough.
Ewe	48.80	58.06	218.95	463 lbs.conc. 1609 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	42.27 cwt.	228.9	- - -	\$ 32.11/cwt.
Hogs-finishing	41.35 cwt.	226.3	40.87/head	26.92/cwt.
Feeder pigs	38.34/head	44.1	- - -	30.24/head
Dairy cow	11.30/cwt.milk	- -	- - -	827.07/cow
Beef-calves sold	87.82/cwt.	429.3	- - -	216.08/cow
Feeder cattle-calves	65.98/cwt.	973.2	84.37/cwt.	40.89/cwt.
Feeder cattle-yearlings	63.83/cwt.	1047.8	84.08	42.53/cwt.
Ewes - lambs sold	66.10/cwt.	107.4	- - -	78.01/ewe

AVERAGE PRICES FOR 1979 FARM GROWN FEEDSGrain

Corn	\$2.10 per bu.
Oats	\$1.20 per bu.
Barley	\$1.65 per bu.
Mixed grain	3½¢ per lb.

Hay

Alfalfa	\$45.00 per ton
Mixed	\$40.00 per ton
Wild	\$35.00 per ton

Other Roughages

Corn silage	\$16.00 per ton
Grass silage	\$14.00 per ton
Legume haylage	\$22.50 per ton
Green crop	\$15.00 per ton
Oats straw	1.25 per bale
Corn stacks	\$10.00 per ton

Pasture

Cows	\$8.00 per head per month
Young cattle	\$4.00 per head per month
Hogs	\$1.00 per head per month
Sheep	\$1.45 per head per month
Lambs70 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	.40/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 - 1975-79

	1975	1976	1977	1978	1979
Farm size	398	406	413	417	414
Labor earnings (whole farm)	17550	3012	18241	39054	7706
Return to capital & family labor	22378	11698	23442	48038	21102
Aver.investment/farm business	329186	372861	388344	486911	542965
Cash sales/farm bus.(T2A-37)	97819	103017	96581	134493	149526
Cash expense/farm business (T2B-39)	75817	91412	83702	113674	144959
Expenses/dollar of income (T5-28)	.86	.97	.85	.78	.94
Ratio of assets to liabilities (T5-L29)	3.16:1	2.68:1	2.42:1	2.55:1	2.27:1
Gain in net worth (T5-L16)	12062	2678	14827	37007	11457
Size of business (work units) (T1-L6)	371	381	365	385	396
Tractor & crop mach.expense per crop acre (T8-L-41)	29.45	28.03	29.07	34.27	41.27

SOURCE OF INCOME CASH RECEIPTS

Income from livestock	60%	61%	55%	59%	62%
Income from crops	35%	32%	38%	35%	32%
Miscellaneous farm income	5%	7%	7%	6%	6%

FAMILY LIVING EXPENSES

Per year (T4-L23)	12876	14780	14796	16767	20610
Per month	1073	1231	1233	1397	1718

(42)

	1975	1976	1977	1978	1979
<u>Return Above Feed Cost Per:</u>					
Dairy cow	242	421	501	710	780
Beef cow	(-43)	(-6)	17	297	202
Cwt.feeder cattle produced	13.25	(-1.25)	2.07	30.00	28.63
Cwt. hogs produced	24.57	12.65	17.19	28.88	9.71
Cwt. feeder lambs produced	28.91	24.91	---	39.34	5.15
Ewe	(-13.63)	(-2.57)	29.44	36.10	58.06

Yield Per Acre

Corn, bu.	77.4	57.0	98.1	113.2	104.8
Soybeans, bu.	34.5	23.4	36.4	41.3	32.6
Flax, bu.	14.7	12.0	19.5	19.8	19.5
Oats, bu.	70.4	50.6	74.7	57.3	55.0
Corn silage, ton	11.4	6.5	13.4	15.1	15.7
Alfalfa, ton	3.4	2.4	3.3	4.3	4.6
Wheat, bu.	36.9	38.7	48.8	26.2	28.7
Sunflowers, cwts.	---	---	13.1	24.1	12.1

Return Over Total Costs Per Acre

Corn	44.89	(-4.68)	30.96	32.08	19.82
Soybeans	69.86	34.61	36.3	130.32	57.29
Flax	48.04	17.82	16.66	31.05	35.65
Oats	41.56	8.00	1.61	(-13.37)	(-10.88)
Corn silage	67.61	(-9.13)	50.28	68.67	85.01
Alfalfa	95.96	52.86	47.65	42.20	36.11
Wheat	72.84	44.72	18.80	(-26.52)	9.01
Sunflowers	---	---	(-18.03)	74.27	(-10.70)

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 4-1-80Address 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 4010	✓	
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 10%/year	✓	✓