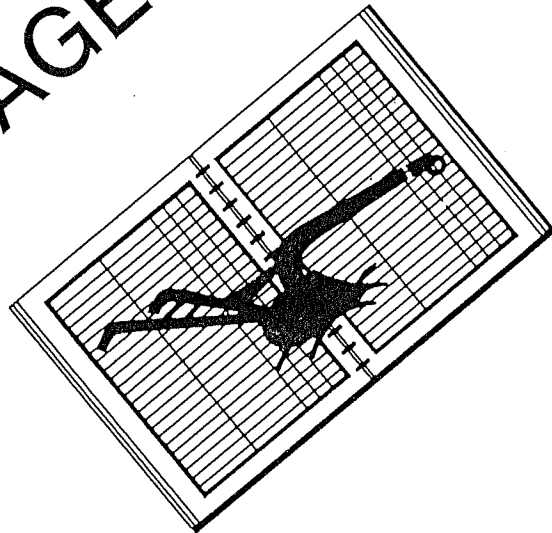


FARM BUSINESS MANAGEMENT



1989 Annual Report Southwestern Minnesota March, 1990

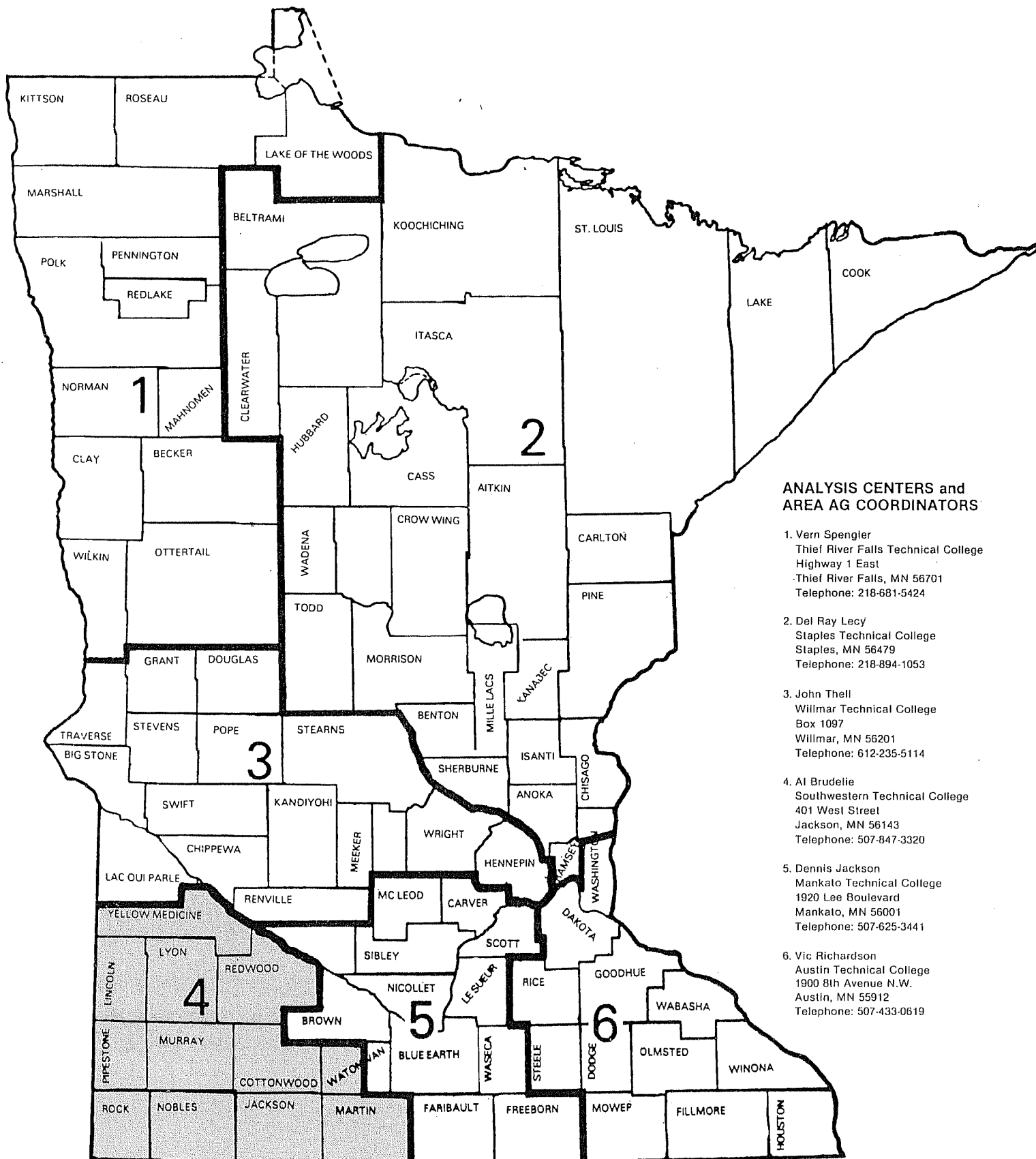
**AN ADULT
EDUCATIONAL
PROGRAM**

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

SOUTHWESTERN TECHNICAL COLLEGE

Price \$5.00

FARM BUSINESS MANAGEMENT COORDINATOR AREAS



ANALYSIS CENTERS and AREA AG COORDINATORS

1. Vern Spengler
Thief River Falls Technical College
Highway 1 East
Thief River Falls, MN 56701
Telephone: 218-681-5424
2. Del Ray Lecy
Staples Technical College
Staples, MN 56479
Telephone: 218-894-1053
3. John Thell
Willmar Technical College
Box 1097
Willmar, MN 56201
Telephone: 612-235-5114
4. Al Brudellie
Southwestern Technical College
401 West Street
Jackson, MN 56143
Telephone: 507-847-3320
5. Dennis Jackson
Mankato Technical College
1920 Lee Boulevard
Mankato, MN 56001
Telephone: 507-625-3441
6. Vic Richardson
Austin Technical College
1900 8th Avenue N.W.
Austin, MN 55912
Telephone: 507-433-0619

SETTING GOALS

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

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

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

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

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

WHAT DOES YOUR FAMILY WANT?

NAME _____ DATE _____

ADDRESS _____

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

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

SOUTHWEST MINNESOTA FARM BUSINESS MANAGEMENT PROGRAMS

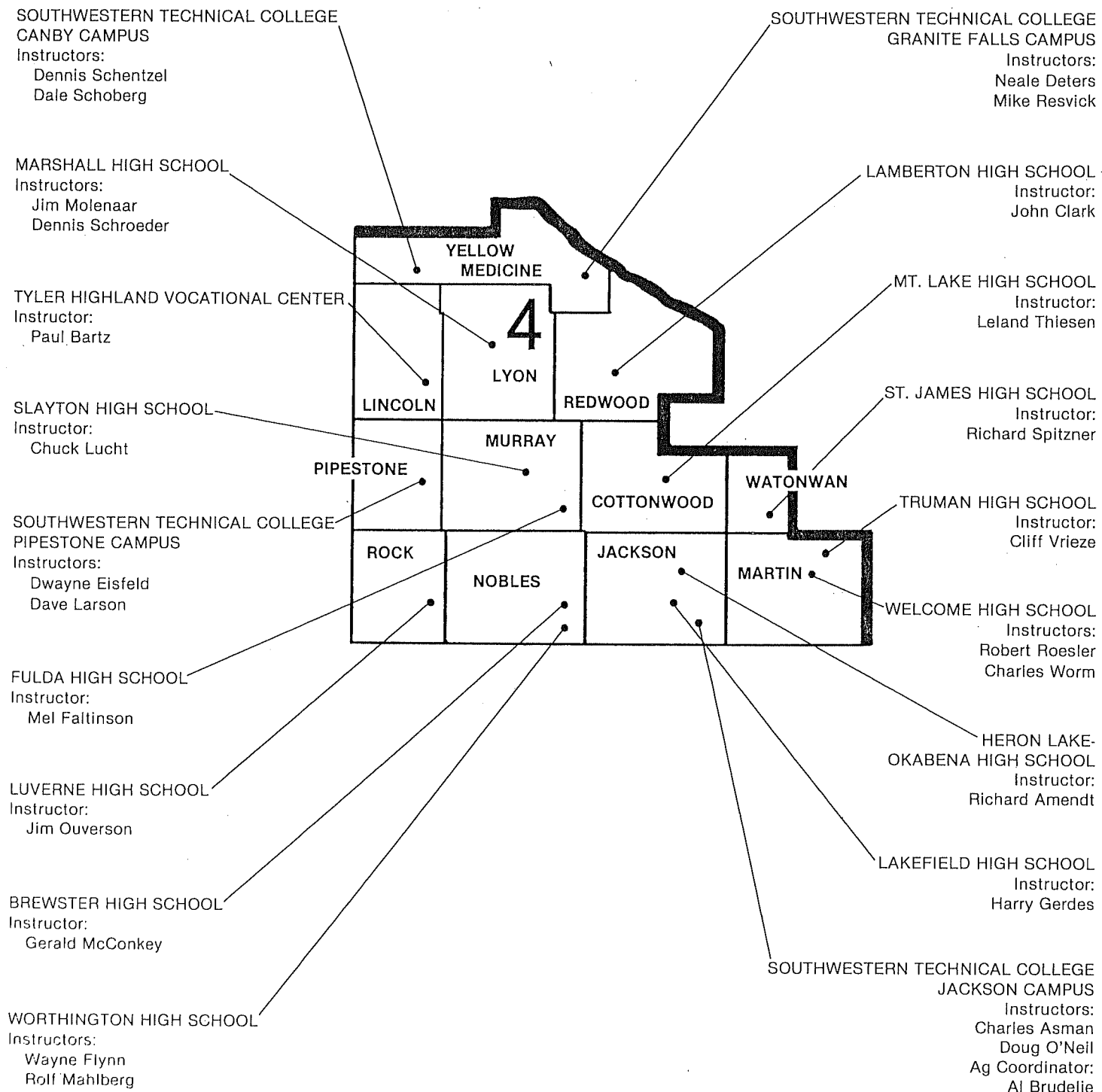


TABLE 16A 6670A SHEEP, FARM COMMERCIAL - 1989

AVERAGE OF 28 FARMS

		<u>FLOCK TOTAL</u>	<u>PER EWE</u>
1.	Average Number of Ewes	93.4	
2.	Pounds of Lamb, Mutton Produced	12,565	
3.	Pounds of Wool Produced	1,083	
4.	Value of Produce		
5.	Wool		10.04
6.	Net Increase in Value		88.18
7.	Other Miscellaneous Income		<u>0.33</u>
8.	<u>Total Value Produced</u>	9,205	98.55
9.	Feed Fed: Quantity & Cost	<u>LBS/EWE</u>	
10.	Grain	528.1	21.87
11.	Protein, Salt, Minerals	91.4	19.04
12.	Legume Hay	657.5	23.73
13.	Other Dry Hay and Roughage	214.6	3.58
14.	Silage	171.3	1.37
15.	Haylage	60.7	1.19
16.	Pasture		<u>1.46</u>
17.	<u>Total Feed Cost</u>	6,746	72.24
18.	Return Over Feed Costs	2,459	26.31
	<u>Other Direct Costs:</u>		
20.	Veterinary		4.74
21.	Breeding		0.40
22.	Miscellaneous		4.80
23.	Custom Work		0.64
24.	Lease Expense		0.17
25.	Special Hired Labor		0.15
26.	Assigned Interest		
27.	Total Other Direct Costs ,	<u>1,018</u>	<u>10.90</u>
28.	<u>Total Direct Costs Including Feed</u>	7,764	83.14
29.	Return Over All Direct Costs	1,441	15.41
30.	<u>Allocated Costs</u>		
32.	Act. Int. Paid Less Int. Assigned-L26	431	4.61
33.	General Hired Labor		1.15
34.	Utilities & Miscellaneous		6.76
35.	Power & Machinery		3.90
36.	Livestock Equipment		5.99
37.	Buildings & Fences		<u>3.78</u>
38.	Total Allocated Costs	2,445	<u>26.19</u>
39.	Total Actual Listed Costs	10,209	109.33
40.	<u>Return Over Actual Listed Costs</u>	-1,004	-10.78
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
41.	Total Listed Costs Adj. to 7% Min. Int.	10,588	113.36
42.	Return/Listed 7% Opportunity Interest	-1,383	-14.81
45.	Return/\$100 Feed Fed	136.45	
46.	Price/Cwt. Lamb Sold or Transferred	71.24	
47.	Ave Wt. Lamb Sold or Transferred	106	
48.	Lbs. Wool/Sheep Sheared	11.6	

TABLE 15B 6140A BEEF FEEDLOT - 1989

AVERAGE OF 53 FARMS

	<u>TOTAL</u>	<u>PER CWT.</u>	<u>PER HEAD</u>
1. Average Number of Animals	52.3		
2. Pounds of Animal Produced	35,609		
3. Net Increase In Value: Animals	21,239	59.65	406.10
4. Other Miscellaneous Income			
5. <u>Total Value Produced</u>	<u>21,239</u>	<u>59.65</u>	<u>406.10</u>
6. Feed Fed: Qty. & Cost	<u>LBS/CWT</u>		
7. Corn	571.9	22.05	150.15
8. Small Grains	3.9	0.20	1.38
9. Complete Rations	21.9	1.22	8.28
10. Protein, Salt, Minerals	108.2	7.04	47.95
11. Legume Hay	70.2	2.71	18.47
12. Other Dry Hay & Roughage	119.4	0.90	6.12
13. Silage	481.0	4.05	27.55
14. Haylage	75.5	0.92	6.29
15. Pasture		<u>0.10</u>	<u>0.65</u>
16. <u>Total Feed Costs</u>	<u>13,956</u>	<u>39.19</u>	<u>266.84</u>
17. Return Over Feed Costs	7,283	20.46	139.26
<u>Other Direct Costs</u>			
19. Veterinary		1.71	11.64
20. Miscellaneous		1.29	8.78
21. Custom Work & Lease Expense		0.83	5.68
22. Special Hired Labor		0.01	0.06
23. Assigned Interest		0.95	6.48
24. Total Other Direct Costs	<u>1,707</u>	<u>4.79</u>	<u>32.64</u>
25. <u>Total Direct Costs Incl. Feed</u>	<u>15,663</u>	<u>43.98</u>	<u>299.48</u>
26. Return Over All Direct Costs	5,576	15.67	106.62
27. <u>Allocated Costs</u>			
29. Act. Int. Pd Less Int. Assigned-L23		2.80	19.06
30. General Hired Labor		0.32	2.20
31. Utilities & Miscellaneous		1.81	12.29
32. Power & Machinery		0.94	6.43
33. Livestock Equipment		1.96	13.38
34. Buildings & Fences		1.07	7.31
35. Total Allocated Costs	<u>3,173</u>	<u>8.90</u>	<u>60.67</u>
36. Total Actual Listed Costs	<u>18,836</u>	<u>52.88</u>	<u>360.15</u>
37. <u>Return Over Actual Listed Costs</u>	<u>2,403</u>	<u>6.77</u>	<u>45.95</u>

*****SUPPLEMENTARY MANAGEMENT INFORMATION*****

38. Total Costs Adj. to 7% Min. Int.	20,541	57.69	392.76
39. Return/Listed 7% Opportunity Int.	698	1.96	13.34
42. Return/\$100 Feed Fed	152.19		
43. Price/Cwt. Sold	73.57		
44. Average Weight All Cattle Sold	1,046		
45. Price/Cwt. Bought	87.63		
46. Average Weight Cattle Bought	548		
47. Number of Head Bought	61		
48. Percent Death Loss	1.12		
49. Effective Daily Gain-Pound/Head/Day	1.87		
50. Price to Cover Purch. Price & Listed	135.22		
51. Hay Equivalent/Cwt.	0.19		
52. Corn Equivalent/Cwt.	10.28		

TABLE 15A 6100A BEEF FARM/WHOLE HERD/COMMERCIAL

AVERAGE OF 39 FARMS

		<u>HERD TOTAL</u>	<u>PER COW</u>
1.	Average Number of Beef Cows	38.4	
2.	Average Number of Other Beef/Bulls	22.9	
3.	Pounds of Beef Produced	17,352	
4.	Net Increase in Value: Beef	15,718	409.32
5.	Other Miscellaneous Income		
6.	<u>Total Value Produced</u>	<u>15,718</u>	<u>409.32</u>
7.	Feed Fed: Quantity & Cost	<u>LBS/COW</u>	
8.	Grain	942.3	39.97
9.	Protein, Salt, Minerals	103.5	14.82
10.	Legume Hay	1,753.8	57.29
11.	Other Dry Hay and Roughage	1,721.7	41.17
12.	Silage	1,833.3	15.63
13.	Haylage	798.1	11.22
14.	Pasture		<u>27.16</u>
15.	<u>Total Feed Costs</u>	<u>7,959</u>	<u>207.26</u>
16.	Return Over Feed Costs	7,759	202.06
	<u>Other Direct Costs</u>		
18.	Veterinary		10.78
19.	Breeding		1.61
20.	Miscellaneous		8.15
21.	Custom Work & Lease Expense		1.64
22.	Special Hired Labor		0.13
23.	Assigned Interest		
24.	Total Other Direct Costs	<u>857</u>	<u>22.31</u>
25.	<u>Total Direct Costs Incl. Feed</u>	<u>8,816</u>	<u>229.57</u>
26.	Return Over All Direct Costs	6,902	179.75
	<u>Allocated Costs</u>		
28.	Actual Interest Paid Less		
29.	Interest Assigned-L23		25.26
30.	General Hired Labor		4.82
31.	Utilities & Miscellaneous		19.90
32.	Power & Machinery		10.71
33.	Livestock Equipment		16.58
34.	Buildings & Fences		<u>8.38</u>
35.	Total Allocated Costs	<u>3,289</u>	<u>85.65</u>
36.	Total Actual Listed Costs	12,105	315.22
37.	<u>Return Over Actual Listed Costs</u>	<u>3,613</u>	<u>94.10</u>
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
38.	Total Costs Adj. to 7% Min. Int.	13,673	356.08
39.	Return Over Listed & 7% Opportunity		
40.	Interest Cost	2,045	53.24
42.	Return/\$100 Feed Fed	197.46	
43.	\$/Cwt. Breeding Animals Sold	73.74	
44.	Ave. Weight of Animals Sold	708.75	
45.	Number of Head Bought	5	
46.	Percent Death Loss	4.26	
47.	Price/Cwt. Calf Sold/Transfer	81.23	
48.	Ave. Weight Calf Sold/Transfer	541	
49.	Percent Calf Crop Born	94.87	
50.	Percent Calf Crop Weaned	92.31	
51.	Percent Calf Death Loss	5.41	
52.	Cull Income/Breeding Cow	108.52	
53.	Hay Equivalent/Cow	2.04	
54.	Corn Equivalent/Cow	16.83	

TABLE 14 ALL DAIRY + DUAL PURPOSE CATTLE - 1989

		10 HIGH RETURN FARMS PER COW	10 LOW RETURN FARMS PER COW
1.	Average Number of Cows	41.9	41.9
2.	Pounds of Milk	17,399	11,569
3.	Pounds of Butterfat	622.65	380.82
4.	Percent of Butterfat in Milk	3.58	3.29
5.	Value of Produce		
6.	Dairy Products Sold	2,252.58	1,429.07
7.	Dairy Products Used in Home	5.37	4.32
8.	Milk Fed to Livestock	1.65	10.53
9.	Net Increase in Value:	614.92	251.91
10.	Other Miscellaneous Income		
11.	<u>Total Value Produced</u>	<u>2,874.52</u>	<u>1,695.83</u>
12.	Feed Fed: Qty. & Cost	<u>LBS/COW</u>	<u>LBS/COW</u>
13.	Corn	6,081	7,225
14.	Small Grain	389	190
15.	Complete Ration	1,084	615
16.	Protein, Salt, Minerals	<u>1,771</u>	<u>1,033</u>
17.	<u>Total Grain Mix</u>	9,325	9,063
18.	Legume Hay	6,510	8,224
19.	Other Dry Hay & Roughage	845	722
20.	Haylage	2,158	1,265
21.	Silage	13,392	10,869
22.	Pasture	<u>10.72</u>	
23.	<u>Total Feed Costs</u>	<u>1,057.79</u>	<u>1,021.07</u>
24.	Return Over Feed Cost	1,816.73	674.76
	<u>Other Direct Costs</u>		
26.	Veterinary	56.28	35.97
27.	Breeding	32.22	10.72
28.	Miscellaneous	119.64	88.09
29.	Custom Work & Lease Expense	62.58	47.80
30.	Special Hire Labor	46.25	9.14
31.	Assigned Interest		
32.	Total Other Direct Costs	<u>316.97</u>	<u>191.72</u>
33.	<u>Total Direct Costs Incl. Feed</u>	<u>1,374.76</u>	<u>1,212.79</u>
34.	Return Over All Direct Costs	1,499.76	483.04
	<u>Allocated Costs</u>		
37.	Int. Pd Less Int. Assigned-L31	64.77	86.23
38.	General Hired Labor	66.01	31.34
39.	Utilities & Miscellaneous	108.07	79.90
40.	Power & Machine	66.55	34.45
41.	Livestock Eqp.	57.17	34.28
42.	Bldg/Fences	<u>73.43</u>	<u>31.89</u>
43.	Total Allocated Costs	<u>436.00</u>	<u>298.09</u>
44.	Total Actual Listed Costs	1,810.76	1,510.88
45.	<u>Return Over Actual Listed Costs</u>	<u>1,063.76</u>	<u>184.95</u>
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
46.	Total Costs Adj. 7% Int.		
47.	Return/Listed 7% Opportunity Int.		
50.	Return/\$100 Feed Fed	272.00	166.00
51.	Lbs. of Milk/Lbs. Grain Mix	1.87	1.28
52.	Average Price/Cwt. Sold	12.97	12.46
53.	Dairy Cow Turnover %	35.80	38.19
54.	Approx. Dry Matter/Cow	54	54
55.	Percent Calf Death Loss	5.43	7.78
56.	Total Investment/Cow	10,948.81	5,687.33
57.	Total Debt/Cow	2,903.63	2,557.71

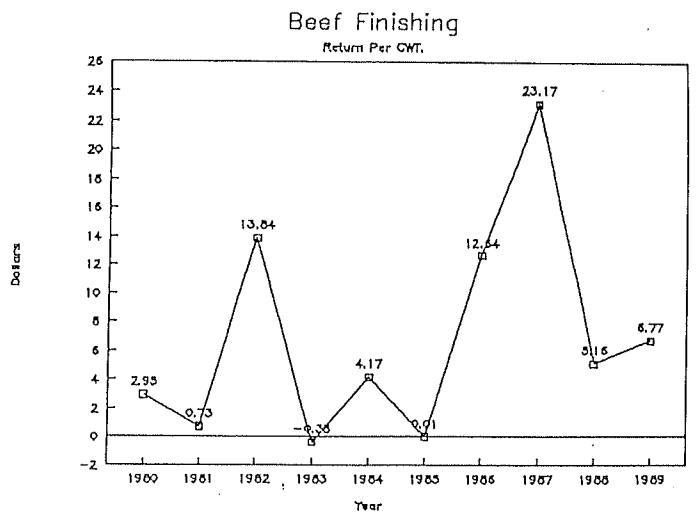
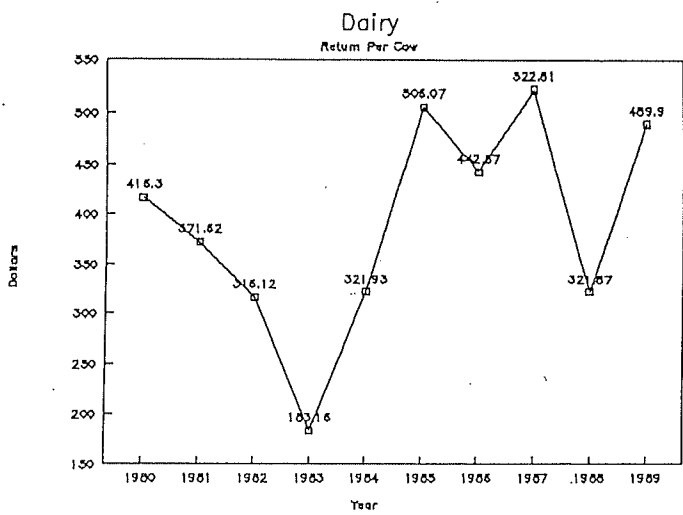
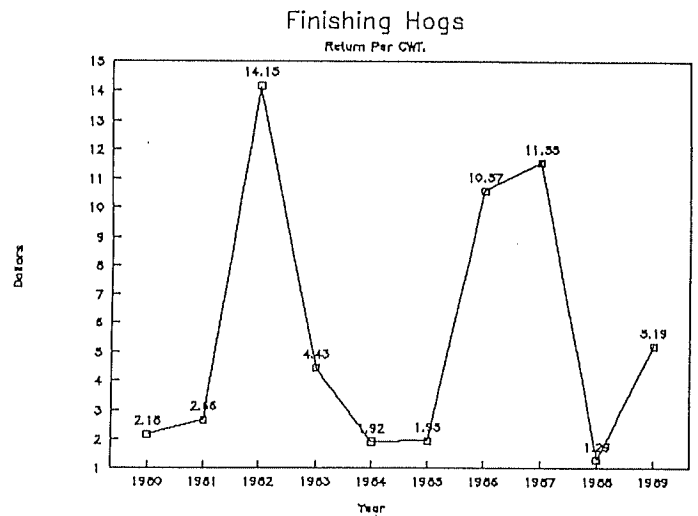
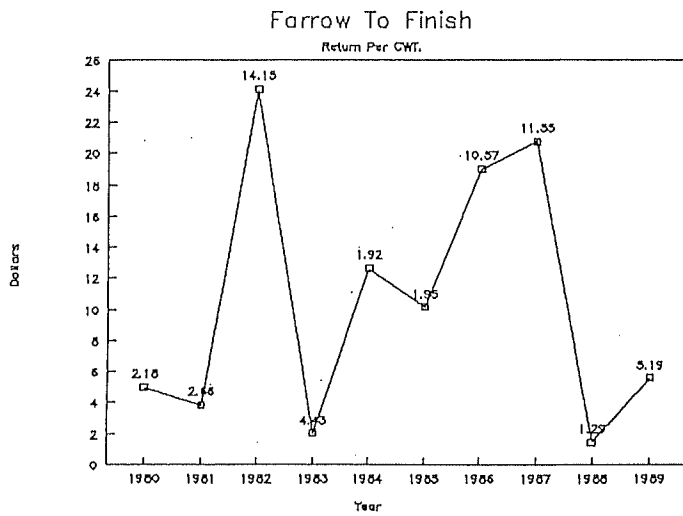
TABLE 14 ALL DAIRY + DUAL PURPOSE CATTLE - 1989

AVERAGE OF 52 FARMS

	<u>HERD TOTAL</u>	<u>PER COW</u>	<u>CWT. MILK</u>
1. Average Number of Cows	51.3		
2. Pounds of Milk		15,088	
3. Pounds of Butterfat		497.67	
4. Percent of Butterfat in Milk		3.32	
5. Value of Produce			
6. Dairy Products Sold		1,896.2	
7. Dairy Products Used in Home		4.35	
8. Milk Fed to Livestock		12.11	
9. Net Increase in Value:		409.04	
10. Other Miscellaneous Income		<u>0.10</u>	
11. <u>Total Value Produced</u>	119,108	2,321.80	15.48
12. Feed Fed: Qty. & Cost	LBS/COW		
13. Corn	6,644	260.43	1.74
14. Small Grain	320	22.16	0.15
15. Complete Ration	1,162	73.43	0.49
16. Protein, Salt, Minerals	<u>1,953</u>	<u>275.19</u>	<u>1.84</u>
17. <u>Total Grain Mix</u>	10,079	631.21	4.22
18. Legume Hay	5,152	198.67	1.33
19. Other Dry Hay & Roughage	1,701	17.47	0.12
20. Haylage	3,595	61.50	0.41
21. Silage	14,623	129.06	0.86
22. Pasture	<u>HERD TOTAL</u>	<u>6.57</u>	
23. <u>Total Feed Costs</u>	53,582	1,044.48	6.98
24. Return Over Feed Cost	65,526	1,277.32	8.50
<u>Other Direct Costs</u>			
26. Veterinary		47.47	0.32
27. Breeding		26.00	0.17
28. Miscellaneous		107.52	0.72
29. Custom Work & Lease Expense		72.88	0.49
30. Special Hire Labor		50.62	0.34
31. Assigned Interest			
32. Total Other Direct Costs	<u>15,621</u>	<u>304.49</u>	<u>2.04</u>
33. <u>Total Direct Costs Incl. Feed</u>	69,203	1,348.97	9.02
34. Return Over All Direct Costs	49,905	972.83	6.46
<u>Allocated Costs</u>			
37. Int. Pd Less Int. Assigned-L31		85.54	0.57
38. General Hired Labor		49.30	0.33
39. Utilities & Miscellaneous		88.95	0.59
40. Power & Machine		55.60	0.37
41. Livestock Eqp.		73.33	0.49
42. Bldg/Fences		61.96	0.41
43. Total Allocated Costs	<u>21,273</u>	<u>414.68</u>	<u>2.76</u>
44. Total Actual Listed Costs	90,476	1,763.65	11.78
45. <u>Return Over Actual Listed Costs</u>	28,632	558.15	3.70
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
46. Total Costs Adj. 7% Int.			
47. Return/Listed 7% Opportunity Int.			
50. Return/\$100 Feed Fed	222		
51. Lbs. of Milk/Lbs. Grain Mix	1.49		
52. Average Price/Cwt. Sold	12.75		
53. Dairy Cow Turnover %	35.09		
54. Approx. Dry Matter/Cow	58		
55. Percent Calf Death Loss	6.06		
56. Total Investment/Cow	7,754		
57. Total Debt/Cow	2,641		

TABLE 13 6310A OTHER DAIRY/COMMERCIAL REPLACEMENT - 1989

		AVERAGE OF 50 FARMS	10 HIGH RETURN FARMS	10 LOW RETURN FARMS
		<u>PER HEAD</u>	<u>PER HEAD</u>	<u>PER HEAD</u>
1.	Average Number of Head	64.8	42.8	56.8
2.	Net Increase in Value:	376.65	626.21	280.51
3.	Other Miscellaneous Inc			
4.	<u>Total Value Produced</u>	<u>376.65</u>	<u>626.21</u>	<u>280.51</u>
5.	Feed Fed: Qty. & Cost	<u>LBS/HEAD</u>		
6.	Corn	1,374	53.55	45.14
7.	Small Grain	90	5.52	5.86
8.	Complete Ration	184	9.91	4.44
9.	Protein, Salt, Minerals	<u>597</u>	<u>40.37</u>	<u>42.76</u>
10.	<u>Total Grain Mix</u>	2,245	109.35	98.20
11.	Legume Hay	1,221	43.87	31.89
12.	Other Dry Hay & Roughage	770	9.23	9.91
13.	Haylage	373	5.99	1.29
14.	Silage	4,804	42.52	43.25
15.	Milk	56	8.64	0.86
16.	Pasture		<u>3.33</u>	<u>1.75</u>
17.	<u>Total Feed Costs</u>	14,446	222.93	187.15
18.	Return Over Feed Cost		153.72	439.06
<u>Other Direct Costs</u>				
20.	Veterinary		7.79	6.26
21.	Breeding		1.56	
22.	Miscellaneous		8.61	3.60
23.	Custom Work & Lease Exp.		2.11	0.61
24.	Special Hired Labor		3.24	
25.	Assigned Interest			
26.	Total Other Direct Costs		<u>23.31</u>	<u>10.47</u>
27.	<u>Total Direct Costs Include Feed</u>		246.24	197.62
28.	Return Over All Direct Costs		130.41	428.59
<u>Allocated Costs</u>				
31.	Int. Pd Less Int. Assigned-L25		13.13	6.80
32.	General Hired Labor		8.06	1.21
33.	Utilities & Misc.		13.13	15.05
34.	Power & Machine		8.65	7.92
35.	Livestock Equipment		12.62	7.50
36.	Building/Fences		<u>10.33</u>	<u>6.78</u>
37.	Total Allocated Costs		<u>65.92</u>	<u>45.26</u>
38.	Total Act. Listed Costs		312.16	242.88
39.	<u>Return Return Over Actual Listed Costs</u>		64.49	383.33
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****				
40.	Total Costs Adj. 7% Int.		344.75	287.13
42.	Return/Listed 7% Opportunity Int.		31.90	339.08
44.	Return/\$100 Feed Fed		168.95	334.61
45.	Percent Calf Death Loss		6.12	8.82



THE FOUR GRAPHS ABOVE INDICATE THE RELATIVE PROFITABILITY OF THE LIVESTOCK INDUSTRY OVER THE PAST
TEN YEARS.

TABLE 12 6290A DAIRY COWS, COMMERCIAL, GENERAL - 1989

		16 HIGH RETURN FARMS	16 LOW RETURN FARMS
		PER COW	PER COW
1.	Average Number of Cows	66.53	38.3
2.	Pounds of Milk	17,399	11,567
3.	Pounds of Butterfat	595	414
4.	Percent of Butterfat in Milk	3.54	3.43
5.	Value of Produce		
6.	Dairy Products Sold	2,188.69	1,459.14
7.	Dairy Products Used in Home	3.91	4.02
8.	Milk Fed to Livestock	15.56	8.46
9.	Net Increase in Value:	-7.38	-39.90
10.	Other Miscellaneous Income		0.42
11.	<u>Total Value Produced</u>	2,200.78	1,432.14
12.	Feed Fed: Qty. & Cost	<u>LBS/COW</u>	<u>LBS/COW</u>
13.	Corn	5,222	5,502
14.	Small Grain	325	104
15.	Complete Ration	396	447
16.	Protein, Salt, Minerals	1,484	896
17.	<u>Total Grain Mix</u>	7,427	6,949
18.	Legume Hay	2,454	5,673
19.	Other Dry Hay & Roughage	424	2,395
20.	Haylage	3,537	1,419
21.	Silage	9,126	6,805
22.	Pasture	<u>HERD TOTAL</u>	<u>HERD TOTAL</u>
23.	<u>Total Feed Costs</u>	778.59	744.28
24.	Return Over Feed Cost	1,422.19	687.86
	<u>Other Direct Costs</u>		
26.	Veterinary	40.33	29.90
27.	Breeding	29.94	13.92
28.	Miscellaneous	109.89	75.35
29.	Custom Work & Lease Expense	78.71	60.47
30.	Special Hire Labor	108.57	9.84
31.	Assigned Interest		
32.	<u>Total Other Direct Costs</u>	367.44	189.48
33.	<u>Total Direct Costs Incl. Feed</u>	1,146.03	933.76
34.	Return Over All Direct Costs	1,054.75	498.38
	<u>Allocated Costs</u>		
37.	Int. Pd Less Int. Assigned-L31	49.62	66.08
38.	General Hired Labor	38.12	24.86
39.	Utilities & Miscellaneous	75.52	71.44
40.	Power & Machine	54.43	39.06
41.	Livestock Eqp.	65.68	59.17
42.	Bldg/Fences	46.25	30.25
43.	<u>Total Allocated Costs</u>	329.62	290.86
44.	<u>Total Actual Listed Costs</u>	1,475.65	1,224.62
45.	<u>Return Over Actual Listed Costs</u>	725.13	207.52
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
46.	Total Costs Adj. 7% Int.	1,509.56	1,247.23
47.	Return/Listed 7% Opportunity Int.	691.22	184.91
50.	Return/\$100 Feed Fed	282.66	192.42
51.	Lbs. of Milk/Lbs. Grain Mix	2.26	1.74
52.	Average Price/Cwt. Sold	13.12	12.22
53.	Dairy Cow Turnover %	36.09	33.94
54.	Approx. Dry Matter/Cow	37	43
55.	Percent Calf Death Loss	XXXX	XXXX
56.	Total Investment/Cow	XXXX	XXXX
57.	Total Debt/Cow	XXXX	XXXX

TABLE 12 6290A DAIRY COWS, COMMERCIAL, GENERAL - 1989

AVERAGE OF 47 FARMS

	<u>HERD TOTAL</u>	<u>PER COW</u>	<u>PER. CWT. MILK</u>
1. Average Number of Cows	52.1		
2. Pounds of Milk		15,088	
3. Pounds of Butterfat		496	
4. Percent of Butterfat in Milk		3.29	
5. Value of Produce			
6. Dairy Products Sold		1,909.08	
7. Dairy Products Used in Home		4.07	
8. Milk Fed to Livestock		12.02	
9. Net Increase in Value:		-31.31	
10. Other Miscellaneous Income		<u>0.12</u>	
11. <u>Total Value Produced</u>	<u>98,676</u>	<u>1,893.98</u>	<u>12.55</u>
12. Feed Fed: Qty. & Cost	<u>LBS/COW</u>		
13. Corn	5,079	200.06	1.33
14. Small Grain	213	16.10	0.11
15. Complete Ration	953	59.92	0.40
16. Protein, Salt, Minerals	<u>1,271</u>	<u>222.15</u>	<u>1.47</u>
17. <u>Total Grain Mix</u>	<u>7,516</u>	<u>498.23</u>	<u>3.31</u>
18. Legume Hay	3,550	142.76	0.95
19. Other Dry Hay & Roughage	834	6.81	0.05
20. Haylage	3,110	52.28	0.35
21. Silage	8,661	75.99	0.50
22. Pasture	<u>HERD TOTAL</u>	<u>1.21</u>	<u>0.01</u>
23. <u>Total Feed Costs</u>	<u>40,497</u>	<u>777.28</u>	<u>5.17</u>
24. Return Over Feed Cost	58,179	1,116.70	7.38
<u>Other Direct Costs</u>			
26. Veterinary		37.98	0.25
27. Breeding		23.30	0.15
28. Miscellaneous		98.02	0.65
29. Custom Work & Lease Expense		71.17	0.47
30. Special Hired Labor		50.61	0.34
31. Assigned Interest			
32. Total Other Direct Costs	<u>14,645</u>	<u>281.08</u>	<u>1.86</u>
33. <u>Total Direct Costs Incl. Feed</u>	<u>55,142</u>	<u>1,058.36</u>	<u>7.03</u>
34. Return Over All Direct Costs	43,534	835.62	5.52
<u>Allocated Costs</u>			
37. Int. Pd Less Int. Assigned-L31	3,645	69.96	0.46
38. General Hired Labor	2,233	42.86	0.28
39. Utilities & Miscellaneous	3,840	73.70	0.49
40. Power & Machine	2,367	45.44	0.30
41. Livestock Eqp.	3,315	63.63	0.42
42. Bldg/Fences	<u>2,612</u>	<u>50.13</u>	<u>0.33</u>
43. Total Allocated Costs	<u>18,012</u>	<u>345.72</u>	<u>2.28</u>
44. Total Actual Listed Costs	73,154	1,404.08	9.31
45. <u>Return Over Actual Listed Costs</u>	<u>25,522</u>	<u>489.90</u>	<u>3.24</u>
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
46. Total Costs Adj. 7% Int.	74,063	1,421.55	9.42
47. Return/Listed 7% Opportunity Int.	24,613	472.43	3.13
50. Return/\$100 Feed Fed	243.66		
51. Lbs. of Milk/Lbs. Grain Mix	2.01		
52. Average Price/Cwt. Sold	12.75		
53. Dairy Cow Turnover %	34.55		
54. Approx. Dry Matter/Cow	40		
55. Percent Calf Death Loss	XXX		
56. Total Investment/Cow	XXX		
57. Total Debt/Cow	XXX		

TABLE 11B 6490A - HOGS, FINISHING ENTERPRISE - 1989

AVERAGE OF 78 FARMS

		<u>TOTAL</u>	<u>PER CWT.</u>	<u>PER HEAD PRODUCED (L52)</u>
1.	Production - Pounds	153,234		177.8
2.	Net Increase in Value: Hogs	55,095	35.95	63.92
3.	Other Miscellaneous Income	<u>38</u>	<u>0.02</u>	<u>0.04</u>
4.	<u>Total Value Produced</u>	55,133	35.97	63.96
	Feed Fed: Quantity & Cost	<u>LBS/CWT</u>		
6.	Corn	280.2	11.13	19.78
7.	Other Grain	1.1	0.09	0.05
8.	Complete Ration	10.3	0.90	1.60
9.	Protein, Salt, Minerals	<u>70.5</u>	<u>11.40</u>	<u>20.27</u>
10.	<u>Total Grain Mix</u>	362.1	23.52	41.80
11.	Forages			
12.	Pasture			
13.	<u>Total Feed Cost</u>	<u>36,032</u>	<u>23.52</u>	<u>41.80</u>
14.	Return Over Feed Costs	19,101	12.45	22.16
	<u>Other Direct Costs</u>			
16.	Veterinary	1,008	0.66	1.17
17.	Miscellaneous	933	0.61	1.08
18.	Custom Work & Lease Expense	1,499	0.98	1.74
19.	Special Hired Labor	368	0.24	0.43
20.	Assigned Interest	<u>74</u>	<u>0.05</u>	<u>0.09</u>
21.	Total Other Direct Costs	<u>3,882</u>	<u>2.54</u>	<u>4.51</u>
22.	<u>Total Direct Costs Incl. Feed</u>	<u>39,914</u>	<u>26.06</u>	<u>46.31</u>
23.	Return Over All Direct Costs	15,219	9.91	17.65
	<u>Allocated Costs</u>			
26.	Act. Int. Paid Less Int. Assigned-L20	1,329	0.87	1.54
27.	General Hired Labor	571	0.37	0.66
28.	Utilities & Miscellaneous	1,517	0.99	1.76
29.	Power & Machinery	766	0.50	0.89
30.	Livestock Equipment	1,406	0.92	1.63
31.	Buildings & Fences	<u>1,637</u>	<u>1.07</u>	<u>1.90</u>
32.	Total Allocated Costs	<u>7,226</u>	<u>4.72</u>	<u>8.38</u>
33.	Total Actual Listed Costs	47,140	30.78	54.69
34.	<u>Return Over Actual Listed Costs</u>	7,993	5.19	9.27
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****				
35.	Total Costs Adj. to 7% Min. Int.	49,396	32.24	57.30
36.	Return/Listed 7% Opportunity Interest	5,737	3.73	6.66
39.	Return/\$100 Feed Fed	153.01		
40.	Ave. Wt./Mkt. Hog Sold	232.89		
41.	Price Rec'd/Cwt. Mkt Hog	44.54		
42.	Ave. Weight/Pig Purchased	48.07		
43.	Ave. Price/Pig Purchased	40.18		
44.	No. Pigs Purchased	476		
45.	No. Pigs Transferred Out/In	391		
46.	Pounds of Pork Purchased	22,883		
47.	Ave. Number of Pigs on Hand	273.5		
48.	Percent Death Loss	3.41		
49.	Effective Daily Gain	1.53		
50.	Price/Cwt. Grain Mix Fed	6.49		
51.	Price/Cwt. Protein, Salt, Minerals	16.17		
52.	Number of Pigs Produced	862		

TABLE 11A 6470A - HOGS, FARROW TO FINISH - 1989

		20 HIGH RETURN FARMS	20 LOW RETURN FARMS
		PER CWT.	PER CWT.
1.	Production	378,741	247,809
2.	Net Increase in Value: Hogs	48.09	43.26
3.	Other Miscellaneous Income		<u>0.01</u>
4.	<u>Total Value Produced</u>	48.09	43.27
	Feed Fed: Quantity & Cost		
	<u>LBS/CWT</u>		<u>LBS/CWT</u>
6.	Corn	10.14	11.02
7.	Other Grain	0.09	0.38
8.	Complete Ration	2.82	2.54
9.	Protein, Salt, Mineral	<u>11.27</u>	<u>17.83</u>
10.	<u>Total Grain Mix</u>	24.32	31.77
11.	Forages	0.01	
12.	Pasture		
13.	<u>Total Feed Cost</u>	24.33	31.77
14.	Return Over Feed Costs	23.76	11.50
	<u>Other Direct Costs</u>		
16.	Veterinary	1.64	0.89
17.	Breeding		
18.	Miscellaneous	0.73	1.12
19.	Custom Work & Lease	2.74	0.24
20.	Special Hired Labor	0.81	1.57
21.	Assigned Interest		<u>0.01</u>
22.	Total Other Direct Costs	<u>5.92</u>	<u>3.83</u>
23.	<u>Total Direct Costs Incl. Feed</u>	30.25	35.60
24.	Return Over All Direct Costs	17.84	7.67
	<u>Allocated Costs</u>		
27.	Act. Int. Paid Less Int. Assigned-L21	1.49	1.14
28.	General Hired Labor	1.09	0.20
29.	Utilities & Miscellaneous	1.95	0.90
30.	Power & Machinery	1.29	0.91
31.	Livestock Equipment	1.46	1.92
32.	Building & Fences	<u>2.99</u>	<u>1.62</u>
33.	Total Allocated Costs	<u>10.27</u>	<u>6.69</u>
34.	Total Actual Listed Costs	40.52	42.29
35.	<u>Return Over Actual Listed Costs</u>	7.57	0.98

*****SUPPLEMENTARY MANAGEMENT INFORMATION*****

36.	Total Costs Adj. to 7% Min. Int.	41.44	43.44
38.	Return/Listed 7% Opportunity Interest	6.65	-0.17
40.	Return/\$100 Feed Fed	197.59	136.24
41.	Ave. Wt./Mkt. Hog Sold	232	223
42.	Price Rec'd/Cwt. Mkt. Hogs	46.15	46.91
43.	Total No. Litters Farrowed	215	139
44.	Litters/Sow/Year	2.05	1.88
45.	No. Pigs Born/Litter	10.33	9.14
46.	No. Pigs Wean/Litter	8.85	7.91
47.	No. Pigs Produced/Sow/Year	16.90	13.72
48.	Litters/Crate/Year	12.15	8.69
49.	Pigs Weaned/Crate/Year	107.50	68.69
50.	Mkt. Animal Death as % of Total Loss	2.51	4.98
51.	Breeding Herd Death Loss	2.13	5.47
52.	Price/Cwt. Grain Mix Fed	7.26	7.72
53.	Price/Cwt. Protein, Salt, Minerals	15.49	17.77
54.	Total Death Loss Percent	13.94	23.39

TABLE 11A 6470A HOGS, FARROW, FINISH, GENERAL - 1989

AVERAGE OF 102 FARMS

		<u>TOTAL</u>	<u>PER CWT.</u>	<u>PER LITTER</u>
1.	Production	249,756		1,771
2.	Net Increase in Value: Hogs	113,946	45.62	808.13
3.	Other Miscellaneous Income	<u>9</u>		<u>.06</u>
4.	<u>Total Value Produced</u>	113,955	45.62	808.19
	Feed Fed: Quantity & Cost	<u>LBS/CWT</u>		
6.	Corn	272.14	27,129	10.86
7.	Other Grain	2.31	442	0.18
8.	Complete Ration	15.35	5,961	2.39
9.	Protein, Salt, Minerals	<u>95.58</u>	<u>34,862</u>	<u>13.96</u>
10.	<u>Total Grain Mix</u>	385.38	68,394	27.39
11.	Forages	0.56	42	0.02
12.	Pasture			0.30
13.	<u>Total Feed Cost</u>	<u>68,436</u>	<u>27.41</u>	<u>485.36</u>
14.	Return Over Feed Costs	45,519	18.21	322.83
	<u>Other Direct Costs</u>			
16.	Veterinary	3,288	1.32	23.32
17.	Breeding	154	0.06	1.09
18.	Miscellaneous	2,439	0.98	17.30
19.	Custom Work & Lease	2,691	1.08	19.09
20.	Special Hired Labor	2,185	0.87	15.50
21.	Assigned Interest	<u>4</u>		<u>0.03</u>
22.	Total Other Direct Costs	<u>10,761</u>	<u>4.31</u>	<u>76.33</u>
23.	<u>Total Direct Costs Incl. Feed</u>	79,197	31.72	561.69
24.	Return Over All Direct Costs	34,758	13.90	246.50
	<u>Allocated Costs</u>			
27.	Act. Int. Paid Less Int. Assigned-L21	3,624	1.45	25.70
28.	General Hired Labor	1,547	0.62	10.97
29.	Utilities & Miscellaneous	3,823	1.53	27.11
30.	Power & Machinery	2,619	1.05	18.57
31.	Livestock Equipment	3,862	1.55	27.39
32.	Building & Fences	<u>5,206</u>	<u>2.08</u>	<u>36.92</u>
33.	Total Allocated Costs	<u>20,681</u>	<u>8.28</u>	<u>146.66</u>
34.	Total Actual Listed Costs	99,878	40.00	708.35
35.	<u>Return Over Actual Listed Costs</u>	14,077	5.62	99.84

*****SUPPLEMENTARY MANAGEMENT INFORMATION*****

36.	Total Costs Adj. to 7% Min. Int.	102,256	40.94	725.22
38.	Return/Listed 7% Opportunity Interest	11,699	4.68	82.97
40.	Return/\$100 Feed Fed	166.51		
41.	Ave. Wt./Mkt. Hog Sold	229		
42.	Price Rec'd/Cwt. Mkt. Hogs	45.74		
43.	Total No. Litters Farrowed	141		
44.	Litters/Sow/Year	1.96		
45.	No. Pigs Born/Litter	9.78		
46.	No. Pigs Wean/Litter	8.44		
47.	No. Pigs Produced/Sow/Year	15.00		
48.	Litters/Crate/Year	10.24		
49.	Pigs Weaned/Crate/Year	86.43		
50.	Mkt. Animal Death as % of Total Loss	3.99		
51.	Breeding Herd Death Loss	5.13		
52.	Price Cwt./Grain Mix Fed	7.11		
53.	Price/Cwt. Protein, Salt, Min.	14.60		
54.	Total Death Loss Percent	14.37		

COSTS AND RETURNS FROM LIVESTOCK ENTERPRISES

Productive livestock enterprises are an important part of many farm businesses in Minnesota. Farms involved in this report may have one or more livestock enterprises. The following tables pertain to these livestock enterprises.

Since feed is the largest single item of cost for all classes of livestock, return over feed costs have been used to classify farm livestock enterprises into high, low, and average groups.

Other cash costs relatively easy to identify and classify in the farm records are listed in each of the tables as other direct costs.

Allocated costs include interest charges to the enterprise, allocated charges for hired labor, utilities, power and machinery, livestock equipment and building and fence costs. These costs are allocated to each livestock enterprise by the computer using a carefully devised formula to make the proper allocations.

Each enterprise table includes supplementary management information. This information can provide clues indicating the strengths and weaknesses of each enterprise.

TABLE 10 - CROP DATA FOR SET ASIDE, OAT SILAGE, & CRP LAND - 1989

	SET ASIDE 659	OAT SILAGE 20	CRP LAND 11
<u>ALL VALUES PER ACRE</u>			
1. *** Total Value Produced \$ ***	5,684	1,532	7,681
2. *** Total Production ***	4,525	102	6,290
3. *** Total Acres ***	16.0	17.0	111.7
4. Yield Per Acre	282.8	6.0	56.3
5. Value Per Unit	1.00	14.28	1.00
6. Crop Production Return	288.25	85.71	58.69
7. Other Crop Income	<u>67.00</u>	<u>4.41</u>	<u>10.07</u>
8. <u>Total Crop Return</u>	355.25	90.12	68.76
<u>Variable Costs</u>			
10. Fertilizer	0.31	3.00	0.49
11. Chemicals	2.00	0.94	1.04
12. Seed Expense	4.69	18.59	2.95
13. Crop Drying			
14. Crop Insurance			
15. Other Expense	0.38	0.18	0.20
16. Special Hired Labor	0.25	0.18	
17. Custom Work Hired Expense	1.38	1.53	
18. Irrigation Operation			
19. Assigned Interest			
20. <u>Total Variable Costs</u>	<u>9.00</u>	<u>24.41</u>	<u>4.67</u>
21. <u>Return Over Variable Costs</u>	346.25	65.71	64.09
<u>Allocated Costs (Variable and Fixed)</u>			
31. Farm Power & Machinery - Ownerships	5.69	7.59	2.56
32. Farm Power & Machinery - Operation	11.00	20.35	1.96
33. Building & Fence Cost	2.81	4.41	0.98
34. Irrigation Ownership Cost			
37. Actual Land Ownership Cost or Rent	67.11	52.15	20.88
38. Utilities & General Farm Expense	3.50	5.12	2.49
39. Hired Labor	1.31	1.24	0.39
41. Actual Non-Real Estate Int. Allocated	<u>5.19</u>	<u>12.24</u>	<u>0.76</u>
42. <u>Total Allocated Costs</u>	96.61	103.10	30.02
43. <u>Total Listed Costs</u>	105.63	127.53	34.69
44. <u>Return Over Listed Costs</u>	249.62	-37.41	34.07
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
50. Land Opportunity Ownership Cost	72.38	84.28	43.51
51. Total Cost Adj. to a Min. 7% Interest	109.75	155.24	58.68
52. Work Units Assigned/Acre	0.20	0.40	0.05
53. Power Cost Allocation Factor	1.00	1.00	1.00
54. Total Listed Cost/Unit of Production	0.37	21.26	0.62
55. Total Adjusted Cost/Unit of Production	0.39	25.87	1.04
56. Cash Variable Cost/Unit of Production	0.11	10.56	0.18
57. Return Over Listed Costs Per Unit	0.88	-6.24	0.61
58. Breakeven Yield/Unit of Production	103.6	8.9	33.4
59. Total Acre Inches Water Applied			
60. Cost of Irrigation Excluding Interest			
61. Average Price Received/Unit Sold			
62. Quantity Sold (O.S.)			

TABLE 10 - CROP DATA FOR CANNING PEAS, CANNING CORN, & SUGARBEETS - 1989

	CANNING PEAS 15	CANNING CORN 15	SUGAR BEETS 10
<u>ALL VALUES PER ACRE</u>			
1. *** Total Value Produced \$ ***	4,082	10,433	159,813
2. *** Total Production ***	3,905	9,988	3,818
3. *** Total Acres ***	24.1	38.2	189.0
4. Yield Per Acre	162.0	261.5	20.2
5. Value Per Unit	1.00	1.00	41.86
6. Crop Production Return	162.03	273.12	845.57
7. Other Crop Income	<u>7.34</u>		
8. <u>Total Crop Return</u>	169.37	273.12	845.57
<u>Variable Costs</u>			
10. Fertilizer	11.33	36.81	25.74
11. Chemicals	8.46	17.12	65.27
12. Seed Expense	3.24	1.81	33.27
13. Crop Drying			
14. Crop Insurance	11.16	6.65	8.46
15. Other Expense	0.17		3.97
16. Special Hired Labor			46.36
17. Custom Work Hired Expense	3.44	0.26	8.99
18. Irrigation Operation			
19. Assigned Interest			
20. <u>Total Variable Costs</u>	37.80	62.64	192.06
21. <u>Return Over Variable Costs</u>	131.57	210.48	568.22
<u>Allocated Costs (Variable and Fixed)</u>			
31. Farm Power & Machinery - Ownerships	14.56	15.52	25.60
32. Farm Power & Machinery - Operation	12.12	26.41	73.10
33. Building & Fence Cost	3.49	5.97	10.61
34. Irrigation Ownership Cost			
37. Actual Land Ownership Cost or Rent	67.72	75.12	69.81
38. Utilities & General Farm Expense	8.38	7.09	30.07
39. Hired Labor	1.99	4.06	36.90
41. Actual Non-Real Estate Int. Allocated	<u>12.12</u>	<u>14.01</u>	<u>55.88</u>
42. <u>Total Allocated Costs</u>	120.38	148.18	301.97
43. <u>Total Listed Costs</u>	158.17	210.84	494.01
44. <u>Return Over Listed Costs</u>	11.20	62.28	354.49
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
50. Land Opportunity Ownership Cost	96.20	87.73	63.76
51. Total Cost Adj. to a Min. 7% Interest	181.62	218.66	457.21
52. Work Units Assigned/Acre	0.40	0.50	2.00
53. Power Cost Allocation Factor	1.00	1.00	1.00
54. Total Listed Cost/Unit of Production	0.98	0.81	24.46
55. Total Adjusted Cost/Unit of Production	1.12	0.84	22.63
56. Cash Variable Cost/Unit of Production	0.45	0.44	9.51
57. Return Over Listed Costs Per Unit	0.07	0.24	17.55
58. Breakeven Yield/Unit of Production	158.2	202.7	11.80
59. Total Acre Inches Water Applied			
60. Cost of Irrigation Excluding Interest			
61. Average Price Received/Unit Sold			
62. Quantity Sold (0.S.)			

TABLE 10 - CROP DATA FOR CORN SILAGE - 1989

	AVERAGE 99	HIGH 19	LOW 19
<u>ALL VALUES PER ACRE</u>			
1. *** Total Value Produced \$ ***	7,320	11,910	6,054
2. *** Total Production ***	420	685	342
3. *** Total Acres ***	26.4	31.6	31.9
4. Yield Per Acre	15.9	21.7	10.7
5. Value Per Unit	17.43	17.39	17.70
6. Crop Production Return	277.27	376.90	189.78
7. Other Crop Income			
8. <u>Total Crop Return</u>	<u>277.27</u>	<u>376.90</u>	<u>189.78</u>
<u>Variable Costs</u>			
10. Fertilizer	31.63	38.54	28.28
11. Chemicals	17.92	19.21	17.24
12. Seed Expense	20.61	21.65	20.13
13. Crop Drying			
14. Crop Insurance	2.69	2.63	1.25
15. Other Expense	1.33	0.03	2.54
16. Special Hired Labor	0.30	0.22	
17. Custom Work Hired Expense	2.27	1.52	1.19
18. Irrigation Operation			
19. Assigned Interest			
20. <u>Total Variable Costs</u>	<u>76.74</u>	<u>83.80</u>	<u>70.63</u>
21. Return Over Variable Costs	200.53	293.10	119.15
<u>Allocated Costs (Variable and Fixed)</u>			
31. Farm Power & Machinery - Ownerships	13.07	13.58	6.08
32. Farm Power & Machinery - Operation	34.43	38.61	36.18
33. Building & Fence Cost	5.49	9.75	3.70
34. Irrigation Ownership Cost			
37. Actual Land Ownership Cost	58.37	66.47	55.93
38. Utilities & General Farm Expense	9.17	17.69	6.68
39. Hired Labor	5.08	10.35	5.92
41. Actual Non-Real Estate Int. Allocated	<u>16.40</u>	<u>20.73</u>	<u>17.02</u>
42. <u>Total Allocated Costs</u>	<u>142.01</u>	<u>177.18</u>	<u>131.51</u>
43. Total Listed Costs	218.75	260.95	202.13
44. <u>Return Over Listed Costs</u>	<u>58.52</u>	<u>115.95</u>	<u>-12.35</u>
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
50. Land Opportunity Ownership Cost	81.99	82.77	81.56
51. Total Cost Adj. to a Min. 7% Interest	237.65	268.26	282.85
52. Work Units Assigned/Acre	0.60	0.60	0.60
53. Power Cost Allocation Factor	1.00	1.00	1.00
54. Total Listed Cost/Unit of Production	13.76	12.03	18.89
55. Total Adjusted Cost/Unit of Production	14.94	12.38	26.38
56. Cash Variable Cost/Unit of Production	8.92	7.89	12.75
57. Return Over Listed Costs Per Unit	3.68	5.34	-1.15
58. Breakeven Yield/Unit of Production	12.6	15.0	11.4
59. Total Acre Inches Water Applied			
60. Cost of Irrigation Excluding Interest			
61. Average Price Received/Unit Sold	7.50		20.18
62. Quantity Sold (0.S.)	719		22

TABLE 10 - CROP DATA FOR ALFALFA HAY - 1989

	AVERAGE 225	HIGH 45	LOW 45
<u>ALL VALUES PER ACRE</u>			
1. *** Total Value Produced \$ ***	3,916	7,191	1,664
2. *** Total Production ***	54	101	22
3. *** Total Acres ***	23.2	23.2	25.2
4. Yield Per Acre	2.3	4.4	0.9
5. Value Per Unit	72.09	71.19	71.82
6. Crop Production Return	167.80	309.91	62.70
7. Other Crop Income	<u>0.99</u>	<u>0.04</u>	<u>3.33</u>
8. <u>Total Crop Return</u>	168.79	309.95	66.03
<u>Variable Costs</u>			
10. Fertilizer	15.34	25.09	9.88
11. Chemicals	1.29	1.42	1.47
12. Seed Expense	6.81	8.41	3.69
13. Crop Drying			
14. Crop Insurance			
15. Other Expense	2.24	2.03	1.79
16. Special Hired Labor	0.65	0.82	0.48
17. Custom Work Hired Expense	3.36	5.09	0.56
18. Irrigation Operation			
19. Assigned Interest			
20. <u>Total Variable Costs</u>	29.70	42.84	17.86
21. <u>Return Over Variable Costs</u>	139.09	267.11	48.17
<u>Allocated Costs (Variable and Fixed)</u>			
31. Farm Power & Machinery - Ownerships	13.75	18.06	9.21
32. Farm Power & Machinery - Operation	34.40	33.79	33.10
33. Building & Fence Cost	5.26	5.43	3.49
34. Irrigation Ownership Cost			
37. Actual Land Ownership Cost	52.96	60.19	40.67
38. Utilities & General Farm Expense	8.23	9.27	8.02
39. Hired Labor	3.53	1.77	3.10
41. Actual Non-Real Estate Int. Allocated	<u>14.70</u>	<u>15.65</u>	<u>13.53</u>
42. <u>Total Allocated Costs</u>	132.83	144.16	111.12
43. <u>Total Listed Costs</u>	162.54	187.03	128.97
44. <u>Return Over Listed Costs</u>	6.25	122.92	-62.94
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
50. Land Opportunity Ownership Cost	71.99	78.20	55.61
51. Total Cost Adj. to a Min. 7% Interest	177.72	201.38	142.58
52. Work Units Assigned/Acre	0.60	0.60	0.60
53. Power Cost Allocation Factor	1.00	1.00	1.00
54. Total Listed Cost/Unit of Production	70.67	42.51	143.30
55. Total Adjusted Cost/Unit of Production	76.35	46.26	163.32
56. Cash Variable Cost/Unit of Production	39.37	23.48	84.01
57. Return Over Listed Costs Per Unit	2.72	27.94	-69.93
58. Breakeven Yield/Unit of Production	2.3	2.6	1.8
59. Total Acre Inches Water Applied			
60. Cost of Irrigation Excluding Interest			
61. Average Price Received/Unit Sold	76.13	89.67	86.43
62. Quantity Sold (0.S.)	14	3	7

TABLE 10 - CROP DATA FOR SOYBEANS - 1989

	AVERAGE 809	HIGH 161	LOW 161
<u>ALL VALUES PER ACRE</u>			
1. *** Total Value Produced \$ ***	23,978	28,886	13,156
2. *** Total Production ***	4,523	5,440	2,478
3. *** Total Acres ***	110.3	111.3	82.6
4. Yield Per Acre	41.0	48.9	30.0
5. Value Per Unit	5.28	5.29	5.30
6. Crop Production Return	216.60	258.48	158.96
7. Other Crop Income	<u>0.79</u>	<u>1.05</u>	<u>0.31</u>
8. <u>Total Crop Return</u>	217.39	259.53	159.27
<u>Variable Costs</u>			
10. Fertilizer	2.03	3.02	1.15
11. Chemicals	18.14	18.34	17.26
12. Seed Expense	11.53	11.21	10.86
13. Crop Drying			
14. Crop Insurance	8.89	10.43	5.31
15. Other Expense	0.71	0.78	0.74
16. Special Hired Labor	0.98	1.12	0.41
17. Custom Work Hired Expense	2.68	2.21	1.17
18. Irrigation Operation			
19. Assigned Interest	<u>0.03</u>		<u>0.04</u>
20. <u>Total Variable Costs</u>	44.99	47.11	36.95
21. Return Over Variable Costs	172.40	212.42	122.32
<u>Allocated Costs (Variable and Fixed)</u>			
31. Farm Power & Machinery - Ownerships	12.87	15.62	10.93
32. Farm Power & Machinery - Operation	23.91	23.35	22.47
33. Building & Fence Cost	6.40	12.44	3.93
34. Irrigation Ownership Cost			
37. Actual Land Ownership Cost	68.77	70.40	50.95
38. Utilities & General Farm Expense	8.09	9.49	9.67
39. Hired Labor	2.96	3.81	2.47
41. Actual Non-Real Estate Int. Allocated	<u>11.19</u>	<u>13.22</u>	<u>9.16</u>
42. <u>Total Allocated Costs</u>	134.19	148.33	109.58
43. Total Listed Costs	179.17	195.44	146.55
44. <u>Return Over Listed Costs</u>	38.22	64.09	12.72
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
50. Land Opportunity Ownership Cost	74.98	88.36	59.18
51. Total Cost Adj. to a Min. 7% Interest	183.25	210.54	154.04
52. Work Units Assigned/Acre	0.45	0.45	0.45
53. Power Cost Allocation Factor	1.00	1.00	1.00
54. Total Listed Cost/Unit of Production	4.37	4.00	4.89
55. Total Adjusted Cost/Unit of Production	4.47	4.31	5.13
56. Cash Variable Cost/Unit of Production	2.22	1.98	2.69
57. Return Over Listed Costs Per Unit	0.93	1.31	0.42
58. Breakeven Yield/Unit of Production	33.9	36.9	27.7
59. Total Acre Inches Water Applied			
60. Cost of Irrigation Excluding Interest			
61. Average Price Received/Unit Sold	6.28	6.45	6.08
62. Quantity Sold (0.S.)	2,650	3,252	1,925

TABLE 10 - CROP DATA FOR CORN FOR GRAIN - 1989

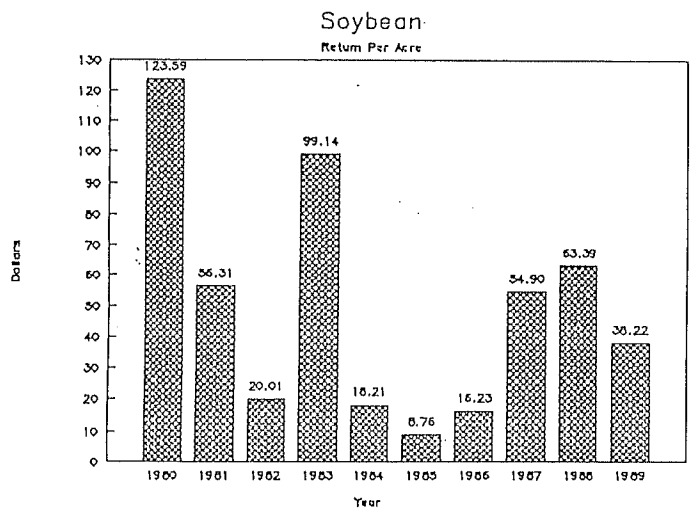
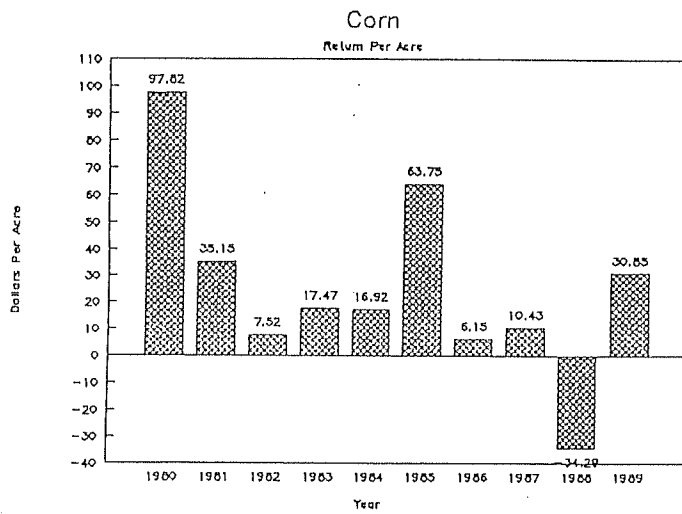
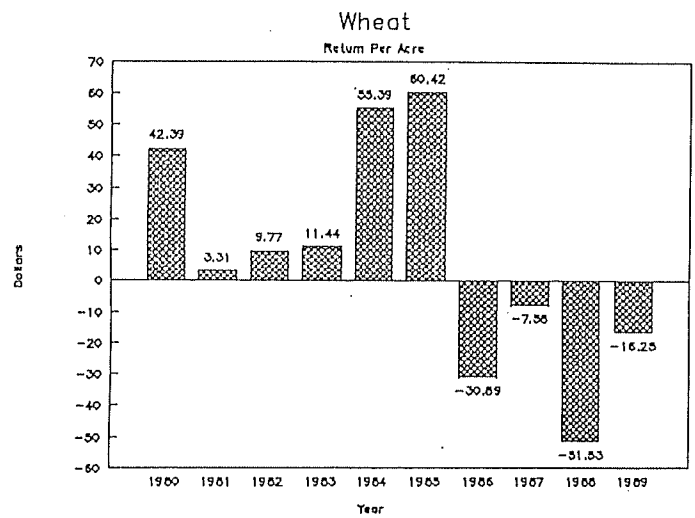
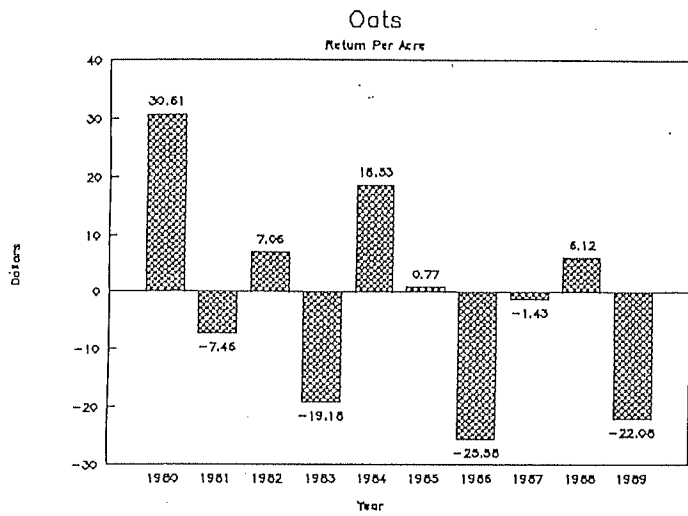
	AVERAGE 860	HIGH 172	LOW 172
<u>ALL VALUES PER ACRE</u>			
1. *** Total Value Produced \$ ***	29,985	37,211	18,474
2. *** Total Production ***	14,598	18,127	8,845
3. *** Total Acres ***	111.0	116.3	89.7
4. Yield Per Acre	131.5	155.9	98.6
5. Value Per Unit	2.05	2.05	2.07
6. Crop Production Return	269.46	319.64	204.45
7. Other Crop Income	<u>0.68</u>	<u>0.32</u>	<u>1.51</u>
8. <u>Total Crop Return</u>	270.14	319.96	205.96
<u>Variable Costs</u>			
10. Fertilizer	38.11	42.89	30.71
11. Chemicals	19.25	19.88	17.01
12. Seed Expense	22.38	23.39	19.74
13. Crop Drying	3.98	4.25	2.87
14. Crop Insurance	4.79	4.98	4.48
15. Other Expense	1.01	1.72	0.39
16. Special Hired Labor	0.41	0.63	0.18
17. Custom Work Hired Expense	3.59	6.19	1.91
18. Irrigation Operation			
19. Assigned Interest	<u>0.02</u>		
20. <u>Total Variable Costs</u>	93.55	103.92	77.29
21. <u>Return Over Variable Costs</u>	176.59	216.04	128.67
<u>Allocated Costs (Variable and Fixed)</u>			
31. Farm Power & Machinery - Ownerships	14.93	17.31	13.75
32. Farm Power & Machinery - Operation	29.23	29.66	28.71
33. Building & Fence Cost	7.19	10.95	3.49
34. Irrigation Ownership Cost			
37. Actual Land Ownership Cost	67.67	66.99	51.34
38. Utilities & General Farm Expense	9.55	10.64	7.98
39. Hired Labor	3.40	4.33	2.65
41. Actual Non-Real Estate Int. Allocated	<u>13.78</u>	<u>13.62</u>	<u>10.86</u>
42. <u>Total Allocated Costs</u>	145.75	153.50	118.78
43. <u>Total Listed Costs</u>	239.29	257.42	196.06
44. <u>Return Over Listed Costs</u>	30.85	62.54	9.90
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
50. Land Opportunity Ownership Cost	72.59	80.68	59.35
51. Total Cost Adj. to a Min. 7% Interest	241.66	269.79	203.60
52. Work Units Assigned/Acre	0.55	0.55	0.55
53. Power Cost Allocation Factor	1.00	1.00	1.00
54. Total Listed Cost/Unit of Production	1.82	1.65	1.99
55. Total Adjusted Cost/Unit of Production	1.84	1.73	2.06
56. Cash Variable Cost/Unit of Production	1.14	1.04	1.29
57. Return Over Listed Costs Per Unit	0.23	0.40	0.10
58. Breakeven Yield/Unit of Production	116.7	125.6	94.7
59. Total Acre Inches Water Applied			
60. Cost of Irrigation Excluding Interest			
61. Average Price Received/Unit Sold	2.19	2.30	2.04
62. Quantity Sold (0.S.)	5,806	7,826	3,292

TABLE 10 - CROP DATA FOR SPRING WHEAT - 1989

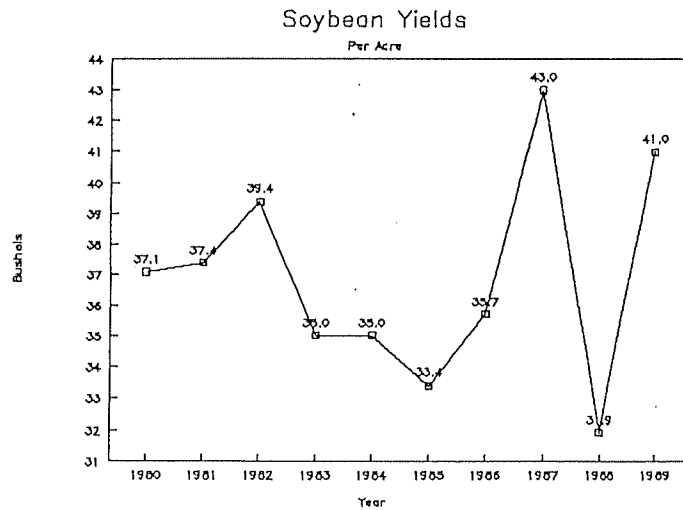
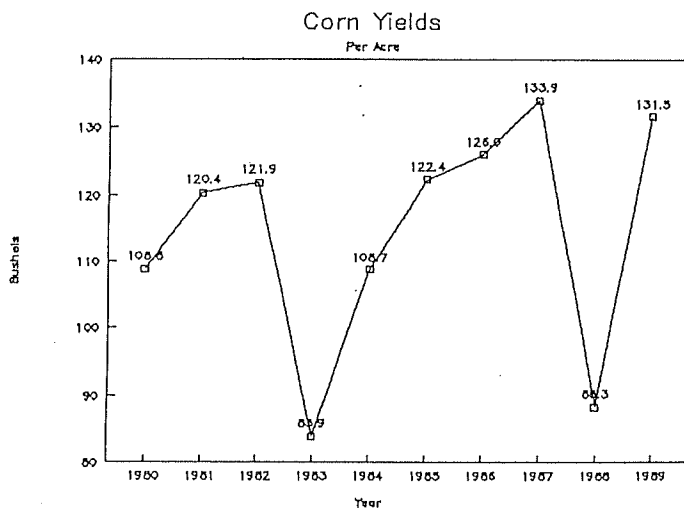
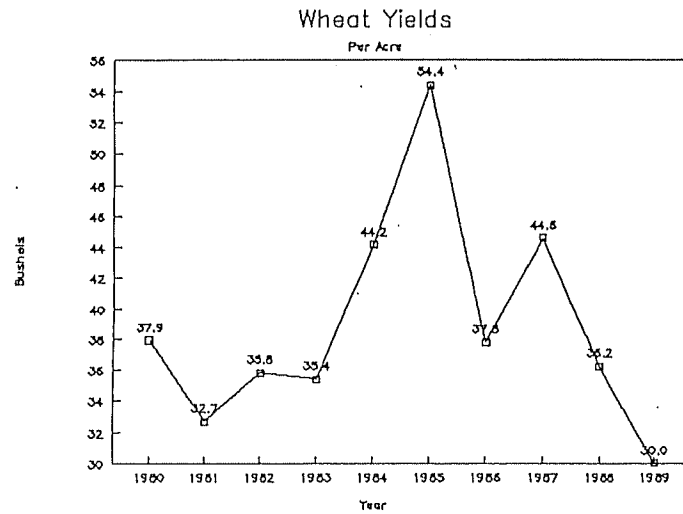
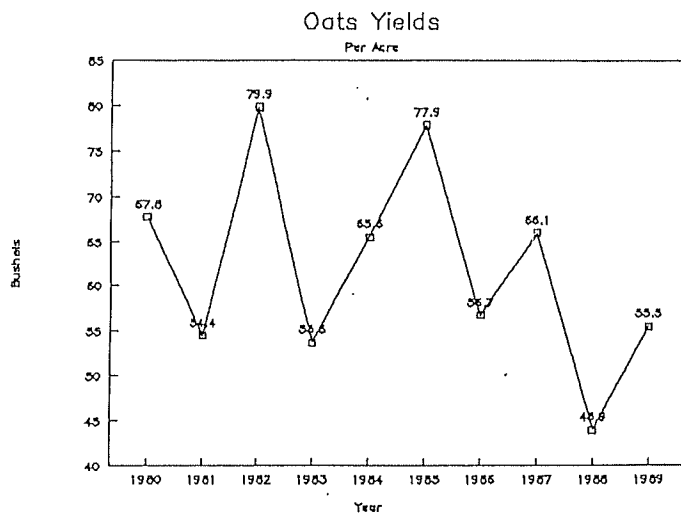
	AVERAGE 110	HIGH 22	LOW 22
<u>ALL VALUES PER ACRE</u>			
1. *** Total Value Produced \$ ***	5363	5394	2731
2. *** Total Production ***	1416	1430	670
3. *** Total Acres ***	47.2	36.1	35.8
4. Yield Per Acre	30.0	39.6	18.7
5. Value Per Unit	3.65	3.60	3.66
6. Crop Production Return	109.47	142.66	68.41
7. Other Crop Income	<u>4.15</u>	<u>6.76</u>	<u>7.88</u>
8. <u>Total Crop Return</u>	113.62	149.42	76.29
<u>Variable Costs</u>			
10. Fertilizer	17.56	13.93	13.83
11. Chemicals	5.21	4.93	5.70
12. Seed Expense	10.28	10.94	9.97
13. Crop Drying			
14. Crop Insurance	4.87	3.74	1.84
15. Other Expense	1.00	2.05	0.25
16. Special Hired Labor	0.72	0.72	
17. Custom Work Hired Expense	1.21	0.55	1.62
18. Irrigation Operation			
19. Assigned Interest			
20. <u>Total Variable Costs</u>	40.85	36.87	33.21
21. <u>Return Over Variable Costs</u>	72.77	112.55	43.08
<u>Allocated Costs (Variable and Fixed)</u>			
31. Farm Power & Machinery - Ownerships	9.75	10.30	9.44
32. Farm Power & Machinery - Operation	14.22	12.77	12.91
33. Building & Fence Cost	2.27	2.24	1.96
34. Irrigation Ownership Cost			
37. Actual Land Ownership Cost	50.36	44.04	45.84
38. Utilities & General Farm Expense	5.04	3.74	8.04
39. Hired Labor	1.61	2.08	1.87
41. Actual Non-Real Estate Int. Allocated	<u>5.78</u>	<u>9.61</u>	<u>3.66</u>
42. <u>Total Allocated Costs</u>	89.03	84.78	83.72
43. <u>Total Listed Costs</u>	129.87	121.66	116.93
44. <u>Return Over Listed Costs</u>	-16.25	27.76	-40.64
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
50. Land Opportunity Ownership Cost	58.27	80.69	44.86
51. Total Cost Adj. to a Min. 7% Interest	137.42	154.04	119.30
52. Work Units Assigned/Acre	0.30	0.30	0.30
53. Power Cost Allocation Factor	1.00	1.00	1.00
54. Total Listed Cost/Unit of Production	4.33	3.07	6.25
55. Total Adjusted Cost/Unit of Production	4.58	3.89	6.37
56. Cash Variable Cost/Unit of Production	2.25	1.64	3.19
57. Return Over Listed Costs Per Unit	-0.54	0.70	-2.17
58. Breakeven Yield/Unit of Production	35.6	33.8	31.9
59. Total Acre Inches Water Applied			
60. Cost of Irrigation Excluding Interest			
61. Average Price Received/Unit Sold	3.63	3.49	3.79
62. Quantity Sold (O.S.)	1175	1254	588

TABLE 10 - CROP DATA FOR OATS - 1989

	AVERAGE 258	HIGH 51	LOW 51
	<u>ALL VALUES PER ACRE</u>		
1. *** Total Value Produced \$ ***	2,420	3,325	1,864
2. *** Total Production ***	1,366	1,828	1,134
3. *** Total Acres ***	24.6	22.0	31.6
4. Yield Per Acre	55.5	83.1	35.9
5. Value Per Unit	1.47	1.46	1.50
6. Crop Production Return	81.42	121.73	53.77
7. Other Crop Income	<u>16.95</u>	<u>29.41</u>	<u>5.22</u>
8. <u>Total Crop Return</u>	98.37	151.14	58.99
<u>Variable Costs</u>			
10. Fertilizer	11.26	9.55	13.07
11. Chemicals	2.72	2.55	3.48
12. Seed Expense	10.28	10.27	9.72
13. Crop Drying			
14. Crop Insurance	0.85	0.64	1.20
15. Other Expense	0.77	1.27	0.85
16. Special Hired Labor	0.24	0.50	0.03
17. Custom Work Hired Expense	4.15	7.27	2.91
18. Irrigation Operation			
19. Assigned Interest			
20. <u>Total Variable Costs</u>	30.28	32.05	31.27
21. <u>Return Over Variable Costs</u>	68.09	119.09	27.72
<u>Allocated Costs (Variable and Fixed)</u>			
31. Farm Power & Machinery - Ownerships	6.75	8.36	5.03
32. Farm Power & Machinery - Operation	15.57	15.45	15.32
33. Building & Fence Cost	2.76	3.59	1.93
34. Irrigation Ownership Cost			
37. Actual Land Ownership Cost	51.95	54.80	53.55
38. Utilities & General Farm Expense	4.19	4.64	3.86
39. Hired Labor	2.72	1.50	3.73
41. Actual Non-Real Estate Int. Allocated	<u>6.22</u>	<u>6.00</u>	<u>5.09</u>
42. <u>Total Allocated Costs</u>	90.16	94.34	88.51
43. <u>Total Listed Costs</u>	120.45	126.41	119.78
44. <u>Return Over Listed Costs</u>	-22.08	24.73	-60.79
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****			
50. Land Opportunity Ownership Cost	56.69	61.54	51.12
51. Total Cost Adj. to a Min. 7% Interest	124.35	133.27	118.45
52. Work Units Assigned/Acre	0.30	0.30	0.30
53. Power Cost Allocation Factor	1.00	1.00	1.00
54. Total Listed Cost/Unit of Production	2.17	1.52	3.34
55. Total Adjusted Cost/Unit of Production	2.24	1.60	3.30
56. Cash Variable Cost/Unit of Production	1.06	0.72	1.65
57. Return Over Listed Costs Per Unit	-0.40	0.30	-1.69
58. Breakeven Yield/Unit of Production	81.9	86.6	79.9
59. Total Acre Inches Water Applied			
60. Cost of Irrigation Excluding Interest			
61. Average Price Received/Unit Sold	1.78	1.58	1.86
62. Quantity Sold (0.S.)	716	949	764



TEN YEAR RETURN ON SELECTED CROPS.



TEN YEAR CROP YIELDS ON SELECTED CROPS.

TABLE 10 - INDIVIDUAL CROP ENTERPRISE ANALYSIS

The individual crop analysis table shows acres, yield, value per unit, (usually the value per unit at harvest time) and gross return per acre for each crop raised by a particular farmer the last crop year.

Cost such as fertilizer, chemicals, seed, crop drying expenses, special hired labor, and custom work are costs that are assigned to each individual crop in the account book or computer record system. These costs are shown in table 10 under variable costs.

Other costs, called allocated costs, are calculated from the actual costs incurred. They are allocated by formula. The power and crop machinery expense is divided into ownership and operation costs for each crop. Allocated cost calculation are assigned to each productive enterprise. Rented land cost is a reported cost from the farmer's records.

The total crop return minus the variable and allocated costs equals the return over listed costs which is line 44.

Each crop produced on a farm is listed as a separate enterprise. This allows the operator to compare the return over listed costs for each crop produced.

Land cost on owned land is calculated by taking the sum of interest paid on real estate and the real estate taxes paid, and dividing this by the acres owned.

TABLE 9 - CROP DATA FOR MAJOR CROPS, DISTRIBUTION OF ACRES & YIELDS - 1989

Crop	ACRES		
	Average of 424 Farms	84 Most Profitable Farms	84 Least Profitable Farms
Total Small Grain + Canning Peas	26.3	26.5	32.5
Total Row Crop	405.7 *	537.4 *	412.0 *
Total Legumes, Including Seed	12.7 *	18.9 *	11.6 *
Total Other Hay	1.2 *	0.6 *	3.6 *
Total Silage + Fodder	7.3 *	11.0 *	4.3 *
Total Tillable Pasture	0.1 *	0.1 *	0.3 *
Total Fallow & Set Aside Land	30.5 *	32.5 *	39.6 *
Total Tillable Land	483.8 *	626.9 *	503.8 *
Total Non-Tillable Hay/Pasture	0.6 *	0.1 *	0.0 *
Wild Hay Not Harvested (Non-Tillable)	1.6	1.0	1.7
Pasture Not Harvested	10.3	11.1	7.4
Roads + Waste	10.4	12.5	9.9
Farmstead	10.2	12.2	10.2
 TOTAL LAND NOT HARVESTED	 33.1 *	 37.2 *	 30.0 *
TOTAL NON-TILLABLE LAND	33.8 *	47.4 *	30.1 *
TOTAL LAND IN FARM OR RANCH	517.9 *	665.9 *	536.2 *

SUPPLEMENTARY MANAGEMENT INFORMATION

	Average All Farms	High Earning Farms	Low Earning Farms
Percent Land Tillable			
* Fertilizer Cost per Acre	20.01	20.29	18.26
* Crop Chemicals per Acre	17.59	18.36	17.82
* Seed and Other Costs per Acre	25.22	25.78	25.76
* Gas, Diesel + Lubricants per Acre	10.74	11.23	9.52
* Repair and Maintenance Cost per Acre	19.34	18.22	21.96

* Tillable Land minus Tillable Pasture, Fallow and Idle Land.

Table 8 - Measures of Farm Organization and Management Efficiency -- 1989

Items	Average 424	High 84	Low 84
1. Return to Operators Labor & Management	\$ 27,965	79,959	-14,450
2. Crop Yield Index	100.0	99.5	95.9
3. Total Operator's Depreciation	11,856	16,723	12,627
4. Gross Return per Tillable Acre	\$ 272.04	256.77	216.11
5. Return per \$100 Feed Fed Productive Livestock Index	100.0	109.2	93.6
6. *livestock Units per 100 Acres	21.86	25.59	19.91
7. Size of Business - Work Units	457.7	705.4	383.3
8. Work Units per Worker	336.54	435.43	301.81
9. Power, Machinery, Equipment, Building Expense per Work Unit	\$ 73.96	67.65	92.97
10. Farm Capital Investment per Worker	\$ 449,961	475,978	504,615

30. Number of Animal Units	105.86	160.44	100.30
31. Work Units			
32. Crops	232.0	309.7	233.0
33. Productive Livestock	216.7	393.7	147.9
34. Other Productive Livestock	8.9	2.0	2.4
35. Expenses Per Work Unit			
36. Tractor & Crop Machinery Expenses	\$ 39.38	33.09	51.86
37. Farm Share of Auto & Truck	\$ 9.51	7.35	11.58
38. Farm Share of Electric Expense	\$ 4.54	4.53	5.29
39. Livestock Equipment Expense	\$ 7.26	7.90	8.10
40. Building, Fence & Tiling Expense	\$ 12.25	13.88	14.85
40A. Other exp/Work Units (Inc. Custom Ent.)			
40B. General Farm Telephone/Other Utilities Except Electricity	\$ 10.96	10.65	14.52
40C. Hired Labor	\$ 10.47	12.84	15.63
41.** Tractor & Crop Machinery Expense per Crop Acre	\$ 37.17	37.23	39.36
42. Farm Power & Machinery Cost Allocation to Livestock	\$ 2,021.69	3,152.58	1,271.34
43. Bldg., Fence & Tiling Cost Allocated to Crops	\$ 3,528.35	5,834.03	4,332.87
44. * Acres Include all Tillable Land, Non-Tillable Hay & Pasture			
45. ** Acres Include all Tillable Land plus Acres in Non-Tillable Hay			

MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

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

1. Return to Labor and Management - A measure of the relative financial return for the operators labor, taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. This is based on the whole farm business and is found also 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; the average being 100%.
3. Return over all Listed Cost Per Tillable Acre (Excluding pasture) This is the net return per tillable crop acre after all variable and allocated costs have been paid.
4. Gross Return per Acre - An additional measure of crop selection based on total production times an average price for the crops, plus other crop income.
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. Unit values are found in Table 7.
7. Size of Business - Work Units - A measure of the total work load. A Work Unit represents the average accomplishment of a worker in one 10 hour day. Work Unit values are assigned to each class of livestock, each crop, and to other tasks utilizing farm labor.
8. Work Units per Worker - Measures labor efficiency. It is the total work units divided by the number of workers on the farm 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 of items 31 through 36 in Table 3 divided by the number of Work Units.

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

EXPLANATION OF TABLE 5.2 RATIO'S

32. THE CURRENT RATIO. This is a measure of liquidity. It indicates the shortrun ability of the business to service debt. It demonstrates the adequacy of current assets, if liquidated, to pay off annual debts as they come due. Usually current assets have a life of 1 year or less. It is calculated by dividing current assets by current liabilities.
33. INTERMEDIATE RATIO. Intermediate assets and liabilities are those where the finances used are converted into product in a period usually from one to ten years. Examples may be breeding livestock, machinery and equipment. The increase in the ratio over a period of time is a favorable sign. This ratio is calculated by dividing intermediate assets by intermediate liabilities.
34. WORKING RATIO. The desired trend is for this ratio to increase over time. It is also desirable for this ratio to be larger than the fixed ratio and net capital ratio. The farm business needs to have sufficient liquid assets and retain management flexibility to absorb price decreases and other factors negatively affecting current and intermediate asset values. This ratio is calculated by dividing current assets and intermediate assets by current liabilities and intermediate liabilities.
35. FIXED RATIO. This ratio should be in excess of one but it is also important for this ratio to be increasing over time. This ratio should not be increased at the expense of a safe working ratio. It is calculated by dividing long term assets by long term liabilities.
36. NET CAPITAL RATIO. Net capital ratio is one of three measures of solvency; how much value remains if all assets are converted to cash at inventoried value and the total debt is paid. This ratio reflects the risk-bearing capacity of the farm business by showing the percentage that assets could decline and still cover liabilities. The higher the ratio number, the better the risk. A ratio of less than 1.0 = insolvent, a ratio of 1.0 = a net worth of zero. A ratio of 2.0 is considered a safe ratio. This would allow a 50% reduction in asset value or 100% increase in liabilities before becoming insolvent. This ratio is calculated by dividing total assets by total liabilities.
37. EQUITY/ASSET. This ratio shows the portion of total assets paid for and owned by the operator clear of financial claims. A ratio of .80 shows that the operator owns 80% of all total assets and a ratio of .44 shows he owns only 44% of all total assets. Therefore, this ratio should be increasing over time. This ratio is calculated by dividing total equity by total assets.
38. DEBT/EQUITY. This is another overall measure of solvency. It shows the relationship between debt and equity. A ratio of 1.00 indicates that equity and debt are equal. That would be equivalent to a net capital ratio of 2.00 and 1.00 and an asset equity/asset ratio of .50 to 1.00. All measures of solvency use the same three measures of financial position. They all express relationships between assets, liabilities, and net worth (or equity). Lenders prefer a debt-equity ratio of less than 1.0. It is calculated by dividing total liabilities by total equity.
39. CURRENT DEBT. The lower the current debt structure ratio is, the more liquid the business. A ratio of .10 means only one dollar (\$1.00) out of every \$10 debt must be paid within the next year. A ratio of .50 means one half of the total debt must be paid in the next year. This ratio is calculated by dividing current liabilities by total liabilities.

TABLE 5.2 - STATEMENT OF OPERATOR'S FINANCIAL POSITION (CONTINUED) - 1989

Average of 424 Farms

Items	84 High Return Farms		84 Low Return Farms	
	Jan 1	Dec 31	Jan 1	Dec 31
<u>Current Liabilities:</u>				
4. Accounts Payable: Personal				
5. Accounts Payable: Farm	125	348	1,694	3,286
6. Current Portion: Chattel & Real Estate Debt	10,660	11,665	8,810	9,598
6A. Current Portion: Notes & Line of Credit	13,921	17,746	9,701	13,032
7. Delinquent Interest			255	505
8. Rents & Lease Payments Due From Past Year		160		
9. <u>Total Current Liabilities</u>	24,707	29,918	20,460	26,420
<u>*Intermediate Liabilities:</u>				
11. Notes Payable: Personal	479	594	626	420
12. Notes Payable: Farm	28,238	31,609	15,392	19,632
13. Chattel Mortgages: Personal	35		249	158
14. Chattel Mortgages: Farm	60,134	62,004	53,938	53,227
16. <u>Total Intermediate Liabilities</u>	88,886	94,207	70,205	73,437
<u>*Long Term Liabilities:</u>				
18. Real Estate Mortgages & Contracts: Personal	1,144	2,041	2,343	3,306
19. Real Estate Mortgages & Contracts: Farm	113,061	117,673	79,963	77,943
21. <u>Total Long Term Liabilities</u>	114,205	119,714	82,305	81,249
22. Total Liabilities	227,798	243,839	172,970	181,106
23. Equity	285,340	332,858	260,060	248,329
24. Change In Equity		47,518		-11,731

RATIOS

FORMULA		END YR.	% IN DEBT	END YR.	% IN DEBT
32. Current (T5.1, L17)/(T5.2, L9) (Current Assets)/(Current Liabilities)	Debt	6.06	16.51	4.09	24.44
33. Intermediate (T5.1, L37)/(T5.2, L16) (Intermediate Assets)/(Intermed. Liab.)	Debt	1.46	68.33	1.33	75.45
34. Working (T5.1, L17 + L37) / (T5.2, L9 + L16) (C. Assets + I. Assets) / (C. Liab. + I. Liab.)	Debt	2.57	38.90	2.06	48.61
35. Fixed Debt (T5.1, L43)/(T5.2, L21) (Long Term Assets)/(Long Term Liab.)	Debt	2.15	46.47	2.76	36.27
36. Net Capital Debt (T5.1, L44)/(T5.2, L22) (Total Assets)/(Total Liabilities)	Debt	2.37	42.28	2.37	42.17
37. Equity Assets (T5.2, L23)/(T5.1, L44) (Total Equity)/(Total Assets)	Eqty.	0.58	57.72	0.58	57.83
38. Debt/Equity (T5.2, L22)/(T5.2, L23) (Total Liabilities)/(Total Equity)	Debt	0.73	73.26	0.73	72.93
39. Current Debt (T5.2, L9)/(T5.2, L22) (Current Liabilities)/(Total Liab.)	Curr.	0.12	12.27	0.15	14.59
51. Return to Capital, Family Labor & Management		74,050		581	
52. Total Income From Non-Farm Source		15,581		15,056	
53. Total Family Income		89,631		15,637	
54. Total Family Cash & Non-Cash Expense		44,429		29,771	
55. Total Money Borrowed		148,073		89,373	
56. Total Paid on Debt		132,028		81,237	

TABLE 5.2 - STATEMENT OF OPERATOR'S FINANCIAL POSITION (CONTINUED) - 1989

Items		AVERAGE OF 424 FARMS	
		JAN 1	DEC 31
<u>Current Liabilities:</u>			
4.	Accounts Payable: Personal	6	6
5.	Accounts Payable: Farm	1,339	1,891
6.	Current Portion: Chattel & Real Estate Debt	9,195	9,330
6A.	Current Portion: Notes & Line of Credit	12,359	14,700
7.	Delinquent Interest	101	178
8.	Rents & Lease Payments Due From Past Year		32
9.	<u>Total Current Liabilities</u>	23,001	26,137
<u>*Intermediate Liabilities:</u>			
11.	Notes Payable: Personal	602	632
12.	Notes Payable: Farm	15,176	18,127
13.	Chattel Mortgages: Personal	283	201
14.	Chattel Mortgages: Farm	44,109	45,327
16.	<u>Total Intermediate Liabilities</u>	60,170	64,289
<u>*Long Term Liabilities:</u>			
18.	Real Estate Mortgages & Contracts: Personal	1,930	2,365
19.	Real Estate Mortgages & Contracts: Farm	82,648	84,292
21.	<u>Total Long Term Liabilities</u>	84,578	86,657
22.	Total Liabilities	167,750	177,083
23.	Equity	234,435	248,450
24.	Change In Equity		14,014

RATIOS				
FORMULA	DESCRIPTION	BEG. YR.	END YR.	%
32. Current (T5.1, L17)/(T5.2, L9) (Current Assets)/(Current Liabilities)	Debt	4.93	4.52	22.11
33. Intermediate (T5.1, L37)/(T5.2, L16) (Intermediate Assets)/(Intermed. Liab.)	Debt	1.60	1.65	60.64
34. Working (T5.1, L17 + L37) / (T5.2, L9 + L16) (C. Assets + I. Assets) / (C. Liab. + I. Liab.)	Debt	2.52	2.48	40.32
35. Fixed Debt (T5.1, L43)/(T5.2, L21) (Long Term Assets)/(Long Term Liab.)	Debt	2.28	2.32	43.05
36. Net Capital Debt (T5.1, L44)/(T5.22) (Total Assets)/(Total Liabilities)	Debt	2.40	2.40	41.61
37. Equity Assets (T5.2, L23)/(T5.1, L44) (Total Equity)/(Total Assets)	Eqty.	0.58	0.58	58.39
38. Debt/Equity (T5.2, L22)/(T5.2, L23) (Total Liabilities)/(Total Equity)	Debt	0.72	0.71	71.28
39. Current Debt (T5.2, L9)/(T5.2, L22) (Current Liabilities)/(Total Liab.)	Curr.	0.14	.015	14.76
51. Return to Capital, Family Labor & Management			33,714	
52. Total Income From Non-Farm Source			12,012	
53. Total Family Income			45,726	
54. Total Family Cash & Non-Cash Expense			34,792	
55. Total Money Borrowed			90,296	
56. Total Paid on Debt			80,946	

TABLE 5.1 - STATEMENT OF OPERATOR'S FINANCIAL POSITION - 1989

Items	84 HIGH PROFIT FARMS		84 LOW PROFIT FARMS	
	JAN 1	DEC 31	JAN 1	DEC 1
<u>Current Assets:</u>				
4. Cash, Checking & Saving Account Balance: Pers.	3,604	3,980	1,660	1,281
5. Cash, Checking & Saving Account Balance: Farm	3,003	5,869	6,777	3,477
6. Hedging Account Equity	817	446	75	203
7. Notes & Accounts Receivables: Personal	55		154	107
8. Notes & Accounts Receivables: Farm	7,187	7,164	2,571	2,670
9. Crops Held for Sale	70,201	77,569	58,286	49,641
10. Livestock Feed	17,853	22,402	12,374	10,193
11. Supplies/Prepays	9,592	10,128	6,016	5,577
12. Feeder Cattle & Market Other Dairy	19,975	25,478	21,102	22,183
13. Market Hogs	19,486	28,078	12,940	12,667
14. Feeder Lambs & Goats	88	9	275	100
15. Poultry - All Types				
16. Other Livestock	<u>132</u>	<u>120</u>		
17. <u>Total Current Assets</u>	151,994	181,242	122,229	108,099
<u>Intermediate Assets:</u>				
19. Dairy Cows	9,696	10,252	490	452
20. Other Dairy	1,929	1,478		
21. Beef Breeding Cattle	1,382	1,500	2,370	1,850
22. Breeding Hogs	9,170	10,541	6,943	7,000
23. Breeding Sheep/Goats		95	807	947
24. Other Productive Livestock		15		
25. Auto & Truck: Personal Share	2,988	4,155	3,037	3,363
26. Auto & Truck: Farm Share	7,411	8,620	5,282	5,599
27. Power, Machinery, & Equipment	52,822	60,879	42,835	47,231
28. Livestock Equipment	8,537	9,314	5,479	5,819
29. Custom Work Equipment				
30. Irrigation Equipment			494	445
31. Stocks & Bonds & Co-Op Equity - Farm	7,425	8,167	7,919	8,511
32. Stocks & Bonds & Co-op Equity - Personal	2,389	2,944	1,400	1,260
35. Other Household Personal	11,459	11,143	8,492	9,024
36. Retirement Accounts & Life Insurance	<u>7,288</u>	<u>8,764</u>	<u>4,946</u>	<u>5,832</u>
37. <u>Total Intermediate Assets</u>	122,496	137,868	90,495	97,335
<u>Long Term Assets:</u>				
39. Building & Fences	51,712	54,414	35,029	36,125
40. Land & Land Improvements	163,476	178,435	151,719	152,890
41. Dwelling	13,916	14,158	18,933	20,262
42. Real Estate Personal	<u>9,544</u>	<u>10,581</u>	<u>14,626</u>	<u>14,724</u>
43. <u>Total Long Term Assets</u>	238,648	257,588	220,307	224,001
44. <u>Total Assets</u>	513,138	576,698	433,030	429,435
45. <u>Total Personal Assets (Incl. Cash)</u>	58,668	63,592	61,167	64,365
46. <u>Total Farm Assets (Incl. Cash)</u>	454,470	512,806	371,863	365,070

TABLE 5.1 - STATEMENT OF OPERATOR'S FINANCIAL POSITION - 1989

AVERAGE OF 424 FARMS

<u>Current Assets:</u>		<u>Jan 1</u>	<u>Dec 31</u>
4.	Cash, Checking & Saving Account Balance: Pers.	1,823	1,490
5.	Cash, Checking & Saving Account Balance: Farm	3,819	3,460
6.	Hedging Account Equity	256	297
7.	Notes & Accounts Receivables: Personal	46	512
8.	Notes & Accounts Receivables: Farm	2,838	2,989
9.	Crops Held for Sale	54,549	55,771
10.	Livestock Feed	13,963	14,929
11.	Supplies/Prepays	6,876	6,034
12.	Feeder Cattle & Market Other Dairy	14,572	15,863
13.	Market Hogs	14,456	16,753
14.	Feeder Lambs & Goats	85	51
15.	Poultry - All types	11	30
16.	Other Livestock	<u>51</u>	<u>62</u>
17.	<u>Total Current Assets</u>	113,345	118,240
<u>Intermediate Assets:</u>			
19.	Dairy Cows	4,487	4,748
20.	Other Dairy	956	950
21.	Beef Breeding Cattle	2,575	2,530
22.	Breeding Hogs	6,102	6,792
23.	Breeding Sheep/Goats	416	458
24.	Other Productive Livestock	15	37
25.	Auto & Truck: Personal Share	3,067	3,804
26.	Auto & Truck: Farm Share	5,512	6,360
27.	Power, Machinery, & Equipment	41,200	45,861
28.	Livestock Equipment	5,935	6,400
29.	Custom Work Equipment	138	140
30.	Irrigation Equipment	98	88
31.	Stocks & Bonds & Co-Op Equity - Farm	7,939	8,520
32.	Stocks & Bonds & Co-op Equity - Personal	1,875	2,094
35.	Other Household Personal	9,343	9,551
36.	Retirement Accounts & Life Insurance	<u>6,707</u>	<u>7,689</u>
37.	<u>Total Intermediate Assets</u>	96,364	106,021
<u>Long Term Assets:</u>			
39.	Building & Fences	36,469	37,636
40.	Land & Land Improvements	133,127	139,731
41.	Dwelling	16,521	17,254
42.	Real Estate Personal	<u>6,360</u>	<u>6,651</u>
43.	<u>Total Long Term Assets</u>	192,476	201,271
44.	<u>Total Assets</u>	402,185	425,533
45.	Total Personal Assets (Incl. Cash)	53,681	57,564
46.	<u>Total Farm Assets</u> (Incl. Cash)	348,504	367,969

TABLE 4 - NON FARM INCOME AND HOUSEHOLD AND PERSONAL EXPENSES - 1989

Items	AVERAGE 253	50 HIGH FARMS	50 LOW FARMS
4. Number of Persons - Family	4	4	4
5. Number of Adult Equivalents - Family	2.9	2.9	2.8
6. Non Farm Income			
7. Outside Investment Income	3,920	8,931	4,299
8. Other Personal Income & Income Tax Refund	7,042	5,914	9,407
9. Sale of Dwelling, Auto, & Truck (Pers. Share)	171		221
10. Net Cash from Non Farm Business	<u>878</u>	<u>736</u>	<u>1,129</u>
11. <u>Total Non Farm Income</u>	12,012	15,581	15,056
Household Expense			
13. Family Draw (Alternative to Detail)			
14. Church & Charity	1,006	1,421	700
15. Medical Care & Health Insurance	2,995	3,670	2,894
16. Food & Meals Bought	4,728	4,861	4,917
17. Operating Expense & Supplies	1,902	2,309	1,710
18. Furnishings & Equipment	1,189	1,117	1,662
19. Clothing & Clothing Materials	1,502	1,641	1,349
20. Personal Care, Personal Spending	2,678	3,407	2,135
21. Education	621	600	453
22. Recreation	1,309	1,691	895
23. Gifts & Special Events	1,092	1,411	1,036
24. Personal Interest	<u>202</u>	<u>220</u>	<u>221</u>
25. <u>Total Cash Household Detail Exp. (L14-L24)</u>	19,224	22,348	17,973
26. Truck & Auto Expense: Personal	1,352	1,277	1,047
27. Upkeep on Dwelling: Personal	564	524	245
28. Cash Rent: Personal	23	90	12
29. Telephone & Electricity Expense: Personal	839	794	834
30. General Farm Expense: Personal	<u>42</u>	<u>10</u>	<u>49</u>
31. <u>Total Cash Living & Operating Expense</u>	22,043	25,043	20,159
32. New Truck & Auto: Personal	1,421	1,811	565
33. New Dwelling, Buildings, Land Bought: Personal	1,242	1,961	1,769
34. Taxes & Other Deductions	4,759	7,190	2,563
35. Life Insurance	1,074	1,091	936
36. Paid on Personal Debt (Principal)	598	843	708
37. Savings & Investments (Excluding Life Ins.)	3,391	6,348	2,850
38. Total Non Farm Cash Expense	34,527	44,287	29,549
39. Total Non Farm Exp. Minus Non Farm Inc.	22,515	28,706	14,493
40. Total Family Living From Farm	<u>265</u>	<u>142</u>	<u>222</u>
41. <u>Total Cash & Non Cash Expense</u>	34,792	44,429	29,771
*****SUPPLEMENTARY INFORMATION*****			
43. Family Living from the Farm			
44. Milk & Cream (Quarts)	110	111	74
45. Beef & Buffalo (Pounds)	232	97	243
46. Pork (Pounds)	186	168	111
47. Lamb, Mutton, Goat, (Pounds)	3	2	11
48. Poultry, All Fowl (Pounds)	1		7
49. Eggs (Dozen)	1		
50. Vegetables, Fruits, Spuds, Other Produce & Wood			
51. Total Family Living From the Farm			
52. Calculated Living Expense			
53. Total Family Income	45,726	89,631	15,637
54. Minus Change In Net Worth	14,014	47,518	-11,731
55. Apparent Family Living	31,712	42,113	27,368
56. Total Family Living Per Work Unit: Calculated	75.44	62.78	77.09
57. Net Family Living Per Work Unit	49.19	40.69	37.81

TABLE 3 - ENTERPRISE STATEMENT FOR WHOLE FARM - 1989

Items	AVERAGE 424	HIGH 84	LOW 84
4. Returns & Net Increases			
5. Net Livestock Lease Income	-86	-235	-185
6. Dairy Cows Cattle	12,108	30,377	2,334
7. Other Dairy Cattle	3,200	8,403	1,212
8. Beef Breeding Cattle	1,774	1,358	1,381
9. Beef Feeder Cattle	8,513	13,949	11,622
10. Hogs Complete and Mixed	38,958	63,425	36,496
11. Hogs Finishing Enterprise	10,044	17,762	5,166
12. Producing Feeder Pigs	4,886	10,571	1,461
13. Sheep & Goats and Wool	565	97	1,042
14. Sheep & Goats Feeders	26	10	120
15. Poultry, All Fowl	219		6
16. Contract Livestock			
17. Other Productive Livestock	<u>47</u>	<u>34</u>	
18. Total All Productive Livestock	80,254	145,751	60,655
19. Value of Feed Fed to Livestock	45,273	73,919	37,975
20. Return Over Feed From Livestock	34,981	71,832	22,679
21. Crop, Seed, & Feed	96,955	144,486	77,567
22. Fertilizer, Chemicals, Seed & Other	28,686	37,072	29,948
23. Return Over Direct Costs: Crops	68,269	107,414	47,620
24. Crops & Supplies Purch. for Resale (Net)	3,877	11,858	685
25. Cooperative Patronage Refunds	919	1,305	792
26. Miscellaneous Farm Income/Accts. Receivable	3,012	4,740	3,504
27. Custom Work Enterprise	616		288
28. Government Payment & Set Aside	<u>10,160</u>	<u>13,402</u>	<u>9,840</u>
29. Total Returns & Net Increases	121,834	210,551	85,408
30. Expenses & Net Decreases			
31. Truck & Auto (Farm Share)	4,355	5,188	4,437
32. Tractors & Crop Machinery	17,989	23,341	19,828
33. Irrigation Equipment	34		49
34. Utilities	2,543	3,819	2,524
35. Livestock Equipment	3,321	5,576	3,106
36. Buildings & Fences	5,608	9,794	5,693
37. Land Improvements & Tile	324	483	428
38. Land	-74	-22	-59
39. Vet & Misc. Livestock Expense	4,667	8,851	4,335
40. All Labor Costs - Paid & Unpaid	4,874	9,796	6,424
41. Property Tax	2,838	2,904	3,160
42. General Farm Expense	4,552	6,887	5,068
43. Interest on Farm Capital (7% Opportunity Chg.)	<u>42,836</u>	<u>53,976</u>	<u>44,860</u>
44. Total Expenses & Net Decreases	93,867	130,593	99,853
45. Return to Whole Farm Operator Labor & Mgmt.	27,967	79,958	-14,445
46. Number of Farm Operators	1	1	1
47. Full Time Operator Equivalent	1.08	1.13	1.01
48. Return to Operator Labor & Mgmt./Full Time Operator	25,895	70,759	-14,302

TABLE 2B & 6B - WHOLE FARM SUMMARY OF CASH EXPENSES - 1989

Items	HIGH 84		LOW 84	
	Whole Farm	Operator Share	Whole Farm	Operator Share
<u>Purchase of Livestock</u>				
5. Dairy Cows	264	246	XXXX	XXXX
6. Other Dairy Cattle	215	200	555	555
7. Beef Breeding Cattle	417	417	60	60
8. Beef Feeder Cattle	22,135	22,135	18,955	18,704
9. Hogs Complete & Mixed	4,064	3,996	2,376	2,361
10. Hogs Finishing	3,099	3,099	2,330	2,330
11. Hogs Producing Feeder Pigs	1,547	1,547	67	67
12. Sheep, Goats, Wool: Breeding	31	31	180	180
13. Sheep, Wool: Feeders	32	32	85	85
14. Poultry, All Fowl			1	1
15. Custom, Contract Livestock Feeding				
16. Other Productive Livestock	5	5	XXXX	XXXX
17. <u>Total Livestock Purchases</u>	31,810	31,709	24,609	24,343
20. Vet, Breeding & Misc. Livestock Exp.	8,851	8,656	4,335	4,210
21. Purchase of Crops & Supp. for Resale	2,015	2,013	6,841	6,833
22. Feed Bought	50,392	49,224	26,344	25,748
23. Fertilizer	12,010	11,842	9,174	8,808
24. Chemicals	10,738	10,563	8,403	8,159
25. Other Crop Expense	14,780	14,595	11,824	11,581
26. Irrigation Operation Cost	77	77	93	93
27. CW Oper. Costs Excl. Labor & Repair	XXXX	XXXX	47	47
28. Custom Work Hired	4,170	4,088	3,184	3,120
29. Gas, Diesel & Lubricants	6,858	6,842	4,730	4,675
30. Repair & Upkeep of Lvsk. Equipment	2,901	2,846	1,686	1,611
31. Repair & Upkeep of Farm Real Estate	1,616	1,615	1,760	1,738
32. Repair & Oper. Mach, Trac, Trk, Auto	10,580	10,543	9,801	9,671
33. Repair & Upkeep of Irrig. Equip.				
34. Repair & Upkeep of Custom Work Equip.	XXXX	XXXX	38	38
35. <u>Total All Repairs</u>	15,096	15,005	13,284	13,058
36. Wages of Hired Labor	9,058	9,057	5,991	5,989
37. Personal Property & Real Est. Taxes	2,904	1,650	3,160	1,708
38. General Farm Expenses	6,887	6,883	5,068	5,015
39. Utilities	3,819	3,758	2,524	2,465
40. Farm Capital Lease Expense	4,619	34,790	1,427	17,116
41. Total Interest Payable This Year	XXXX	21,257	XXXX	14,484
42. Operator Interest Actually Paid	XXXX	21,257	XXXX	14,234
43. <u>Total Cash Operating Expense</u>	184,084	232,008	131,058	157,452
50. Auto, Truck & Machinery Bought	19,449	19,421	13,989	13,939
51. Irrigation Equipment Bought				
52. Custom Work Equipment Bought				
53. Livestock Equipment Bought	2,586	2,586	1,718	1,718
54. New Real Estate: Buildings & Fences	8,051	8,051	4,261	4,258
55. New Real Estate: Land-Land Improvements	15,481	15,481	3,234	3,234
57. <u>Total Capital Purchases</u>	45,565	45,538	23,201	23,149
58. <u>Total Farm Purchases</u>	229,649	277,546	154,259	180,601
60. Decrease in Farm Capital (Not Incl. Cash)	XXXX	XXXX	7,782	3,493
61. Interest on Farm Capital: 7% Charge	53,976	12,287	44,860	10,950
62. Unpaid Family Labor	304	304	32	32
63. Board Furnished Hired Labor	XXXX	XXXX	13	13
64. <u>Total Farm Expense</u>	283,929	290,137	206,946	195,089
70. Return to Operator Labor & Mgmt. (6A/62)-(64)	79,959	61,333	-14,450	-10,711
71. Number of Operators	3	XXXX	1	XXXX
72. Full Time Operator Equivalents	1.13	XXXX	1.01	XXXX
73. Return/Operator/Full Time Oper. Equiv. (70/72)	70,760	XXXX	-14,307	XXXX
74. * Return: Cap. & Family Labor & Mgmt.	XXXX	74,050	XXXX	581

TABLE 2B & 6B - WHOLE FARM SUMMARY OF CASH EXPENSES - 1989

Items	AVERAGE OF 424 FARMS	
	Whole Farm	Operator Share
<u>Purchase of Livestock</u>		
5. Dairy Cows	213	210
6. Other Dairy Cattle	271	268
7. Beef Breeding Cattle	409	404
8. Beef Feeder Cattle	13,299	13,249
9. Hogs Complete & Mixed	1,899	1,877
10. Hogs Finishing	3,355	3,346
11. Hogs Producing Feeder Pigs	715	715
12. Sheep, Goats, Wool: Breeding	76	76
13. Sheep, Wool: Feeders	23	23
14. Poultry, All Fowl		
15. Custom, Contract Livestock Feeding		
16. Other Productive Livestock	<u>28</u>	<u>28</u>
17. <u>Total Livestock Purchases</u>	20,288	20,196
20. Vet, Breeding & Misc. Livestock Exp.	4,667	4,568
21. Purchase of Crops & Supp. for Resale	3,801	3,799
22. Feed Bought	30,647	29,863
23. Fertilizer	8,891	8,487
24. Chemicals	7,881	7,575
25. Other Crop Expense	11,022	10,785
26. Irrigation Operation Cost	44	44
27. CW Oper. Costs Excl. Labor & Repair	524	524
28. Custom Work Hired	3,024	2,989
29. Gas, Diesel & Lubricants	5,044	5,010
30. Repair & Upkeep of Lvsk. Equipment	1,720	1,689
31. Repair & Upkeep of Farm Real Estate	1,451	1,438
32. Repair & Oper. Mach, Trac, Trk, Auto	8,360	8,303
33. Repair & Upkeep of Irrig. Equip.	1	1
34. Repair & Upkeep of Custom Work Equip.	<u>132</u>	<u>132</u>
35. <u>Total All Repairs</u>	11,665	11,564
36. Wages of Hired Labor	4,793	4,785
37. Personal Property & Real Est. Taxes	2,838	1,407
38. General Farm Expenses	4,552	4,531
39. Utilities	2,543	2,500
40. Farm Capital Lease Expense	2,134	19,034
41. Total Interest Payable This Year	XXXX	14,748
42. Operator Interest Actually Paid	<u>XXXX</u>	<u>14,672</u>
43. <u>Total Cash Operating Expense</u>	124,358	152,408
50. Auto, Truck & Machinery Bought	13,606	13,536
51. Irrigation Equipment Bought		
52. Custom Work Equipment Bought	32	32
53. Livestock Equipment Bought	1,748	1,748
54. New Real Estate: Buildings & Fences	4,611	4,535
55. New Real Estate: Land-Land Improvements	<u>7,276</u>	<u>7,276</u>
57. <u>Total Capital Purchases</u>	<u>27,273</u>	<u>27,127</u>
58. <u>Total Farm Purchases</u>	151,631	179,535
60. Decrease in Farm Capital (Not Incl. Cash)		
61. Interest on Farm Capital: 7% Charge	42,836	10,074
62. Unpaid Family Labor	158	158
63. Board Furnished Hired Labor	<u>6</u>	<u>6</u>
64. <u>Total Farm Expense</u>	194,631	189,773
70. Return to Operator Labor & Mgmt. (6A/62)-(64)	27,965	23,293
71. Number of Operators	1	XXXX
72. Full Time Operator Equivalents	1.08	XXXX
73. Return/Operator/Full Time Oper. Equiv. (70/72)	25,894	XXXX
74. * Return: Cap. & Family Labor & Mgmt.	XXXX	33,714

TABLE 2A & 6A WHOLE FARM SUMMARY OF CASH RECEIPTS - 1989

Items	85 High Ret. Farms		85 Low Ret. Farms	
	Whole Farm	Operator Share	Whole Farm	Operator Share
<u>Sale of Livestock & Livestock Products</u>				
2. Dairy Cows	2,745	2,531	92	92
3. Dairy Products	30,784	28,143	2,514	2,514
4. Other Dairy Cattle	2,691	2,590	2,870	2,870
5. Beef Breeding Cattle	916	825	1,164	1,142
6. Beef Feeder Cattle	33,581	33,581	28,968	28,087
7. Hogs Complete & Mixed	59,630	58,591	38,202	37,502
8. Hogs Finishing	26,725	26,725	8,679	8,679
9. Hogs Producing Feeder Pigs	3,983	3,983	1,122	1,122
10. Sheep, Goats, Wool: Breeding	149	149	965	940
11. Sheep, Wool: Feeders	6	6	490	490
12. Poultry, All Fowl	XXXX	XXXX	4	4
13. Eggs				
14. Custom, Contract Livestock Feeding				
15. Other Productive Livestock	37	37	XXXX	XXXX
16. Other Misc. Livestock Income	XXXX	XXXX	4	4
17. <u>Total Sales of Productive Livestock</u>	161,246	157,161	85,072	83,446
<u>Sale of Crops</u>				
21. Wheat	1,245	1,205	1,225	1,225
22. Durum				
23. Other Small Grain	759	695	621	609
24. Corn	45,509	41,831	30,956	29,872
25. Soybeans	56,025	53,369	36,105	34,655
26. Sunflowers				
27. Grain Sorghum & Other Row Crops	3,779	3,779	118	118
28. Legumes & Other Roughage	832	805	8,000	7,997
29. Grass Seed				
30. Fruits & Nuts				
31. Vegetables, Roadside Mkt./Specialty				
32. Nursery, Timber & Other	121	121	XXXX	XXXX
33. Sale: Crops/Supply Purch. for Resale	13,873	13,873	7,526	7,526
34. <u>Total Sales From Crops and Supplies</u>	122,145	115,680	84,551	82,000
40. Government Payments - Set Aside Acres	13,402	13,147	9,840	9,553
41. Gas Tax Refund	15	15	26	26
42. Income From Work Off Farm	1,984	1,984	1,098	1,071
43. Custom Work Enterprise Income	XXXX	XXXX	374	374
44A Patronage Refunds (Cash)	519	519	359	359
44B Patronage Refunds (Equity)	786	783	434	434
45. Miscellaneous Farm Income	4,763	4,763	3,405	3,404
46. <u>Total Other Farm Income</u>	21,469	21,211	15,535	15,220
47. <u>Total Farm Operating Income</u>	304,860	294,051	185,158	180,667
50. Auto, Truck, & Machinery Sold	1,050	1,050	1,514	1,514
51. Irrigation Equipment Sold				
52. Custom Work Equipment Sold				
53. Livestock Equipment Sold	23	23	68	68
54. Buildings & Improvements Sold	476	XXXX	498	34
55. Land & Land Improvements Sold	2,954	159	4,814	1,703
56. Farm Capital Lease Income	446	446	149	149
57. <u>Total Farm Capital Sales</u>	4,948	1,678	7,043	3,468
58. <u>Total Farm Sales</u>	309,809	295,729	192,201	184,136
60. Increase in Farm Capital (Not Incl. Cash)	53,789	55,470	XXXX	XXXX
61. Family Living From the Farm	290	271	295	242
62. <u>Total Farm Receipts (58)+(60)+(61)</u>	363,888	351,470	192,496	184,378
70. Total Farm Operating Income (Line 47)		294,051		180,667
71. Total Cash Farm Operating Expense (6B-L43)		232,008		157,452
72. <u>Net Cash Operating Income (70)-(71)</u>		62,043		23,215

TABLE 2A & 6A WHOLE FARM SUMMARY OF CASH RECEIPTS - 1989

Items	AVERAGES OF 424 FARMS	
<u>Sale of Livestock & Livestock Products</u>	<u>Whole Farm</u>	<u>Operator Share</u>
2. Dairy Cows	1,217	1,175
3. Dairy Products	12,200	11,677
4. Other Dairy Cattle	1,652	1,607
5. Beef Breeding Cattle	1,233	1,210
6. Beef Feeder Cattle	21,674	21,485
7. Hogs Complete & Mixed	38,008	36,652
8. Hogs Finishing	15,740	15,714
9. Hogs Producing Feeder Pigs	2,977	2,977
10. Sheep, Goats, Wool: Breeding	578	562
11. Sheep, Wool: Feeders	98	98
12. Poultry, All Fowl	12	12
13. Eggs	187	187
14. Custom, Contract Livestock Feeding	XXXX	XXXX
15. Other Productive Livestock	36	31
16. Other Misc. Livestock Income	<u>11</u>	<u>11</u>
17. <u>Total Sales of Productive Livestock</u>	95,623	93,397
<u>Sale of Crops</u>		
21. Wheat	1,066	1,028
22. Durum	XXXX	XXXX
23. Other Small Grain	926	858
24. Corn	33,194	29,872
25. Soybeans	41,059	38,217
26. Sunflowers	29	29
27. Grain Sorghum & Other Row Crops	1,487	1,481
28. Legumes & Other Roughage	2,090	2,065
29. Grass Seed		
30. Fruits & Nuts		
31. Vegetables, Roadside Mkt./Specialty		
32. Nursery, Timber & Other	108	108
33. Sale: Crops/Supply Purch. for Resale	<u>7,678</u>	<u>7,678</u>
34. <u>Total Sales From Crops and Supplies</u>	87,636	81,336
40. Government Payments - Set Aside Acres	10,160	9,692
41. Gas Tax Refund	14	14
42. Income From Work Off Farm	1,553	1,541
43. Custom Work Enterprise Income	1,302	1,302
44A Patronage Refunds (Cash)	413	413
44B Patronage Refunds (Equity)	506	506
45. Miscellaneous Farm Income	<u>2,861</u>	<u>2,861</u>
46. <u>Total Other Farm Income</u>	<u>16,808</u>	<u>16,328</u>
47. <u>Total Farm Operating Income</u>	200,067	191,061
50. Auto, Truck, & Machinery Sold	1,182	1,111
51. Irrigation Equipment Sold		
52. Custom Work Equipment Sold		
53. Livestock Equipment Sold	70	63
54. Buildings & Improvements Sold	294	12
55. Land & Land Improvements Sold	2,165	466
56. Farm Capital Lease Income	<u>276</u>	<u>256</u>
57. <u>Total Farm Capital Sales</u>	<u>3,987</u>	<u>1,907</u>
58. <u>Total Farm Sales</u>	204,054	192,968
60. Increase in Farm Capital (Not Incl. Cash)	18,251	19,824
61. Family Living From the Farm	<u>291</u>	<u>274</u>
62. <u>Total Farm Receipts (58)+(60)+(61)</u>	222,596	213,066
70. Total Farm Operating Income (Line 47)	XXXX	191,061
71. Total Cash Farm Operating Expense (6B-L43)	XXXX	152,408
72. Net Cash Operating Income (70)-(71)	XXXX	38,653

TABLE 1 - SUMMARY OF FARM INVENTORIES * - 1989

Items	84 FARMS HIGH PROFIT		84 FARMS LOW PROFIT	
<hr/>				
<u>Measures of Farm Size</u>				
2. Acres - Total	665.9		536.2	
3. - Tillable	629.0		508.4	
4. Work Units - Crops	309.7		233.0	
5. - Livestock	393.7		147.9	
6. - Other	<u>2.0</u>		<u>2.4</u>	
7. - Total	705.4		383.3	
8. Workers - Operator(s) Year Equivalents	1.13		1.01	
9. - Hired	.44		.24	
10. - Custom	.02		.02	
11. - Unpaid Family	<u>.03</u>			
12. - Total	1.62		1.27	
13. Capital Invested - Per Worker	475,978		504,615	
14. - Per Work Unit	1,093		1,672	
 <u>Whole Farm Inventories</u>				
	<u>JAN 1</u>	<u>DEC 31</u>	<u>JAN 1</u>	<u>DEC 31</u>
22. Feeder Cattle	15,124	19,033	20,022	22,293
23. Market Hogs	19,782	28,459	13,283	12,964
24. Feeder Lambs	88	36	282	108
25. Poultry - All Types				
26. Other Livestock	5,987	7,581	2,148	769
27. Crops Held for Sale & Livestock Feed	88,247	101,511	72,283	61,065
28. Supplies/Prepays, Fuel & Lubricants	9,714	10,291	6,077	5,643
29. Accounts Receivables & Hedging Acct. Equity	8,004	7,609	2,646	2,873
30. Dairy Cows	10,861	11,512	690	595
31. Other Dairy	1,939	1,492		
32. Beef Breeding	1,760	2,015	2,382	1,850
33. Swine Breeding	9,308	10,692	6,997	7,166
34. Sheep Breeding		68	834	973
35. Other Breeding Livestock		15		
36. Auto & Truck (Farm Share)	7,411	8,620	5,400	5,706
37. Power & Machinery	53,007	61,087	43,097	47,467
38. Livestock Equipment	8,573	9,347	5,535	5,869
39. Custom Equipment				
40. Irrigation Equipment			494	445
50. Bare Land	445,202	456,933	417,845	416,141
51. Land Improvements & Tile	4,625	4,949	4,218	3,982
52. Buildings - Fences - Etc.	<u>54,558</u>	<u>56,729</u>	<u>40,519</u>	<u>41,061</u>
60. Total Farm Capital	744,190	797,979	644,752	636,970
70. Increase or Decrease in Total Farm Capital		53,789		-7,782

TABLE 1 - SUMMARY OF FARM INVENTORIES * - 1989

Items	AVERAGES OF 424 FARMS	
<hr/>		
<u>Measures of Farm Size</u>		
2. Acres - Total	517.9	
3. - Tillable	485.3	
4. Work Units - Crops	232.0	
5. - Livestock	216.7	
6. - Other	<u>8.9</u>	
7. - Total	457.7	
8. Workers - Operator(s) Year Equivalents	1.08	
9. - Hired	.24	
10. - Custom	.02	
11. - Unpaid Family	<u>.02</u>	
12. - Total	1.36	
13. Capital Invested - Per Worker	449,961	
14. - Per Work Unit	1,337	
 <u>Whole Farm Inventories</u>		
	<u>Jan 1</u>	<u>Dec 31</u>
22. Feeder Cattle	12,426	13,595
23. Market Hogs	14,825	17,148
24. Feeder Lambs	87	58
25. Poultry - All Types	11	30
26. Other Livestock	2,635	2,736
27. Crops Held for Sale & Livestock Feed	69,192	71,609
28. Supplies/Prepays, Fuel & Lubricants	6,939	6,106
29. Accounts Receivables & Hedging Acct. Equity	3,094	3,286
30. Dairy Cows	4,758	5,026
31. Other Dairy	958	953
32. Beef Breeding	2,667	2,653
33. Swine Breeding	6,221	6,957
34. Sheep Breeding	433	471
35. Other Breeding Livestock	23	44
36. Auto & Truck (Farm Share)	5,577	6,413
37. Power & Machinery	41,864	46,494
38. Livestock Equipment	6,070	6,515
39. Custom Equipment	138	140
40. Irrigation Equipment	98	88
50. Bare Land	381,732	386,502
51. Land Improvements & Tile	3,251	3,353
52. Buildings - Fences - Etc.	<u>39,823</u>	<u>40,896</u>
60. Total Farm Capital	602,822	621,073
70. Increase or Decrease in Total Farm Capital		18,251

TABLE 500 - SUMMARY MANAGEMENT INFORMATION - 1989

Items	AVERAGE	HIGH	LOW
	424	84	84

Farm Size

2. Total Acres Operated	517.9	665.9	536.2
2A. Total Acres Owned	169.2	154.3	191.1
3. Tillable Acres Operated	485.3	629.0	508.4
3A. Tillable Acres Owned	150.8	137.3	174.7
4. Total Work Units	457.7	705.4	383.3
5. Total Full Time Equivalent Workers	1.36	1.62	1.27

Profit and Loss Analysis

12. Return to Labor & Management-Whole Farm	27,965	79,959	-14,450
13. Full Time Operator Equivalent	1.08	1.13	1.01
14. Return to Capital, Farm Labor, & Management (O.S.)	33,714	74,050	581
15. Ratio: Total Expense to Total Receipts (O.S.)	0.89	0.83	1.06
16. Ratio: Cash Operating Exp. to Total Farm Op. Inc.	0.80	0.79	0.87
17. Ratio: Cash Operating Expense to Total Expenses	0.80	0.80	0.81
18. Ratio: Capital Turnover: Ave. Capital to Receipts: W.F.	2.75	2.12	3.33
19. Ratio: Capital Turnover: Ave. Capital to Receipts: O.S.	1.68	1.38	2.00
20. Net Cash Operating Income	38,653	62,043	23,215
21. Interest Payable Per Work Unit	32.22	30.13	37.79
22. Interest Payable Per Dollar of Farm Operating Income	0.08	0.07	0.08

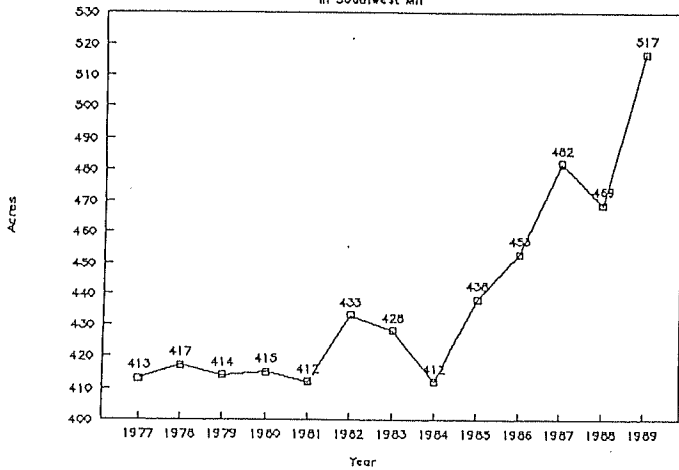
Balance Sheet Analysis

31. Change in Total Assets	23,348	63,560	-3,595
32. Change in Total Liabilities	9,333	16,041	8,136
33. Change in Equity	14,014	47,518	-11,731
34. Current Ratio: End of Year	4.52	6.06	4.09
35. Working Ratio: End of Year	2.48	2.57	2.06
36. Fixed Ratio: End of Year	2.32	2.15	2.76
37. Net Capital Ratio: End of Year	2.40	2.37	2.37
38. Total Farm Assets/Work Unit	804	727	952
39. Total Farm Liabilities/Work Unit	380	342	454

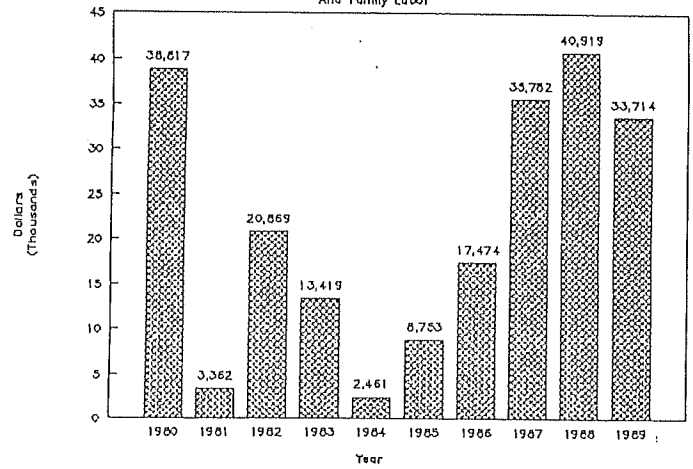
Family Information

41. Total Non-Farm Income	12,012	15,581	15,056
42. Total Cash & Non-Cash Family Living Expense	34,792	44,429	29,771
43. Total Dollars Available to Save or Reduce Debt	14,923	52,393	-10,576

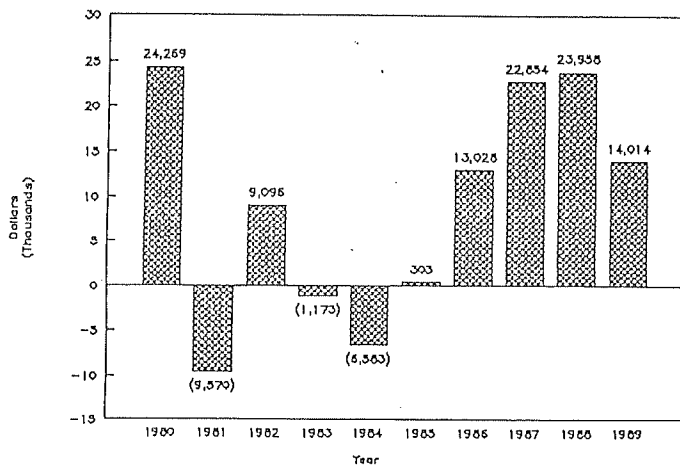
Farm Size
In Southwest Mn



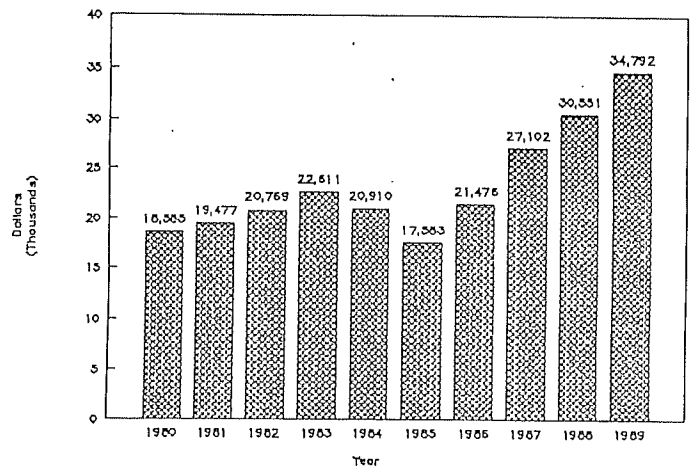
Operator's Return To Capital
And Family Labor



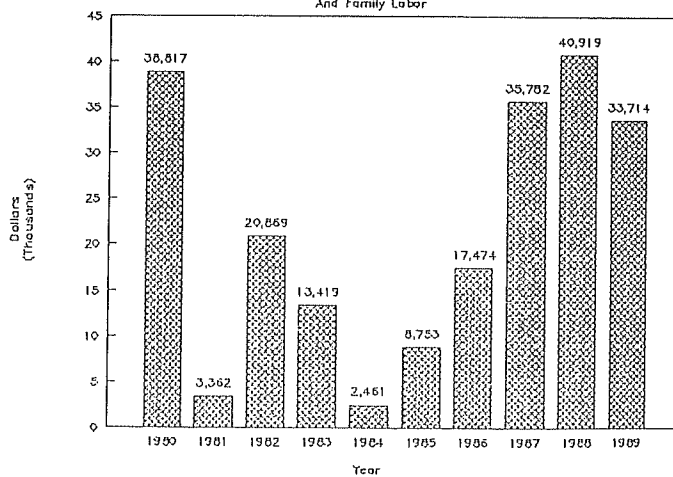
Change In Net Worth



Family Living Expense



Return To Capital
And Family Labor



THE FOUR GRAPHS ABOVE SHOW US WHAT HAPPENED TO AGRICULTURE IN SOUTHWESTERN MINNESOTA IN THE PAST DECADE.

Below is a Listing of the Schools Involved and the Instructors Responsible for these Programs.

* * * * *

<u>CLASS LOCATION</u>	<u>INSTRUCTOR</u>
Brewster	Gerald McConkey
Canby	Dennis Schentzel
	Dale Schoberg
Fulda	Mel Faltinson
Heron Lake/Okabena	Richard Amendt
Jackson	Charles Asman
	Douglas O'Neil
Granite Falls	Neale Deters
	Mike Resvick
Lakefield	Harry Gerdes
Lamberton	John Clark
Luverne	Jim Ouverson
Marshall	Dennis Schroeder
	Jim Molenaar
Mt. Lake	Leland Thiesen
Pipestone	Dwayne Eisfeld
	Dave Larson
Slayton	Chuck Lucht
St. James	Richard Spitzner
Truman	Cliff Vrieze
Tyler H.V.C.	Paul Bartz
Welcome	Robert Roesler
	Charles Worm
Worthington	Wayne Flynn
	Rolf Mahlberg

* * * * *

The Analysis of the records and preparation of the report for the Southwest area is done under the direction of Al Brudelle, Area Ag Coordinator, at Southwestern Technical College - Jackson Campus. Directing in a supervisory capacity are Marlin Wacholz, Director, Southwestern Technical College; Dennis Finstad, Campus Director; John Murray, Education Specialist, State Board of Vocational Technical Education; and Dr. Edgar Persons, Chairman of the University of Minnesota Agricultural Education Division. Data processing was done by Specialized Data Systems, Inc., Madison, Wisconsin. Special acknowledgments to Suzanne Lovell for her part in the preparation of this report.

INTRODUCTION

Farm Business Management Education has been a part of agriculture education programs in Minnesota schools since 1952. From the early cooperative efforts of the State Department of Education and the Department of Agriculture Education (University of Minnesota), the program has expanded to serve over 6,000 farm families each year in six Farm Management areas. Programs are now administered and managed by the State Board of Vocational Technical Education through the Technical Colleges and local school districts.

The purpose of Farm Management Education is to help farm families achieve their farm business and family goals. This is done through improved management organization and efficiency of their farm operations. This purpose has not changed over the years.

To accomplish these purposes, programs have been organized to conform to the following guidelines:

1. Farm families enroll in a specific management course.
2. Each course has a specific objective and units of instruction to meet the objective.
3. Courses are offered in sequence and farmers are expected to enroll in the first of the sequence of courses.
4. There is continuity to each course. Each leads to the next course in the sequence.
5. Instruction occurs both in the classroom and on the farm with the farm family.

Programs organize their course around the same central theme.

They are:

- Year 1 - Farm business records and accounts.
- Year 2 - Farm business analysis and evaluation.
- Year 3 - Farm business organization.
- Year 4 - Farm reorganization and enterprise efficiency.
- Year 5 - Current issues in Farm Management.
- Year 6 - Managing the business for family goal attainment.

Like most educational programs, members benefit from the instruction in relation to how much effort they put into study. Some farmers have benefitted more, and some less, depending upon how seriously they studied the results of their business analysis and the kind of decisions they made as a result of their analysis.

This year the farm business and enterprise analysis has been redesigned. Beginning this year all specific and general farm expenses have been allocated to each farm enterprise. The items are; building expenses, interest, utilities, insurance and general farm expense.

The new analysis will more completely identify the expenses that each enterprise incurs. The return over listed costs for each of the enterprises may be used for family living, debt repayment, capital purchases or savings. We believe this makes the farm business analysis a more accurate report to be used for long range planning, short term cash purchase planning and cash flow projections.

1989 ANNUAL VOCATIONAL AGRICULTURE FARM BUSINESS MANAGEMENT EDUCATION PROGRAM REPORT OF SOUTHWESTERN
MINNESOTA

AL BRUDELIE
AREA PROGRAM COORDINATOR

TABLE OF CONTENTS

Introduction	1
Schools Participating	2
Ten Year Financial Data	2A
Table 500, Summary Management Information	3
Table 1, Summary of Farm Inventories	4 & 5
Table 2A & 6A, Whole Farm Summary of Cash Receipts	6 & 7
Table 2B & 6B, Whole Farm Summary of Cash Expenses	8 & 9
Table 3, Enterprise Statement for Whole Farm	10
Table 4, Household and Personal Expenses	11
Table 5.1, Statement of Operator's Financial Position	12 & 13
Table 5.2, Statement of Operator's Financial Position	14 & 15
Explanation of Table 5.2 Ratio's	16
Explanation of Table 8	16A
Table 8, Measures of Organization and Management	17
Table 9, Crop Data for Major Crops	18
Explanation of Crop Analysis - Table 10	19
Ten Year Crop Yields Per Acre.	19A
Ten Year Crop Returns Per Acre	19B
Table 10, Crop Data for Oats	20
Table 10, Crop Data for Spring Wheat	21
Table 10, Crop Data for Corn	22
Table 10, Crop Data for Soybeans	23
Table 10, Crop Data for Alfalfa Hay	24
Table 10, Crop Data for Corn Silage	25
Table 10, Crop Data for Canning Peas, Canning Corn and Sugarbeets	26
Table 10, Crop Data for Set Aside, Oat Silage and CRP Land	27
Description of Costs and Returns for Livestock Enterprise	28
Table 11A, Hogs, Farrow, Finish and General	29 & 30
Table 11B, Hogs, Finishing Enterprise	31 & 32
Table 11C, Hogs, Feeder Pig Production	33 & 34
Table 12, Dairy Cows	35 & 36
Ten Year Selected Livestock Data	36A
Table 13, Other Dairy/Commercial Replacement	37
Table 14, All Other + Dual Purpose Cattle	38 & 39
Table 15A, Beef Farm/Whole Herd/Commercial	40
Table 15B, Beef Feedlot	41
Table 16A, Sheep, Farm Commercial	42