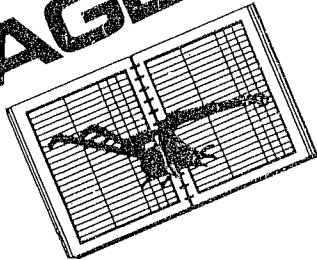


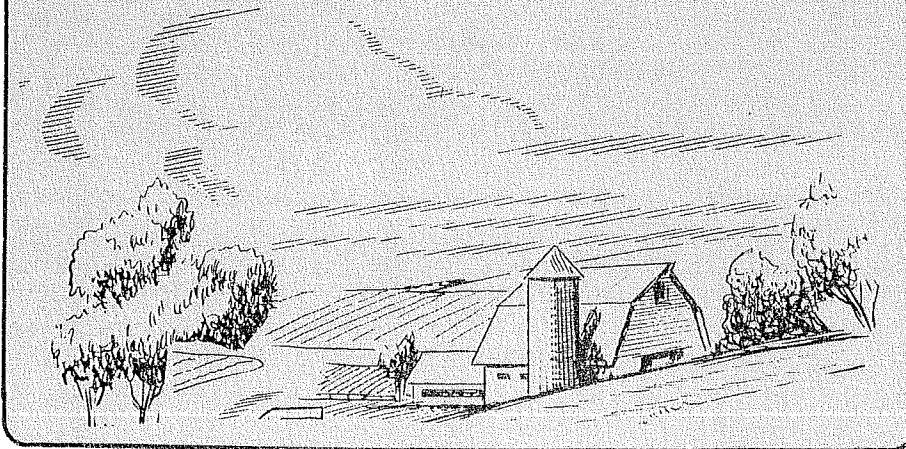
FARM BUSINESS MANAGEMENT



**1977
ANNUAL REPORT**

**SOUTHWEST MINNESOTA
VOCATIONAL AGRICULTURE**

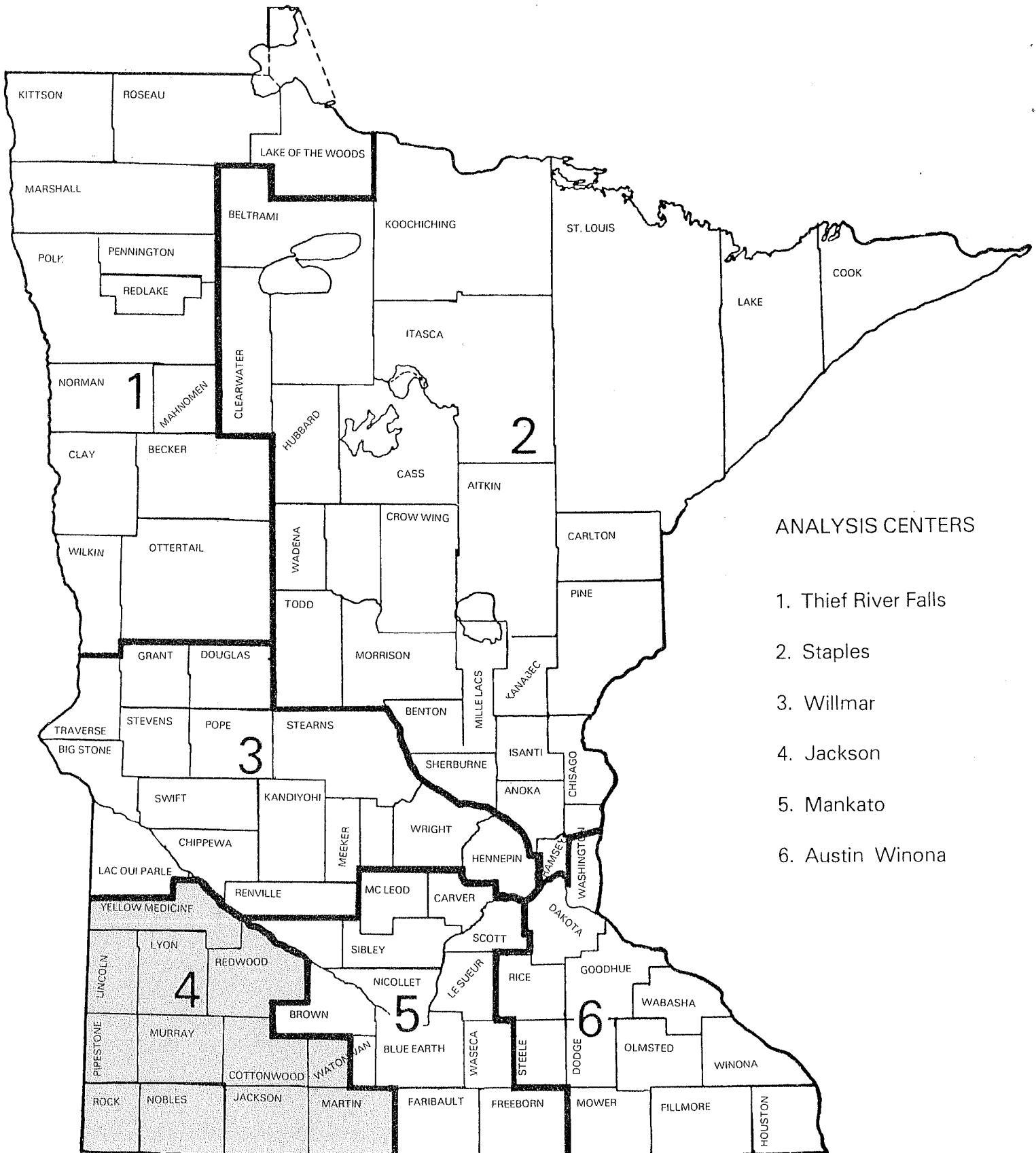
**FARM BUSINESS
MANAGEMENT EDUCATION
PROGRAM**



SOUTHWESTERN MINNESOTA
REPORT NO. 8
AREA VOCATIONAL-TECHNICAL
INSTITUTE
JACKSON, MINN.

**AN ADULT
EDUCATIONAL
PROGRAM**

VO-AG FARM MANAGEMENT AREAS



ANALYSIS CENTERS

1. Thief River Falls
2. Staples
3. Willmar
4. Jackson
5. Mankato
6. Austin Winona

1977 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, eight 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 Overass 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 765 records, the Jackson Analysis Center utilizes satellite analysis centers. This year the following satellites operated: Brewster, Canby A.V.T.I., Fairmont, Pipestone, St. James, Wabasso 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 765 records were processed with 475 of the total processed included in the averages of this report.

(ii)

Source of Farm Record Analyses
for 1977 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	17	19
Canby	Maynard Hughes	100	26	36
Fairmont	Floyd Lehman	100	20	24
Fulda	Mel Faltinson	50	13	13
Hills-Beaver Creek	Wendell Erickson	50	22	25
	Gene Kostrebra			
Jackson	Charles Asman	100	36	47
	Richard Amendt	100	37	43
Lakefield	*Harry Gerdes	100	34	47
Luverne	*James Ouverson	40	9	20
Pipestone	Heimer Swanson	100	43	55
	Marlin Berg	10	7	7
Slayton	George Crompton	100	35	41
Storden-Jeffers	*Richard Spitzner	70	10	18
Tracy	*Tom Gruendemann	80	5	11
Wabasso	Ralph Groshen	100	27	40
Windom	Keith Hirsch	80	22	28
Worthington	Wayne Flynn	100	51	60

Veterans Farm Training Program

Canby	Craig Bauman	19	23
	Dale Schoberg	23	24
Edgerton	Robert Vanorny	27	30
Jackson	Doug O'Neil	31	35
	Kent Ringkob	12	15
Luverne	Jerry Reu	22	24
Pipestone	Donald Briggeman	11	11
Slayton	John Wittman	24	29
St. James	Cliff Vrieze	21	22
Tracy	Charles Swenson	20	24
Tyler H.V.C.C.	Paul Bartz	21	23
	Roger Hanson	20	21
Westbrook	Larry Oraskovich	29	29
Worthington	Gary Lonneman	23	25
	Kendall Langseth	16	16

Others

Canby A.V.T.I.	Farm Operations Management	8	10
	Swine Management	1	2
Jackson A.V.T.I.	Farm Operations Management	14	14
	Others	9	9

Totals

765

927

*Denotes new instructor

Table 1 - Summary of Farm Inventories* - 1977

Items	Averages of 475 Farms	
	Jan. 1	Dec. 31
1. Size of farm - total acres	412.6	
2. - tillable acres	364.7	
3. Work units - crops	176.44	
4. - livestock	159.71	
5. - other	29.24	
6. Total size of business in work units	365.39	
7. Number of workers	1.46	
8. Farm capital investment per worker	\$ 271039	
9. Productive livestock		
10. Dairy cows	2256	2274
11. Other dairy cattle	1075	1457
12. Beef breeding cattle	3394	3765
13. Beef feeder cattle	11826	13133
14. Hogs	9293	11383
15. Sheep (including feeders) & goats	186	237
16. Poultry-all types	10	31
17. Other livestock	189	235
18. Total productive livestock	\$ 28229	32515 *
19. Crop, seed & feed	35807	45768
20. Power, machinery & equipment		
21. Auto & truck (farm share)	3662	3934
22. Power & machinery	25609	28790
23. Irrigation equipment	12	11
24. Custom work equipment	3	2
25. Livestock equipment	3006	3398
26. Total power, machinery & equipment	\$ 32291	36135 *
27. Land	250113	257275
28. Buildings-fences-etc.	27481	31073
29. Total farm capital	\$ 373921	402767 *
30. Increase or decrease in total farm capital		\$ 28846 *

*Table 1 lists the categories of farm capital for the averages of 475 farms and for the 95 most profitable and 95 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* - 1977

Items	95 High Profit Farms	
1. Size of farm - total acres	572.0	
2. - tillable acres	512.5	
3. Work units - crops	249.69	
4. - livestock	216.40	
5. - other	39.44	
6. Total size of business in work units	505.53	
7. Number of workers	1.62	
8. Farm capital investment per worker	\$ 321334	
	Jan.1	Dec. 31
9. Productive livestock		
10. Dairy cows	2438	2105
11. Other dairy cattle	887	1354
12. Beef breeding cattle	6264	6668
13. Beef feeder cattle	18650	21136
14. Hogs	13792	17945
15. Sheep (including feeders) & goats	150	183
16. Poultry - all types	5	81
17. Other livestock	1	2
18. Total productive livestock	\$ 42187	49474 *
19. Crop, seed & feed	53673	74197
20. Power, machinery & equipment		
21. Auto & truck (farm share)	4249	4649
22. Power & machinery	32328	37409
23. Irrigation equipment	61	56
24. Custom work equipment	14	9
25. Livestock equipment	3939	4340
26. Total power, machinery & equipment	\$ 40591	46464 *
27. Land	308160	318745
28. Buildings-fences-etc.	43463	48390
29. Total farm capital	\$ 488074	537269 *
30. Increase or decrease in total farm capital		\$ 49195 *

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

Table 1 - Summary of Farm Inventories* - 1977

Items	95 Low Profit Farms	
	Jan.1	Dec.31
1. Size of farm - total acres	409.7	
2. - tillable acres	365.8	
3. Work units - crops	175.42	
4. - livestock	141.30	
5. - other	33.03	
6. Total size of business in work units	349.74	
7. Number of workers	1.43	
8. Farm capital investment per worker	\$ 301027	
9. Productive livestock		
10. Dairy cows	1865	2069
11. Other dairy cattle	1048	1192
12. Beef breeding cattle	3631	3667
13. Beef feeder cattle	14572	13397
14. Hogs	8139	8551
15. Sheep (including feeders) & goats	64	119
16. Poultry - all types	5	11
17. Other livestock	132	150
18. Total productive livestock	\$ 29456	29157 *
19. Crop, seed & feed	39855	44114
20. Power, machinery & equipment		
21. Auto & truck (farm share)	4004	4153
22. Power & machinery	28034	31262
23. Irrigation equipment		
24. Custom work equipment		
25. Livestock equipment	2954	3184
26. Total power, machinery & equipment	\$ 34992	38599 *
27. Land	296863	301977
28. Buildings-fences-etc.	26895	28548
29. Total farm capital	\$ 428062	442394 *
30. Increase or decrease in total farm capital		\$ 14332 *

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 - 1977

Items	Average 475	High 95	Low 95
1. Sale of livestock & livestock products			
2. Dairy cows	\$ 574	653	428
3. Dairy products	5236	5512	3909
4. Other dairy cattle	453	354	482
5. Beef breeding cattle	1002	2359	882
6. Beef feeder cattle	19639	33431	20460
7. Hogs complete & mixed	18277	28110	12485
8. Hogs finishing	6574	11474	7877
9. Hogs producing weaning pigs	1194	990	684
10. Sheep, goats & wool, farm flock	244	194	54
11. Sheep & wool, feeder lambs	68		
12. Chickens (including hens & broilers)	356	151	1487
13. Turkeys			
14. Eggs			
15. Other productive livestock & products	49	24	117
16. Other miscellaneous livestock income			
17. Total sales of productive livestock	\$ 53665 *	83252 *	48865 *
18. Sale of crops			
19. Wheat	1693	2200	1574
20. Other small grains	1546	1935	1163
21. Corn	14174	23405	11058
22. Soybeans	18922	31213	17272
23. Other row crops	169	52	101
24. Legumes & other forage	374	629	429
25. Grass seed			
26. Fruits & nuts			
27. Vegetable roadside market & specialty			
28. Nursery, timber & other	3		
29. Set aside acres-government payments	101	80	136
30. Total sales from crops	\$ 36982 *	59515 *	31733 *
31. Capital assets sold	2139	467	1280
32. Gas tax refund	139	146	164
33. Income from work off the farm	1332	1619	1605
34. Custom work enterprise income	65	126	143
35. Patronage refunds	959	1402	967
36. Miscellaneous farm income	1119	1210	1098
37. Total farm sales	\$ 96581 *	147737 *	85855 *
38. Increase in farm capital	28846	49195	14332
39. Family living from the farm	312	394	226
40. Total farm receipts (37)+(38)+(39)	125739 *	197326 *	100412 *

*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 - 1977

Items	Average 475	High 95	Low 95
1. Purchase of livestock			
2. Dairy cows	\$ 255	235	373
3. Other dairy cattle	147	9	180
4. Beef breeding cattle	343	697	175
5. Beef feeder cattle	9671	17067	9711
6. Hogs complete & mixed	1449	1505	1531
7. Hogs finishing	2468	4083	3109
8. Hogs producing weaning pigs	120	80	118
9. Sheep & goats	77	47	14
10. Sheep, feeder lambs	22		
11. Chickens (including hens & broilers)	56	75	177
12. Turkeys			
13. Other productive livestock	20	6	59
14. Miscellaneous livestock expense	1623	2273	1535
15. Feed bought	14199	19991	14597
16. Fertilizer	4871	6632	5579
17. Chemicals	2586	4140	2470
18. Other crop expense	4193	5728	4364
19. Irrigation operation costs			
20. Custom work enterprise operator costs, incl. labor	17	29	19
21. Custom work hired	1795	2364	1971
22. Repair & upkeep of livestock equipment	453	642	429
23. Repair & upkeep of farm real estate	844	997	702
24. Gas, oil & grease bought (farm share)	2802	3513	2920
25. Repair & oper. of mach., tractor, truck & auto	3137	3604	3714
26. Repair & upkeep of irrigation equipment			
27. Repairs - custom work enterprise	5	13	12
28. Wages of hired labor	1542	2222	1892
29. Personal property & real estate taxes	2611	3904	2423
30. General farm expense	1208	1598	1208
31. Telephone expense (farm share)	190	209	196
32. Electricity expense (farm share)	558	697	538
33. Total cash operating expense	\$ 57262 *	82362 *	60018 *
34. Power, crop & gen. mach. bought (farm share)	10481	14719	11463
35. Irrigation equipment bought			
36. Custom work equipment bought			
37. Livestock equipment bought	1020	1320	824
38. New real estate & improvement	14939	18732	9845
39. Total farm purchases (33) thru (38)	\$ 83702 *	117134 *	82150 *
40. Decrease in farm capital			
41. Interest on farm capital	23301	30760	26114
42. Unpaid family labor	390	425	406
43. Labor charge for partners & other operators	51	47	205
44. Board furnished hired labor	55	61	24
45. Total farm expense (39) thru (44)	\$ 107498 *	148427 *	108898 *
46. Ret. to oper. labor & mgmt. - single oper. (W.F.) (2A/40) - (45)	\$ 18241 *	48899 * (-8486) *	
47. Number of operators	1	1	1
48. Full time operator equivalents	1.11	1.19	1.06
49. Return to oper. labor & mgmt./full time operator equivalent	17050	44328	(-7208)

Table 3 - Summary of Farm Earnings (Enterprise Statement - Whole Farm) - 1977

Items	Average 475	High 95	Low 95
1. Returns & net increases			
2. Productive livestock			
3. Dairy cows	\$ 5108	5180	3750
4. Other dairy cattle	1375	1422	939
5. Beef breeding cattle	1835	2877	1908
6. Feeder cattle	10540	18185	8549
7. Hogs, complete & mixed	18180	28546	11743
8. Hog finishing enterprise	4137	7983	3882
9. Producing weaning pigs	1850	2615	1120
10. Sheep & goats	226	183	95
11. Sheep, feeder lambs	40		
12. Chickens (including hens & broilers)	321	154	1326
13. Turkeys			
14. Other productive livestock	83	19	76
15. Total all productive livestock	\$ 43693 *	67165 *	33386 *
16. Value of feed fed to livestock	29069	41332	29415
17. Return over feed from livestock	14624	25832	3971
18. Crop, seed & feed	50107	84844	38354
19. Cooperative patronage refunds	959	1402	967
20. Miscellaneous farm income	1119	1210	1098
21. Custom work enterprise	41	78	112
22. Total returns & net increases	\$ 66850 *	113366 *	44503 *
23. Expenses & net decreases			
24. Truck & auto (farm share)	\$ 2573	3006	2714
25. Tractors & crop machinery	10626	13848	12220
26. Irrigation equipment			
27. Electricity	558	697	538
28. Livestock equipment	1071	1511	1027
29. Buildings, fences & tiling	2942	4111	2622
30. Bare land			
31. Miscellaneous livestock expense	1623	2273	1535
32. Labor	1857	2502	2186
33. Labor charge for other operator(s)	51	47	205
34. Property tax	2611	3904	2423
35. General farm expense & telephone	1398	1807	1404
36. Interest on farm capital	23301	30760	26114
37. Total expenses & net decreases	\$ 48610 *	64467 *	52989 *
38. Return to operators labor & management	\$ 18241	48899	(-8486)
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 - 1977
For those farms with complete accounts - Operator's share

Items	Average 325	Per Adult Equivalent
1. Number of persons - family	4	
2. Number of adult equivalent - family	3.0	
3. Church & welfare	\$ 739	246.33
4. Medical care & health insurance	1242	414.00
5. Food & meals bought	2432	810.67
6. Operating expense & supplies	822	274.00
7. Furnishings & equipment	841	280.33
8. Clothing & clothing materials	847	282.33
9. Personal care, personal spending	544	181.33
10. Education	274	91.33
11. Recreation	401	133.67
12. Gifts & special events	345	115.00
13. Personal share truck & auto expense	491	163.67
14. Operator share upkeep on dwelling	253	84.33
14A. Cash rent (personal)	4	1.33
15. Personal share telephone & elect. expense	274	91.33
15A. Personal share - general farm expense	26	8.67
16. Total cash living expense	\$ 9532	3177.33 *
17. Personal share new truck & auto	398	132.67
18. New dwelling bought	1460	486.67
19. Taxes & other deductions	1608	536.00
20. Life insurance & other savings & investments	1485	495.00
21. Total household & personal (16) thru (20)	\$ 14484	4828.00
22. Total family living from the farm (33)	311	103.67
23. Total cash & non-cash expenses (21)+(22)	\$ 14796	4932.00

FAMILY LIVING FROM THE FARM

	Quantity	Oper. Share
25.		
26. Milk & cream (quarts)	182	38
27. Beef & buffalo (pounds)	499	189
28. Pork (pounds)	184	71
29. Lamb, mutton, goat (pounds)	3	1
30. Poultry, all fowl (pounds)	10	7
31. Eggs (dozen)	4	2
32. Vegetables, fruits, spuds, & fuel-also other produce		3
33. Total family living from the farm		\$ 311 *

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 \$794.33 per month for cash living expense (line 16) and spend a total of \$1207 per month on an average for total personal and household expense (line 21).

** Table 4 includes 325 farm families that kept complete household and personal records.

Table 5 - Net Worth Statement - Operator - 1977
 For those Farms With a Complete Record of all Assets and Liabilities

Items	Averages of 440 Farms	
	Jan. 1	Dec. 31
1. Total productive livestock	\$ 25331	29419
2. Crop, seed & feed	33965	43680
3. Total power, machinery & equipment	31358	34976
4. Land	83122	92895
5. Buildings, fences, etc.	23919	27118
6. Total farm capital	\$ 197695	228087 *
7. Non-farm assets	18818	21010
7A. Cash on hand & in the bank	1628	2013
8. Dwelling	8297	9469
9. Total assets	\$ 226438	260579 *
10. Real estate mortgages	44150	54154
11. Chattel mortgages	26470	31814
12. Notes	14915	18376
13. Accounts payable	2502	3006
14. Total liabilities	\$ 88036	107350 *
15. Farmers net worth	\$ 138402	153229 *
16. Gain (or loss) in net worth		\$ 14827 *
	* * *	
17. Supplementary management information		
18. Operators labor earnings (6B/47)	\$ 16594	
19. Return to capital & family labor (6B/48)	23538	
20. Non-farm income		
21. Outside investment income	538	
22. Other personal income & income tax refund	2495	
22A. Sale of personal share-dwelling, auto & truck	\$ 22	
23. Total non-farm income	\$ 3055	
24. Total family farm & non-farm income	26593	
25. Total money borrowed	70420	
26. Total paid on debt (principal)	50870	
27. Total household & personal cash/non-cash expense (4/23)	11591	
28. Ratio: Total farm expense to total farm receipts (O.S.)	.854	
	Jan. 1	Dec. 31
29. Ratio: total assets to total liabilities	2.572	2.427
30. Ratio: non-real estate assets - non-real estate liabilities	2.532	2.464
31. Ratio: real estate assets to real estate liabilities	2.612	2.391
32. Ratio: net worth to total liabilities	1.572	1.427
33.* Ratio: cash operating expenses to adjusted total farm sales (O.S.)		.780
34. Ratio: total farm receipts to average farm capital (W.F.)		.326
35. Ratio: total farm receipts to average farm capital (O.S.)		.534

*Adjusted total farm sales does not include sale of capital assets

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

Table 5 - Net Worth Statement - Operator - 1977
For Those Farms With a Complete Record of all Assets and Liabilities

Items	88 High Profit Farms	
	Jan.1 - - - -	Dec.31
1. Total productive livestock	\$ 35831	45256
2. Crop, seed & feed	50886	71101
3. Total Power, mach. & equipment	40508	44075
4. Land	108986	124863
5. Buildings, fences, etc.	41145	46171
6. Total farm capital	\$ 277356	331465 *
7. Non-farm assets	22792	26158
7A. Cash on hand & in bank	1454	2077
8. Dwelling	11312	13325
9. Total assets	\$ 312914	373024 *
10. Real estate mortgages	68816	76423
11. Chattel mortgages	36432	43585
12. Notes	20659	26328
13. Accounts payable	3195	4324
14. Total liabilities	\$ 129102	150660 *
15. Farmers net worth	\$ 183812	222365 *
16. Gain (or loss) in net worth		\$ 38553 *
	* * *	
17. Supplementary management information		
18. Return to operators labor & management (6B/47)	43857	
19. Return to capital & family labor (6B/48)	53240	
20. Non-farm income		
21. Outside investment income	939	
22. Other per. income & income tax refund	2519	
22A. Sale of pers. share-dwelling, auto & truck	89	
23. Total non-farm income	\$ 3547	
24. Total family farm & non-farm income	\$ 56787	
25. Total money borrowed	86977	
26. Total paid on debt (principal)	65419	
27. Total household & pers. cash/non-cash exp. (4/23)	15902	
28. Ratio: Tot. farm exp. to tot. farm receipts (O.S.)	.750	
	Jan.1	Dec.31
29. Ratio: Total assets to total liabilities	2.424	2.476
30. Ratio: Non-real estate assets -non-real estate liabilities	2.513	2.541
31. Ratio: Real est. assets to real est. liabilities	2.346	2.412
32. Ratio: Net worth to total liabilities	1.424	1.476
33.* Ratio: Cash oper. exp. to adjusted tot. farm sales (O.S.)		.743
34. Ratio: Tot. farm receipts to aver. farm capital (W.F.)		.350
35. Ratio: Total farm receipts to average farm capital (O.S.)		.577

*Adjusted total farm sales does not include sale of capital assets

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

*The ratio of 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 - 1977
 For those farms with a complete record of all assets and liabilities

Items	88 Low Profit Farms	
	Jan.1 - - - - -	Dec.31
1. Total productive livestock	\$ 28279	27205
2. Crop, seed & feed	39335	42946
3. Total power,machinery & equipment	38311	42059
4. Land	131920	139852
5. Buildings, fences, etc.	27441	29503
6. Total farm capital	\$ 265286	281565 *
7. Non-farm assets	21766	26078
7A. Cash on hand & in bank	2275	2819
8. Dwelling	12114	12739
9. Total assets	\$ 301441	323201 *
10. Real estate mortgages	55256	69896
11. Chattel mortgages	43629	48331
12. Notes	17165	20097
13. Accounts payable	2945	2176
14. Total liabilities	\$ 118995	140500 *
15. Farmers net worth	\$ 182446	182700 *
16. Gain (or loss) in net worth		\$ 254 *
	* * *	
17. Supplementary management information		
18. Ret.to operators labor (6B/47)	\$ (-5736)	
19. Return to capital & fam.labor (6B/48)	2831	
20. Non-farm income		
21. Outside investment income	687	
22. Other pers.inc.& inc. tax refund	3157	
22A. Sale of pers.share-dwell,auto & truck	17	
23. Total non-farm income	\$ 3860	
24. Total family farm & non-farm income	\$ 6691	
25. Total money borrowed	102969	
26. Total paid on debt (principal)	81464	
27. Total household & pers.cash/non-cash exp. (4/23)	11635	
28. Ratio: Tot.farm exp.to tot.farm receipts (O.S.)	1.053	
	Jan.1	Dec.31
29. Ratio: Total assets to total liabilities	2.533	2.300
30. Ratio: Non-real estate assets - non-real estate liabilities	2.039	1.999
31. Ratio: Real estate assets to real estate liabilities	3.103	2.605
32. Ratio: Net worth to total liabilities	1.533	1.300
33.* Ratio: Cash operating expenses to adjusted total farm sales (O.S.)		.874
34. Ratio: Total farm receipts to average farm capital (W.F.)		.289
35. Ratio: Total farm receipts to average farm capital (O.S.)		.396
*Adjusted total 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 - 1977

Items	Average 475	High 95	Low 95
1. Sale of livestock & livestock products			
2. Dairy cows	\$ 570	794	405
3. Dairy products	5149	6845	4146
4. Other dairy cattle	417	276	412
5. Beef breeding cattle	708	327	948
6. Beef feeder cattle	18491	28750	22778
7. Hogs complete & mixed	17162	29909	13550
8. Hogs finishing	6217	9413	9549
9. Hogs producing weaning pigs	1118	1664	349
10. Sheep, goats & wool, farm flock	241	91	72
11. Sheep & wool, feeder lambs	68		
12. Chickens (including hens & broilers)	289		1473
13. Turkeys			
14. Eggs			14
15. Other productive livestock & products	49	25	92
16. Other miscellaneous livestock income			
17. Total sales of productive livestock	\$ 50478 *	78095 *	53787 *
18. Sale of crops			
19. Wheat	1364	1579	1806
20. Other small grain	1013	1277	967
21. Corn	9493	14163	9104
22. Soybeans	15229	26613	13724
23. Other row crops	158	476	41
24. Legumes & other roughage	260	364	266
25. Grass seed			
26. Fruits & nuts			
27. Vegetables, roadside market & specialty			
28. Nursery, timber & other	3		
29. Set aside acres - government payments	100	80	180
30. Total sales from crops	\$ 27620 *	44551 *	26088 *
31. Capital assets sold	745	314	1794
32. Gas tax refund	135	155	166
33. Income from work off the farm	1292	1481	1660
34. Custom work enterprise income	65	126	143
35. Patronage refunds	945	1334	907
36. Miscellaneous farm income	1041	1064	1481
37. Total farm sales	\$ 82321 *	127119 *	86026 *
38. Increase in farm capital	30188	54808	14861
39. Family living from the farm	312	392	286
40. Total farm receipts (37)+(38)+(39)	112820 *	182319 *	101172 *
41. Adjusted total farm sales (37)-(31)	81576	126805	84232
42. Total cash farm operating expense	63768	93786	74453
43. Net cash operating income	\$ 17808 *	33019 *	9779 *

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.

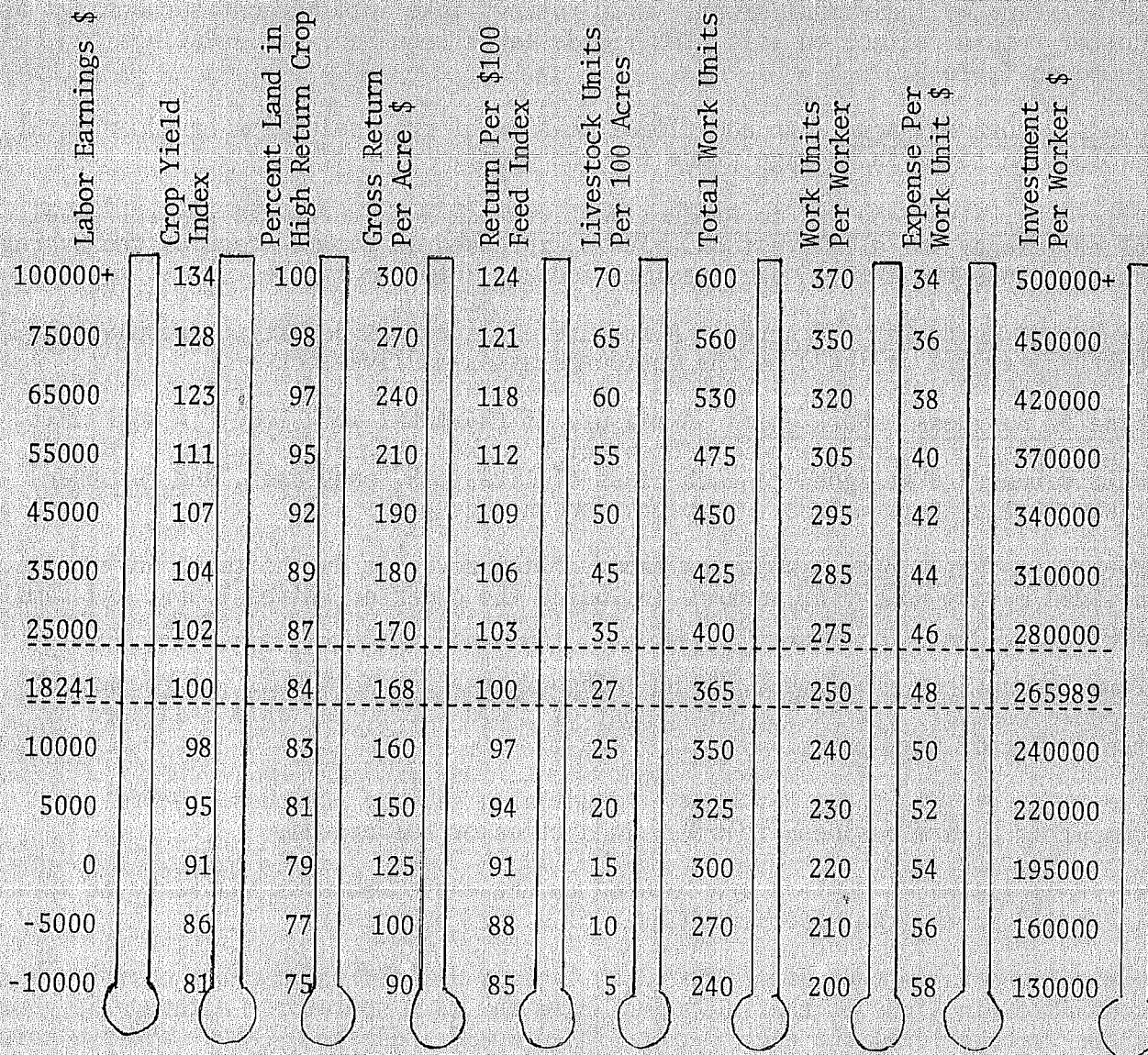
Table 6B - Operator's Share of Cash Expenses - 1977

Items	Average 475	High 95	Low 95
1. Purchase of livestock			
2. Dairy cows	\$ 255	247	325
3. Other dairy cattle	147	9	155
4. Beef breeding cattle	274	356	212
5. Beef feeder cattle	9510	16947	9878
6. Hogs complete	1415	1656	1580
7. Hogs finishing	2392	3428	4008
8. Hogs producing weaning pigs	103	139	102
9. Sheep, farm flock	76	34	25
10. Sheep, feeder lambs	22		
11. Chickens	56	75	177
12. Turkeys			
13. Other productive livestock	18	16	24
14. Miscellaneous livestock expense	1526	2301	1571
15. Feed bought	13525	20733	15750
16. Fertilizer	4195	5550	5642
17. Chemicals	2312	3662	2377
18. Other crop expense	3983	5397	4235
19. Irrigation operation cost			
20. Custom work operator costs, including labor	17	29	19
21. Custom work hired	1745	2245	1966
22. Repair & upkeep of livestock equipment	448	698	463
23. Repair & upkeep of farm real estate	805	1191	776
24. Gas,oil,grease bought (farm share)	2734	3497	2991
25. Repair & operation of mach., tractor, truck, auto (F.S.)	3087	3660	3915
26. Repair & upkeep of irrigation equipment			
27. Repairs, custom work enterprise	5	13	12
28. Wages of hired labor	1512	2437	2118
29. Personal property & real estate taxes	1098	1685	1374
30. Cash rent	4313	5834	4537
31. General farm expenses	1172	1405	1328
32. Telephone expense (farm share)	186	227	215
33. Electricity expense (farm share)	542	825	551
34. Interest expense	6296	9490	8127
35. Total cash operating expense	\$ 63768 *	93786 *	74453 *
36. Power,crop & gen.mach bought (farm share)	10259	12437	11907
37. Irrigation equipment bought			
38. Custom work enterprise equipment bought			
39. Livestock equipment bought	993	1486	872
40. New real estate & improvements	14304	20248	12566
41. Total farm purchases (35) thru (40)	\$ 89323 *	127956 *	99797 *
42. Decrease in farm capital			
43. Interest on farm capital (equity)	6606	9937	7791
44. Unpaid family labor	390	431	396
45. Board furnished hired labor	55	50	45
46. Total farm expense (41) thru (45)	\$ 96374 *	138374 *	108029 *
47. Return to operator labor & mgmt. (operators share) (6A/40)-(46)	\$ 16446 *	43945 *	(-6857)*
48. Return to capital & family labor (47)+(44)+(43)	\$ 23442	54313	1330

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 - 1977

Items	Average 475	High 95	Low 95
1. Return to operators labor & management	\$ 18241	48899	(-8486)
2. Crop yield index	100.0	107.4	89.2
3. Percent tillable land in high return crops	83.6	86.2	81.8
4. Gross return per till.acre (exclud.pasture)	\$167.73	184.00	157.45
5. Return per \$100 feed fed prod.livstk.index	100.0	105.0	80.0
6.* Livestock units per 100 acres	26.52	26.89	25.86
7. Size of business-work units	365.39	505.53	349.74
8. Work units per worker	250.27	312.06	244.57
9. Power mach.,equip.,bldg.exp.per worker unit	\$ 47.61	45.97	54.67
10. Farm capital investment per worker	\$265989	316464	304356
11. Index of return per \$100 feed fed			
12. 6100A beef breeding farm,whole herd,commercial	100.0	108.9	72.5
13. 6140A beef feeders feedlot	100.0	117.7	72.5
14. 6240A chickens,laying flock,commercial	100.0	100.0	
15. 6260A chickens, broilers	100.0		100.0
16. 6290A dairy cows, commercial, general	100.0	96.3	83.0
17. 6310A other dairy,comm., replacements	100.0	113.9	67.2
18. 6420A geese	100.0		46.7
19. 6470A hogs,farrow,finish,general	100.0	99.8	84.2
20. 6490A hogs, finishing	100.0	116.6	73.3
21. 6510A hogs, weaning pig production	100.0	96.9	73.0
22. 6530A hogs, mixed systems	100.0	120.3	76.2
23. 6550A horses	100.0		69.7
24. 6570A lambs, feeders	100.0		
25. 6670A sheep, farm, commercial	100.0	90.5	69.7
30. Number of animal units	97.41	137.97	95.37
31. Work units			
32. Crops	176.44	249.69	175.42
33. Productive livestock	159.71	216.40	141.30
34. Other productive work units	29.24	39.44	33.03
35. Expenses per work units			
36. Tractor & crop machinery expense	\$ 29.11	27.47	34.94
37. Farm share of auto & truck expense	\$ 7.05	5.96	7.76
38. Farm share of electric expense	\$ 1.53	1.38	1.54
39. Livestock equipment expense	\$ 2.93	3.00	2.94
40. Building,fence & tiling expense	\$ 6.99	8.15	7.50
41.** Tractor & crop mach.expense per crop acre	\$ 29.07	26.98	33.38
42. Farm Power & mach.cost alloc.to livestock	\$ 1106.12	1282.18	1093.44
43. Building,fence & tiling cost allocation to crops BCAF (1)	871.02	2072.44	1306.21
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 475 Farms - 1977

	<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	}	45.0	C	74.7 bu.	1.12	1.61
Wheat			C	48.8 bu.	1.89	18.80
Flax			B	19.5 bu.	3.84	16.66
Corn		132.3	A	98.1 bu.	1.49	30.96
Soybeans		124.4	A	36.3 bu.	3.26	74.10
Corn silage		32.2	A	13.4 ton	10.31	50.28
Alfalfa		30.8	B	3.3 ton	29.97	47.65
Other tillable land		29.5				
Total non-tillable		18.4				
Total		412.6				

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

	*	*	*
Supplementary Management Information	Average	High	Low
	475	95	95
Percent land tillable	88.4	89.6	89.3
Percent land in high return crops	83.6	86.2	81.8
*Fertilizer cost per acre	\$ 13.40	13.85	14.29
*Crop chemicals per acre	7.01	7.52	7.49
*Seed & other costs per acre	12.41	12.29	12.73
*Gas, oil & grease bought per acre	5.92	5.46	6.10
*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 - 1977

	AVERAGE 323	HIGH 161	LOWS 161
1. Acres	42.2	36.9	47.5
	Per Acre	Per Acre	Per Acre
2. Yield	74.7	92.4	61.0
3. Value per bushel	1.00	1.01	.98
4. Crop product return	\$ 74.72	93.33	59.75
5. Other crop income	10.83	12.82	9.33
6. Total crop return	\$ 85.55 *	106.15 *	69.08 *
7. Direct Costs			
8. Fertilizer	\$ 5.52	\$ 5.20	\$ 5.72
9. Chemicals	.88	.87	.91
10. Seed & other	6.92	7.24	6.73
11. Special hired labor	.02		.04
12. Custom work hired	4.36	5.23	3.71
13. Irrigation operation			
14. Total direct costs	\$ 17.70	18.54	17.11
15. Return over direct costs	\$ 67.85 *	87.61 *	51.97 *
16. Allocated costs			
17. Farm power & machinery - ownership	8.58	\$ 9.00	\$ 8.25
18. Farm power & machinery - operation	8.70	8.76	8.69
19. Irrigation equipment - ownership			
20. Land costs	46.10	51.60	40.51
21. Miscellaneous costs	.12	.05	.17
22. *Interest on mach. & equip. investment	2.74	3.13	2.46
23. Total allocated costs	\$ 66.24	72.54	60.08
24. Return over all listed costs	\$ 1.61 *	15.07 *	(-8.11) *
25. Supplementary management information			
26. Work units assigned per acre	.30	.30	.30
27. Power costs allocation factor	1.00	1.00	.98
28. Total listed cost per bu.of prod.	1.12	.99	1.26
29. Return over listed costs per bush.	.02	.16	(-.13)
30. Breakeven yield	83.94	90.18	78.77
31. Total listed costs per acre	\$ 83.94 *	\$ 91.08 *	\$ 77.19 *

* 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 - 1977

	AVERAGE 127	HIGH 63	LOW 63
1. Acres	41.2	36.0	45.8
2. Yield	per acre 48.8	per acre 60.9	per acre 39.3
3. Value per bushel	2.23	2.23	2.22
4. Crop product return	\$ 108.91	135.92	87.25
5. Other crop income	2.35	2.97	1.92
6. Total crop return	\$ 111.26	138.89	89.17
7. Direct Costs			
8. Fertilizer	\$ 9.30	11.44	\$ 7.51
9. Chemicals	1.31	1.42	1.22
10. Seed & other	8.45	9.56	7.73
11. Special hired labor	.12	.17	.09
12. Custom work hired	3.33	3.47	3.30
13. Irrigation operation			
14. Total direct costs	\$ 22.51	26.06	19.85
15. Return over direct costs	\$ 88.75 *	112.83 *	69.32 *
16. Allocated costs			
17. Farm power & machinery - ownership	9.52	\$ 9.97	\$ 9.23
18. Farm power & machinery -operation	8.46	8.45	8.42
19. Irrigation equipment - ownership			
20. Land costs	48.84	53.38	44.29
21. Miscellaneous costs	.46	.03	.83
22. *Interest on mach.& equip.investment	2.67	2.68	2.65
23. Total allocated costs	\$ 69.95	74.51	65.42
24. Return over all listed costs	\$ 18.80 *	38.32 *	3.90 *
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.	1.89	1.65	2.17
29. Return over listed costs per bushel	.39	.63	.10
30. Breakeven yield	41.46	45.10	38.41
31. Total listed costs per acre	\$ 92.46 *	\$ 100.57 *	\$ 85.27 *

* 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 - 1977

		AVERAGE 33	HIGH 16	LOW 16
1. Acres		41.8	37.0	44.7
		per acre	per acre	per acre
2. Yield		19.5	25.6	14.5
3. Value per bushel		4.24	4.25	4.23
4. Crop product return	\$	82.68	108.78	61.14
5. Other crop income		8.85	11.73	6.85
6. Total crop return	\$	91.53	120.51	67.99
7. Direct costs				
8. Fertilizer	\$	2.32	\$ 2.54	\$ 1.81
9. Chemicals		1.87	2.30	1.66
10. Seed & other		10.50	11.41	9.51
11. Special hired labor		.07	.19	
12. Custom work hired		3.80	6.51	1.95
13. Irrigation operation				
14. Total direct costs	\$	18.56	22.95	14.93
15. Return over direct costs	\$	72.97 *	97.56 *	53.06 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	8.03	\$ 8.65	\$ 7.02
18. Farm power & machinery - operation		7.93	7.68	8.04
19. Irrigation equipment - ownership				
20. Land costs		38.61	40.88	34.19
21. Miscellaneous costs		.05	.14	
22. *Interest on mach. & equip. investment		2.69	2.78	2.47
23. Total allocated costs	\$	56.31	60.13	51.72
24. Return over all listed costs	\$	16.66 *	37.43 *	1.34 *
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 bu. of production		3.84	3.25	4.61
29. Return over listed costs per bushel		.85	1.46	.09
30. Breakeven yield		17.66	19.55	15.76
31. Total listed costs per acre	\$	74.87 *	\$ 83.08 *	\$ 66.65 *

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

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

Table 10-3011 Sunflowers - 1977

	AVERAGE 8
1. Acres	50.4
	per acre
2. Yield	13.1
3. Value per cwt.	7.66
4. Crop product return	100.62
5. Other crop income	
6. Total crop return	\$ 100.62 *
7. Direct costs	
8. Fertilizer	\$ 13.69
9. Chemicals	13.06
10. Seed & other	8.37
11. Special hired labor	
12. Custom work hired	6.77
13. Irrigation operation	
14. Total direct costs	41.89
15. Return over direct costs	\$ 58.73 *
16. Allocated costs	
17. Farm power & machinery - ownership	\$ 12.15
18. Farm power & machinery - operation	10.91
19. Irrigation equipment - ownership	
20. Land costs	50.25
21. Miscellaneous costs	
22. *Interest on mach.& equip.investment	3.45
23. Total allocated costs	76.76
24. Return over all listed costs	\$ (-18.03) *
25. Supplementary management information	
26. Work units assigned per acre	.55
27. Power costs allocation factor	.94
28. Total listed cost per cwt.of production	9.03
29. Return over listed costs per cwt.	(-1.37)
30. Breakview yield	15.49
31. Total listed costs per acre	\$ 118.65 *

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

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

Table 10-0222 Crop Data for Corn for Grain - 1977

		AVERAGE 460	HIGH 230	LOW 230
1. Acres		112.0	119.4	104.4
		per acre	per acre	per acre
2. Yield		98.1	114.6	79.1
3. Value per bushel		1.80	1.79	1.81
4. Crop product return	\$	176.56	205.14	143.13
5. Other crop income		.75	.39	1.18
6. Total crop return	\$	177.31 *	205.53 *	144.31 *
7. Direct costs				
8. Fertilizer	\$	25.06	\$ 28.17	\$ 21.37
9. Chemicals		9.04	9.68	8.29
10. Seed & other		15.68	17.40	13.73
11. Special hired labor		.06	.06	.07
12. Custom work hired		2.69	3.02	2.32
13. Irrigation operation				
14. Total direct costs	\$	52.53	58.33	45.78
15. Return over direct costs	\$	124.78 *	147.20 *	98.53 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	18.67	\$ 19.85	\$ 17.29
18. Farm power & machinery - operation		15.68	15.35	16.06
19. Irrigation equipment - ownership				
20. Land costs		53.84	62.07	45.69
21. Miscellaneous costs		.22		.48
22. *Interest on mach.& equip.investment		5.41	5.67	5.11
23. Total allocated costs	\$	93.82	102.94	84.63
24. Return over all listed costs	\$	30.96 *	44.26 *	13.90 *
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 bu.of production		1.49	1.41	1.65
29. Return over listed costs per bushel		.32	.39	.18
30. Breakeven yield		81.31	90.09	72.05
31. Total listed costs per acre	\$	146.35 *	\$ 161.27 *	\$ 130.41 *

*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 10-0291 Crop Data for Soybeans - 1977

		AVERAGE 380	HIGH 190	LOW 190
1. Acres		103.4	113.5	93.1
		per acre	per acre	per acre
2. Yield		36.3	41.0	30.6
3. Value per bushel		5.27	5.26	5.27
4. Crop product return	\$	191.23	215.45	161.33
5. Other crop income		1.07	.93	1.27
6. Total crop return	\$	192.30 *	216.38 *	162.60 *
7. Direct Costs				
8. Fertilizer	\$	1.04	\$ 1.36	\$.67
9. Chemicals		8.08	8.33	7.78
10. Seed & other		12.21	12.23	12.19
11. Special hired labor		.74	.48	1.05
12. Custom work hired		2.18	2.09	2.30
13. Irrigation operation				
14. Total direct costs	\$	24.25	24.49	23.99
15. Return over direct costs	\$	168.05 *	191.89 *	138.61 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	16.68	\$ 17.04	\$ 16.24
18. Farm power & machinery - operation		12.55	12.45	12.70
19. Irrigation equipment - ownership				
20. Land costs		60.22	65.11	55.38
21. Miscellaneous costs		.04		.10
22. *Interest on mach.& equip.investment		4.46	4.54	4.29
23. Total allocated costs	\$	93.95	99.14	88.71
24. Return over all listed costs	\$	74.10 *	92.75 *	49.90 *
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 prod.		3.26	3.02	3.68
29. Return over listed costs per bushel		2.04	2.26	1.63
30. Breakeven yield		22.43	23.50	21.39
31. Total listed costs per acre	\$	118.20 *	\$ 123.63 *	\$ 112.70 *

*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 - 1977

		AVERAGE 180	HIGH 90	HIGH 90
1. Acres		32.2	32.5	31.2
		per acre	per acre	per acre
2. Yield		13.4	16.5	10.2
3. Value per ton		14.06	14.01	14.12
4. Crop product return	\$	188.63	231.05	143.91
5. Other crop income				
6. Total crop return	\$	188.63 *	231.05 *	143.91 *
7. Direct costs				
8. Fertilizer	\$	23.35	\$ 24.25	\$ 21.67
9. Chemicals		9.07	9.85	8.14
10. Seed & other		11.77	12.18	11.41
11. Special hired labor		.03		.06
12. Custom work hired		3.07	2.92	3.27
13. Irrigation operation		.09		.22
14. Total direct costs	\$	47.38	49.20	44.77
15. Return over direct costs	\$	141.25 *	181.85 *	99.14 *
16. Allocated costs				
17. Farm power & machinery - ownership	\$	20.02	\$ 20.25	\$ 19.51
18. Farm power & machinery - operation		17.98	18.00	17.54
19. Irrigation equipment - ownership				
20. Land costs		47.19	50.42	43.77
21. Miscellaneous costs		.09		.19
22. *Interest on mach.& equip.investment		5.69	5.77	5.58
23. Total allocated costs	\$	90.97	94.44	86.59
24. Return over all listed costs	\$	50.28 *	87.41 *	12.55 *
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		10.31	8.71	12.89
29. Return over listed costs per ton		3.75	5.30	1.23
30. Breakeven yield		9.84	10.25	9.30
31. Total listed costs per acre	\$	138.35 *	143.64 *	131.36 *

*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 - 1977

		AVERAGE 76
1.	Acres	27.7
2.	Yield	per acre 6.4
3.	Value per ton	15.03
4.	Crop product return	\$ 96.03
5.	Other crop income	
6.	Total crop return	\$ 96.03 *
7.	Direct costs	
8.	Fertilizer	\$ 4.66
9.	Chemicals	.47
10.	Seed & other	7.47
11.	Special hired labor	
12.	Custom work hired	2.20
13.	Irrigation operation	.11
14.	Total direct costs	\$ 14.91
15.	Return over direct costs	\$ 81.12 *
16.	Allocated costs	
17.	Farm power & machinery - ownership	\$ 12.48
18.	Farm power & machinery - operation	11.15
19.	Irrigation equipment - ownership	
20.	Land costs	45.49
21.	Miscellaneous costs	
22.	*Interest on mach.& equip.investment	3.87
23.	Total allocated costs	\$ 72.99
24.	Return over all listed costs	\$ 8.13 *
25.	Supplementary Management Information	
26.	Work units assigned per acre	.40
27.	Power costs allocation factor	1.00
28.	Total listed cost per ton of production	13.76
29.	Return over listed costs per ton	1.27
30.	Breakeven yield	8.85
31.	Total listed costs per acre	\$ 87.90 *

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

Table 10-0401 Crop Data for Alfalfa Hay - 1977

	AVERAGE 260	HIGH 130	LOW 130
1. Acres	30.8	30.2	31.3
2. Yield	per acre 3.3	per acre 4.7	per acre 2.0
3. Value per ton	44.58	45.03	44.12
4. Crop product return	\$ 149.09	213.21	88.82
5. Other crop income	.10	.23	
6. Total crop return	\$ 149.19 *	213.44 *	88.82 *
7. Direct costs			
8. Fertilizer	\$ 6.02	\$ 8.21	\$ 3.88
9. Chemicals	.13	.23	.03
10. Seed & other	5.79	6.29	5.31
11. Special hired labor	.13	.20	.07
12. Custom work hired	5.00	5.03	4.95
13. Irrigation operation			
14. Total direct costs	\$ 17.07	19.96	14.24
15. Return over direct costs	\$ 132.12 *	193.48 *	74.58 *
16. Allocated costs			
17. Farm power & machinery - ownership	\$ 16.74	\$ 18.11	\$ 15.34
18. Farm power & machinery - operation	18.32	18.52	18.08
19. Irrigation equipment - ownership			
20. Land costs	44.02	50.53	37.52
21. Miscellaneous costs	.07		.13
22. *Interest on mach.& equip.investment	5.32	5.75	4.87
23. Total allocated costs	\$ 84.47	92.91	75.94
24. Return over all listed costs	\$ 47.65 *	100.57 *	(-1.36)*
25. Supplementary management information			
26. Work units assigned per acre	.60	.60	.60
27. Power costs allocation factor	.97	1.00	.93
28. Total listed cost per ton of production	29.97	23.84	44.66
29. Return over listed costs per ton	14.64	21.24	.18
30. Breakeven yield	2.31	2.51	2.11
31. Total listed costs per acre	\$ 101.54 *	\$ 112.87 *	\$ 90.18 *

*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 - 1977

	AVERAGE 176	HIGH 35	LOW 35
1. Pounds of hogs produced	99790	82228	72020
2. Net increase in value of hogs	\$ per cwt. 41.39	per cwt. 44.98	per cwt. 37.25
3. Other miscellaneous hog income			
4. Total value produced	41.39 *	44.98 *	37.25 *
5. Pounds of feed fed			
6. Corn	286.8	274.3	307.3
7. Small grain	26.6	38.6	30.5
8. Complete ration	18.6	21.2	28.7
9. Protein, salt & mineral & milk	79.7	66.4	100.0
10. Total concentrates	411.7	400.5	466.5
11. Forages	3.6	8.4	1.9
12. Feed cost			
13. Grains	11.65	11.45	12.57
14. Complete ration	1.58	1.71	2.41
15. Protein, salt & mineral & milk	10.86	7.91	14.66
16. Forages	.11	.25	.06
17. Pasture			
18. Total feed costs	\$ 24.20	21.32	29.70
19. Return over feed costs	\$ 17.19 *	23.66 *	7.55 *
20. Other direct costs			
21. Miscellaneous livestock expense	.87	.88	1.11
22. Veterinary expense	.65	.67	.63
23. Custom work	.25	.23	.23
24. Special hired labor	.03		.01
25. Total other direct costs	\$ 1.80	1.78	1.98
26. Return over feed & other direct costs	\$ 15.39 *	21.88 *	5.57 *
27. Allocated costs			
28. Power & machinery costs (PCAF 1.00)	.83	.73	.84
29. Livestock equipment costs (ECAF 1)	.86	.85	.85
30. Building & fences (BCAF 1)	1.34	.88	1.38
31. Total allocated costs	\$ 3.03	2.46	3.07
32. Return over all listed costs	\$ 12.36 *	19.42 *	2.50 *
33. Supplementary Management Information			
34. Return for \$100 feed fed	171.02	210.99	125.42
35. Price received per cwt.all animals	39.86	40.92	35.60
36. Price received per cwt.sold mkt.only	40.52	41.09	38.52
37. Number of litters farrowed	55	46	32
38. Number of pigs born per litter	9.5	10.6	9.3
39. Number of pigs weaned per litter	7.6	8.7	7.6
40. Percent death loss	13.8	13.7	11.1
41. Average weight of all hogs sold	230.6	227.5	231.9
42. Average weight of mkt.hogs sold	232.3	225.6	263.9
43. Price per cwt.concentrate fed	5.85	5.44	6.35
44. Price per cwt.protein,salt & mineral	13.63	11.92	14.66
45. Pounds of pork purchased	3279	2343	4556
46. Total listed costs per cwt.pork produced	29.03 *	\$ 25.56 *	\$ 34.75 *

*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 - 1977

	AVERAGE 71	HIGH 14	LOW 14
1. Average number of pigs on hand	191.8	164.5	168.0
2. Pounds of hogs produced	84206	86574	62546
	per cwt.	per cwt.	per cwt.
3. Net increase in value of hogs	30.69	34.78	24.42
4. Other miscellaneous hog income			
5. Total value produced	\$ 30.69 *	34.78 *	24.42 *
6. Pounds of feed fed			
7. Corn	250.2	288.1	336.6
8. Small grain	12.0	17.6	6.1
9. Complete ration	57.8	17.8	76.8
10. Protein, salt & mineral & milk	53.9	43.6	67.3
11. Total concentrates	373.9	367.1	486.8
12. Forages	.2	.7	
13. Feed cost			
14. Grains	9.31	11.18	12.19
15. Complete ration	3.99	2.79	4.48
16. Protein, salt & mineral & milk	7.43	4.76	10.13
17. Forages		.02	
18. Pasture			
19. Total feed costs	\$ 20.73	18.75	26.80
20. Return over feed costs	\$ 9.96 *	16.05 *	(-2.38) *
21. Other direct costs			
22. Miscellaneous livestock expense	.39	.50	.54
23. Veterinary expense	.37	.15	.11
24. Custom work	.19	.21	.15
25. Special hired labor		.03	
26. Total other direct costs	\$.95	.89	.80
27. Return over feed & other direct costs	\$ 9.01 *	15.16 *	(-3.18) *
28. Allocated costs			
29. Power & machinery costs (PCAF 1.00)	.52	.34	.62
30. Livestock equipment costs (ECAAF 1)	.58	.45	.53
31. Building & fences (BCAF 1)	.17	.59	.87
32. Total allocated costs	\$ 1.27	1.38	2.02
33. Return over all listed costs	\$ 7.74 *	13.78 *	(-5.20) *
34. Supplementary management information			
35. Return for \$100 feed fed	148.03	185.46	91.10
36. Price received per cwt.	40.53	41.03	39.80
37. Average weight of pigs sold	224.0	225.0	219.3
38. Average price paid per pig bought	37.58	33.33	40.50
39. Average weight per pig bought	43.5	39.7	46.1
40. Number of pigs purchased	422	367	383
41. No. pigs transferred in	75	138	7
42. Average weight of pigs transferred in	41.8	33.5	39.1
43. Pounds of pork purchased	18363	14584	17669
44. Percent death loss	3.7	3.4	8.4
45. Price per cwt. concentrate fed	5.54	5.37	5.51
46. Price per cwt. protein, salt & mineral fed	13.78	10.90	15.07
47. Effective daily gain-pounds p/d/p/pig	1.20	1.44	1.02
48. Total listed cost per cwt. pork prod.	22.95 * \$	21.02 * \$	29.62 *

*Farms included in table 11B purchased all hogs 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 - 1977

	AVERAGE 25
1. Number of litters farrowed	85
2. Net increase in value of hogs	\$ 334.01
3. Other miscellaneous weaning pigs income	
4. Total value produced	\$ 334.01
5. Pounds of feed fed	
6. Corn	1330.1
7. Small grain	288.4
8. Complete ration	566.9
9. Protein, salt & mineral, & milk	350.0
10. Total concentrates	2535.4
11. Forages	13.5
12. Feed cost	
13. Grains	55.85
14. Complete ration	44.27
15. Protein, salt & mineral & milk	45.56
16. Forages	.34
17. Pasture	
18. Total feed costs	\$ 146.02
19. Return over feed costs	\$ 187.99 *
20. Other direct costs	
21. Miscellaneous livestock expense	14.09
22. Veterinary expense	12.22
23. Custom work	1.40
24. Special hired labor	.07
25. Total other direct costs	\$ 27.78
26. Return over feed & other direct costs	\$ 160.21 *
27. Allocated costs	
28. Power & machinery costs (PCAF 1.00)	10.02
29. Livestock equipment costs (ECAAF 1)	8.00
30. Building & fences (BCAF 1)	12.70
31. Total allocated cost	\$ 30.72
32. Return over all listed costs	\$ 129.49 *
33. Supplementary management information	
34. Return for \$100 feed fed	228.74
35. Average price received per animal sold	42.25
36. Average price per pig sold or transferred	36.26
37. Average weight per pig sold or transferred	42.2
38. Number of pigs produced	677
39. Number of pigs born per litter	10.3
40. Number of pigs weaned per litter	8.1
41. Percent death loss	19.1
42. Price per cwt.concentrate fed	5.75
43. Price per cwt.protein,salt & mineral fed	13.02
44. Feed & supplemental costs per pig produced	21.82
45. Total listed costs per litter	\$ 204.52 *

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 12-6200 - Dairy Cows - 1977

	AVERAGE 56	HIGH 11	LOW 11
1. Average number of cows	35.0	41.2	36.1
	per cow	per cow	per cow
2. Pounds of milk	12657	14584	10769
3. Pounds of butterfat	431.6	492.2	367.4
4. Percent of butterfat in milk	3.4	3.4	3.4
5. Value of produce			
6. Dairy products sold	\$ 1064.77	\$1213.50	\$ 917.45
7. Dairy products used in home	6.71	7.01	3.66
8. Milk fed to livestock	10.77	15.97	6.04
9. Net increases in value of cows	(-47.20)	(-9.34)	(-67.29)
10. Other miscellaneous dairy income			
11. Total value produced	\$ 1035.05 *	1227.14 *	859.86 *
12. Pounds of feed fed			
13. Corn	3825.9	3131.0	5792.9
14. Small grain	737.3	832.6	770.1
15. Complete ration	720.3	734.8	34.2
16. Protein, salt & mineral	552.0	490.9	719.8
17. Total concentrates	5835.5	5189.3	7317.0
18. Legume hay	5519.7	6822.6	4237.7
19. Other hay & dry roughage	753.6		1980.9
20. Silage	10910.7	11660.6	11743.6
21. Feed costs			
22. Grains	167.57	146.84	239.86
23. Complete ration	47.06	50.58	3.32
24. Protein, salt & mineral	78.00	62.35	119.09
25. All hay & dry roughage	148.60	143.08	149.34
26. Silage	87.69	93.50	92.24
27. Pasture	4.83	5.32	4.76
28. Total feed costs	\$ 533.75	501.67	608.61
29. Return over feed cost	\$ 501.30 *	725.47 *	251.25 *
30. Other direct costs			
31. Miscellaneous livestock expense	48.74	55.12	43.41
32. Veterinary expense	17.69	18.16	11.39
33. Custom work hired	48.80	52.62	43.16
34. Special hired labor	.40	.44	1.47
35. Total other direct costs	\$ 115.63	126.34	99.43
36. Return over feed & other direct costs	385.67 *	599.13 *	151.82 *
37. Allocated costs			
38. Power & machinery costs (PCAF 1.00)	39.41	41.16	37.47
39. Livestock equipment costs (ECAAF 1)	33.99	35.49	37.29
40. Building & fences (BCAF 1)	36.09	37.85	32.67
41. Total allocated costs	\$ 109.49	114.50	107.43
42. Return over all listed costs	\$ 276.18 *	484.63 *	44.39 *
43. Supplementary management information			
44. Return for \$100 feed fed	193.92	244.61	141.28
45. Feed cost per cwt. milk	4.22	3.44	5.66
46. Feed cost per pound of butterfat	1.24	1.02	1.66
47. Pounds of milk per pound of concent.	2.17	2.81	1.47
48. Average price per cwt. milk sold	8.55	8.47	8.63
49. Average price per pound of butterfat	2.51	2.51	2.53
50. Total listed costs per cwt. mlk prod.	6.00	5.09	7.57
51. Dairy cow turnover percentage	37.1	34.0	44.3
52. Total listed costs per cow	\$ 758.87 * \$	742.51 * \$	815.47 *

Table 13-6310 - Other Dairy - 1977

	AVERAGE 56	HIGH 11	LOW 11
1. Number of head	45.5	34.9	53.1
	per head	per head	per head
2. Net increase in value	\$ 203.23	326.22	124.01
3. Other miscellaneous income			
4. Total income	\$ 203.23 *	326.22 *	124.01 *
5. Pounds of feed fed			
6. Corn	697.6	629.0	785.3
7. Small grain	314.3	326.9	573.6
8. Complete ration	94.0	83.1	100.4
9. Protein, salt & minerals	111.5	101.4	76.9
10. Hay & dry roughage	1639.9	1434.1	1993.7
11. Silage	4487.3	3409.7	5288.5
12. Milk	108.2	92.5	142.7
13. Feed cost			
14. Grains	36.48	31.83	50.45
15. Complete ration	6.07	5.64	7.65
16. Protein, salt & minerals	15.12	12.81	11.45
17. Hay & dry roughage	41.12	32.64	42.90
18. Silage	37.45	26.68	43.01
19. Milk	8.22	5.76	11.32
20. Pasture	4.51	6.50	4.11
21. Total feed costs	\$ 148.97	121.86	170.89
22. Return over feed costs	\$ 54.26 *	204.36 *	(-46.88) *
23. Other direct costs			
24. Miscellaneous expense	4.42	2.29	2.66
25. Veterinary expense	1.60	2.66	.58
26. Custom work hired	1.23	1.38	1.22
27. Special hired labor	.04		
28. Total other direct costs	\$ 7.29	6.33	4.46
29. Return over feed & other direct costs	\$ 46.97 *	198.03 *	(-51.34) *
30. Allocated costs			
31. Power & machinery costs (PCAF 1.00)	6.87	5.92	6.48
32. Livestock equipment costs (BCAF 1)	5.81	4.40	6.84
33. Building & fences (BCAF 1)	6.55	9.52	4.25
34. Total allocated costs	\$ 19.23	19.84	17.57
35. Return over all listed costs	\$ 27.74 *	178.19 *	(-68.91) *
36. Supplementary management information			
37. Return for \$100 feed fed	136.43	267.69	72.57
38. Percent death loss - total	11.1	10.4	12.8
39. Percent calf death loss	22.9	21.2	28.2
40. Total listed costs per head	\$ 175.49 *	\$ 148.03 *	\$192.92 *

Table 14 - All Dairy Cattle - 1977

	AVERAGE 56	HIGH 11	LOW 11
1. Average number of cows	35.0	41.2	36.1
	per cow	per cow	per cow
2. Value of dairy products	1068.35	1179.59	828.60
3. Net increase in value	219.89	330.99	164.29
4. Miscellaneous dairy income			
5. Total value produced	\$ 1288.24 *	1510.58 *	992.89 *
6. Pounds of feed fed			
7. Grains	5883.4	5166.2	7438.2
8. Complete rations	831.6	524.9	49.0
9. Protein, salt & min. incl. milk equiv.	690.1	814.7	550.0
10. Hay & dry roughage	8168.1	6420.2	8134.0
11. Silage	17107.7	15452.0	21434.5
12. Feed cost			
13. Grains	215.13	188.68	271.56
14. Complete rations	54.25	31.10	6.30
15. Protein, salt & minerals, incl. milk	105.73	120.39	89.03
16. Hay & dry roughage	198.55	164.57	211.88
17. Silage	140.94	124.24	181.92
18. Pasture costs	11.31	15.21	16.10
19. Total feed costs	\$ 725.91	644.19	776.79
20. Return over feed costs	\$ 562.33 *	866.39 *	216.10 *
21. Other direct costs			
22. Miscellaneous livestock expense	53.05	58.24	41.75
23. Veterinary expense	18.75	19.48	11.79
24. Custom work	49.66	58.40	38.44
25. Special hired labor	.46		1.72
26. Total other direct costs	\$ 121.92	136.12	93.70
27. Return over feed & other dir. costs	\$ 440.41 *	730.27 *	122.40 *
28. Allocated costs			
29. Power & machinery costs	48.14	48.84	51.20
30. Livestock equipment costs	42.74	38.60	38.98
31. Building & fences	42.68	65.03	30.23
32. Total allocated costs	\$ 133.56	152.47	120.41
33. Return over all listed costs	\$ 306.85 *	577.80 *	1.99 *
34. Supplementary management information			
35. Return for \$100 feed fed	177.47	234.49	127.82
36. Total listed costs per cow	\$ 981.39 *	\$ 932.78 *	\$ 990.90 *

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 - 1977

		AVERAGE 71	HIGH 14	LOW 14
1.	Average number of beef cows	40.1	27.1	33.1
2.	Average number of other beef animals & bulls	24.7	16.6	16.5
3.	Pounds of beef produced	15716	15575	6025
		per cow	per cow	per cow
4.	Net increase in value	\$ 183.67	223.75	145.32
5.	Other miscellaneous beef income			
6.	Total value produced	\$ 183.67 *	223.75 *	145.32 *
7.	Pounds of feed fed			
8.	Grain	182.4	195.5	277.9
9.	Protein,salt & mineral	77.6	109.5	45.6
10.	Legume hay	3175.7	1653.1	2741.5
11.	Other hay & dry roughage	1343.0	384.8	1326.7
12.	Silage	4218.6	3906.2	9328.9
13.	Feed Cost			
14.	Grain	6.46	7.08	9.94
15.	Protein,salt & mineral	8.08	11.40	6.34
16.	Legume hay	71.45	41.11	61.69
17.	Other hay & dry roughage	26.86	4.02	26.52
18.	Silage	33.69	31.77	65.29
19.	Pasture	20.42	30.52	27.16
20.	Total feed costs	\$ 166.96	125.90	196.94
21.	Return over feed cost	\$ 16.71 *	97.85 *	(-51.62)*
22.	Other direct costs			
23.	Miscellaneous livestock expense	6.53	3.47	3.47
24.	Veterinary expense	3.37	2.25	4.23
25.	Custom work	2.69	2.55	4.38
26.	Special hired labor	.02		
27.	Total other direct costs	\$ 12.61	8.27	12.08
28.	Return over feed & other direct costs	\$ 4.10 *	89.58 *	(-63.70)*
29.	Allocated costs			
30.	Power & machinery costs (PCAF 1.00)	10.80	15.71	12.07
31.	Livestock equipment costs (ECAAF 1)	10.51	14.77	12.60
32.	Building & fences (BCAF 1)	15.22	13.48	12.95
33.	Total allocated costs	\$ 36.53	43.96	37.62
34.	Return over all listed costs	\$ (-32.43)*	46.00 *	(-101.32)*
35.	Supplementary management information			
36.	Return for \$100 feed fed	110.00	177.69	73.78
37.	Price per cwt. sold	32.94	30.94	27.59
38.	Price per cwt.calves sold or transferred	39.27	42.17	39.55
39.	Average weight per head sold	685.9	713.5	926.3
40.	Average weight per calf sold or transferred	448.8	480.0	427.0
41.	Percent death loss	3.0	1.4	6.0
42.	Percent calf crop	93.2	98.0	87.1
43.	Total listed costs per cow	\$ 216.10 *	\$ 178.13 *	246.64 *

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 16A - 6670 - Sheep Farm Flock - 1977

	AVERAGE 19
1. Average number of ewes	64.4
2. Pounds of lamb & mutton produced	6606
3. Pounds of wool produced	661
	per ewe
4. Value of produce	
5. Wool	\$ 6.75
6. Net increase in value of animals	63.21
7. Other miscellaneous sheep income	
8. Total value produced	\$ 69.96
9. Pounds of feed fed	
10. Grain	382.3
11. Protein, salt & mineral	28.6
12. Legume hay	553.0
13. Other hay & dry roughage	52.1
14. Silage	383.8
15. Feed cost	
16. Grain	14.66
17. Protein, salt & mineral	3.48
18. Legume hay	15.42
19. Other hay & dry roughage	1.48
20. Silage	3.12
21. Pasture	2.36
22. Total feed costs	\$ 40.52
23. Return over feed costs	\$ 29.44 *
24. Other direct costs	
25. Miscellaneous livestock expense	2.17
26. Veterinary expense	1.20
27. Custom work	1.30
28. Special hired labor	
29. Total other direct costs	\$ 4.67
30. Return over feed & other direct costs	\$ 24.77 *
31. Allocated costs	
32. Power & machinery costs (PCAF 1.00)	6.59
33. Livestock equipment costs (ECAAF 1)	5.47
34. Building & fences (BCAF 1)	6.34
35. Total allocated costs	\$ 18.40
36. Return over all listed costs	\$ 6.37 *
37. Supplementary management information	
38. Return for \$100 feed fed	172.71
39. Price per cwt. lamb & mutton sold	48.70
40. Price per cwt. lamb sold or transferred	50.40
41. Average weight of lambs sold or trans.	105.5
42. Pounds of wool per sheep sheared	8.4
43. Number of ewes kept for lambing	33
44. Percent lamb crop	157.6
45. Percent death loss	7.7
46. Total listed costs per ewe	\$ 63.59 *

*Table 15B - 6140 Beef Feeders Feedlot - Calves 500 lbs. or less - 1977

	AVERAGE 66
1. Average number of beef feeders	91.9
2. Pounds of beef produced	55653
	per cwt.
3. Net increase in value of animals	42.34
4. Other miscellaneous beef income	
5. Total value produced	42.34
6. Pounds of feed fed	
7. Grain	412.7
8. Protein, salt & mineral	50.3
9. Legume hay	157.8
10. Other hay & dry roughage	6.4
11. Silage	1556.1
12. Feed cost	
13. Grain	15.22
14. Protein, salt & mineral	5.11
15. Legume hay	4.06
16. Other hay & dry roughage	.09
17. Silage	10.89
18. Pasture	.18
19. Total feed cost	\$ 35.55
20. Return over feed cost	\$ 6.79
21. Other direct costs	
22. Miscellaneous livestock expense	.35
23. Veterinary expense	.78
24. Custom work hired	.61
25. Special hired labor	
26. Total other direct costs	\$ 1.74
27. Return over feed & other direct costs	\$ 5.05
28. Allocated costs	
29. Power & machinery costs (PCAF 1.00)	.74
30. Livestock equipment costs (ECAF 1)	.68
31. Buildings & fences (BCAF 1)	1.11
32. Total allocated costs	\$ 2.53
33. Return over all listed costs	\$ 2.52
34. Supplementary management information	
35. Return for \$100 feed fed	\$ 127.41
36. Price per cwt. sold	38.54
37. Average weight per head sold	1058.4
38. Price per cwt. bought	39.87
39. Average weight per head bought	464.6
40. Number of head bought	88
41. Percent death loss	1.0
42. Effective daily gain-pounds per head per day	1.66
43. Total listed cost per cwt. produced	\$ 39.82 *

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.

Table 15B - 6141 Beef Feeders Feedlot - Yearlings 500-700 lbs. - 1977

	AVERAGE 71
1. Average number of beef feeders	116.05
2. Pounds of beef produced	83264
3. Net increase in value of animals	40.41
4. Other miscellaneous beef income	per cwt.
5. Total value produced	40.41
6. Pounds of feed fed	
7. Grain	435.2
8. Protein, salt & mineral	51.8
9. Legume hay	76.1
10. Other hay & dry roughage	18.4
11. Silage	1200.7
12. Feed cost	
13. Grain	17.31
14. Protein, salt & mineral	5.76
15. Legume hay	2.03
16. Other hay & dry roughage	.20
17. Silage	10.89
18. Pasture	.07
19. Total feed cost	\$ 36.26
20. Return over feed cost	\$ 4.15
21. Other direct costs	
22. Miscellaneous livestock expense	.59
23. Veterinary expense	.57
24. Custom work hired	.48
25. Special hired labor	
26. Total other direct costs	\$ 1.65
27. Return over feed & other direct costs	\$ 2.50
28. Allocated costs	
29. Power & machinery costs (PCAF 1)	.68
30. Livestock equipment costs (ECAF)	.49
31. Buildings & fences (BCAF)	1.07
32. Total allocated costs	\$ 2.24
33. Return over all listed costs	\$.26
34. Supplementary management information	
35. Return for \$100 feed fed	111.45
36. Price per cwt. sold	38.75
37. Average weight per head sold	1041.8
38. Price per cwt bought	41.30
39. Average weight per head bought	577.6
40. Number of head bought	142.8
41. Percent death loss	1.1
42. Effective daily gain - pounds per head per day	1.96
43. Total listed cost per cwt. produced	\$ 40.15 *

Pages 36 and 37 compare calves with yearlings purchased as feeders to feed out

Selected Livestock Data - for 475 Farms - 1977

	<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	24.20	17.19	171.02	412 lbs.
Cwt. Hogs finishing only	20.73	9.96	148.03	374 lbs.
Hogs - Weaning per litter	146.02	187.99	228.74	2548 lbs
Dairy cow	533.75	501.30	193.92	5835 lbs. conc. 17184 lbs. rough.
Other Dairy	148.97	54.26	136.43	1217 lbs. conc. 6127 lbs. rough.
Beef Cow - calf to weaning	166.96	16.71	110.00	260 lbs. conc. 8737 lbs. rough.
Cwt. Feeder cattle calves purchased	35.55	6.79	127.41	463 lbs. conc. 2183 lbs. rough.
Cwt. Feeder cattle yearlings purchased	36.26	4.15	111.45	487 lbs. conc. 1295 lbs. rough.
Ewe	40.52	29.44	172.71	410 lbs. conc. 989 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	40.52/cwt	232.3	---	\$ 29.03/cwt.
Hogs-finishing	40.53/cwt	224.0	37.58/head	22.95/cwt.
Feeder pigs	36.26/head	42.2	---	25.61/head
Dairy cow	8.55/cwt. milk	---	---	758.87/cow
Beef-calves sold	39.27/cwt.	448.8	---	216.10/cow
Feeder cattle-calves	38.54/cwt	1058.4	39.87/cwt	39.82/cwt.
Feeder cattle-yearlings	38.75/cwt	1041.8	41.30/cwt	40.15/cwt.
Ewes - lambs sold	50.40/cwt	105.5	---	63.59/ewe

AVERAGE PRICES FOR 1977 FARM GROWN FEEDSGrain

Corn . . . . .	.\$2.00 per bu.
Oats . . . . .	.\$1.20 per bu.
Barley . . . . .	.\$1.60 per bu.
Mixed grain	3½¢ per lb.

Hay

Alfalfa . . . . .	.55.00 per ton
Mixed . . . . .	.55.00 per ton
Wild . . . . .	.50.00 per ton

Other Roughages

Corn silage . . . . .	.16.00 per ton
Grass silage . . . . .	.15.00 per ton
Legume haylage . . . . .	.27.00 per ton
Green crop . . . . .	.14.00 per ton
Oats straw . . . . .	.50 per bale
Corn stacks	8.00 per ton

Pasture

Cows . . . . .	.\$6.00 per head per month
Young cattle	3.00 per head per month
Hogs . . . . .	.40 per head per month
Sheep	1.00 per head per month
Lambs . . . . .	.50 per head per month

OTHER NON-CASH COSTS

Unpaid family labor	\$15.00 per day
Board furnished hired labor	5.00 per day
Second operator's labor	600.00 per month
Interest on farm capital	6%

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 - 1973-77

	1973	1974	1975	1976	1977
Farm size	411	408	398	406	413
Labor earnings (whole farm)	52731	19438	17550	3012	18241
Return to capital & family labor	53768	23378	22378	11698	23442
Aver.investment/farm business	245458	316432	329186	372861	388344
Cash sales/farm business (T2A-37)	102738	110373	97819	103017	96581
Cash expense/farm business (T2B-39)	88519	78382	75817	91412	83702
Expenses/dollar of income (T5-28)	.66	.87	.86	.97	.85
Ratio of assets to liabilities (T5-L29)	2.63:1	3.24:1	3.16:1	2.68:1	2.42:1
Gain in net worth (T5-L16)	45366	11783	12062	2678	14827
Size of business (work units) (T1-L6)	399	389	371	381	365
Tractor & crop mach.expense per crop acre (T8-L41)	21.34	26.18	29.45	28.03	29.07

SOURCE OF INCOME CASH RECEIPTS

Income from livestock	66%	57%	60%	61%	55%
Income from crops	29%	39%	35%	32%	38%
Miscellaneous farm income	5%	4%	5%	7%	7%

FAMILY LIVING EXPENSES

Per year (T4-L23)	9739	12125	12876	14780	14796
Per month	812	976	1073	1231	1233

(42)

	1973	1974	1975	1976	1977
<u>Return Above Feed Cost Per:</u>					
Dairy cow	359	241	242	421	501
Beef cow	136	(-146)	(-43)	(-6)	17
Cwt.feeder cattle produced	9.26	(-20.24)	13.25	(-1.25)	2.07
Cwt.hogs produced	21.97	6.30	24.57	12.65	17.19
Cwt.feeder lambs produced	22.23	2.34	28.91	24.56	---
Ewe	3.93	(-16.96)	(-13.63)	(-2.57)	29.44
<u>Yield Per Acre</u>					
Corn, bu.	96.9	63.5	77.4	57.0	98.1
Soybeans, bu	32.6	27.2	34.5	23.4	36.3
Flax, bu.	20.3	13.4	14.7	12.0	19.5
Oats, bu.	71.9	65.5	70.4	50.6	74.7
Corn silage, ton	15.5	10.1	11.4	6.5	13.4
Alfalfa, ton	3.2	3.7	3.4	2.4	3.3
Wheat, bu.	--	36.7	36.9	38.7	48.8
<u>Return Over Total Costs Per Acre</u>					
Corn	101.96	89.68	44.89	(-4.68)	30.96
Soybeans	96.60	127.54	69.86	34.61	74.10
Flax	103.02	95.86	48.04	17.82	16.66
Oats	27.82	46.59	41.56	8.00	1.61
Corn silage	144.37	89.99	67.61	(-9.13)	50.28
Alfalfa	27.07	92.21	95.96	52.86	47.65
Wheat	---	74.91	72.84	44.72	18.80

Have You Checked Your Goals Lately?

The farm business analysis provides an excellent opportunity to do some serious thinking about both family and farm goals. Where are you heading this year? Next year? Ten years from now? If you have studied your analysis carefully, you should already have an idea of how well your business performed last year. But what are your plans for the future?

One of the aims of the farm management education program is to assist you in reaching your farm and family goals. But first you must know what those goals are.

Life is too short, and farming success too fragile to permit the luxury of aimless effort. To get somewhere, you've got to know where you are going and you've got to know how to get there.

Planning goals is not easy. Members of your family may not agree on what goals are important. You may have to give some serious thought to the goals you elect so that all the members of the family can benefit from your farming business. Remember that not all goals are related to farm income. You may find it important to consider social, community, family, church and education goals as well.

Setting up goals in a systematic way lets you fit the wants and desires of all of the family members into a plan. There are no right or wrong goals, since each family may approach the problems they face 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 your progress rather than an asset.

On the next page is a place for you to record your goals for this and future years. Take some time with your family to jot down the things you want to accomplish. Put them in order of priority. Next year, when you pull this report from your files, you will be able to determine if you were able to reach the goals your family established.

Thought for the year:

Pray for a good harvest, but keep on hoeing!

WHAT DOES YOUR FAMILY WANT?

Name _____ Date _____

Address _____

One of the steps for improving the farm and home business is to clarify what is wanted. You may know of things you've 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
FOR A PROFITABLE FARM BUSINESS:		
FOR SATISFYING LIVING:		
FOR DEVELOPMENT OF FAMILY MEMBERS:		
FOR LONG-TERM FINANCIAL SECURITY:		