

SOUTHWESTERN MINNESOTA
FARM BUSINESS MANAGEMENT ASSOCIATION

2018
ANNUAL REPORT

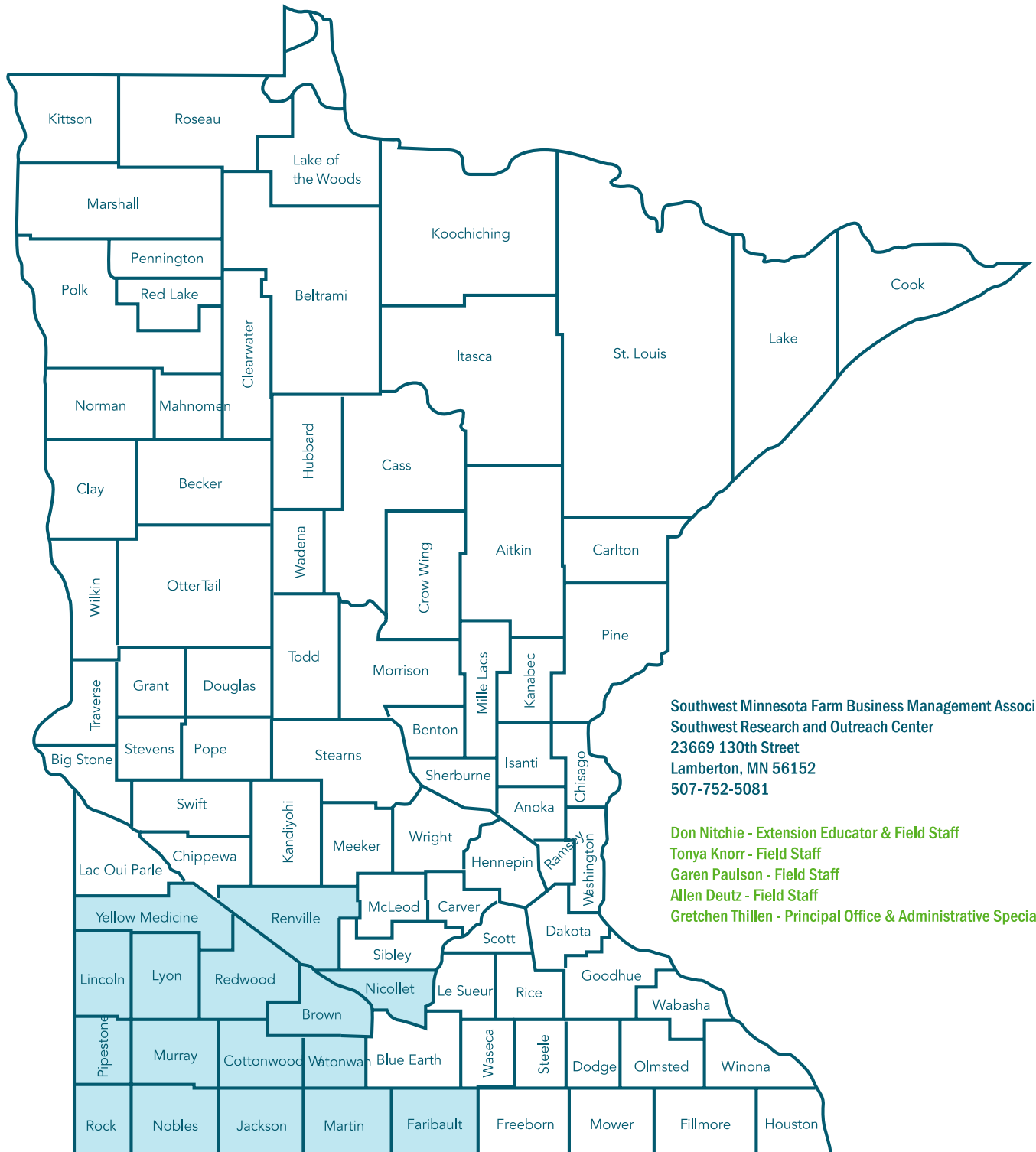


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SOUTHWEST MINNESOTA FARM BUSINESS MANAGEMENT ASSOCIATION



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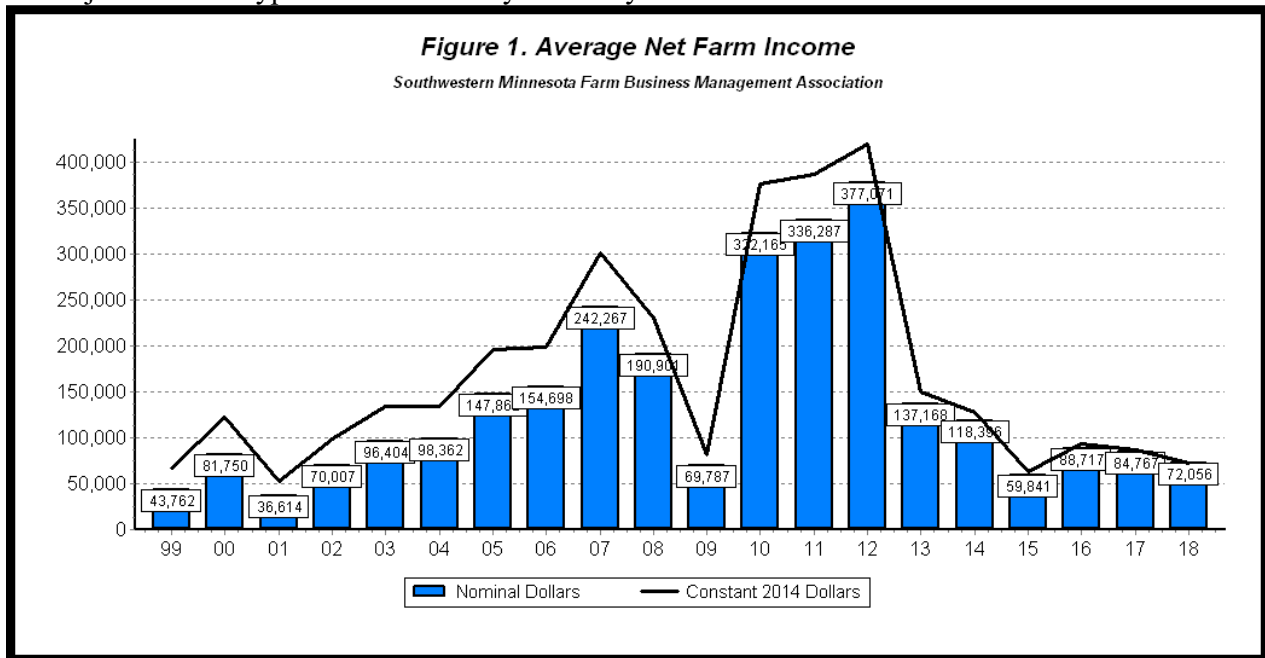
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Executive Summary

2018 Annual Report of the Southwestern Minnesota Farm Business Management Association

by Pauline A. Van Nurden, Donald L. Nitchie, Garen J. Paulson,
Tonya L. Knorr, Allen Deutz, and Dale W. Nordquist

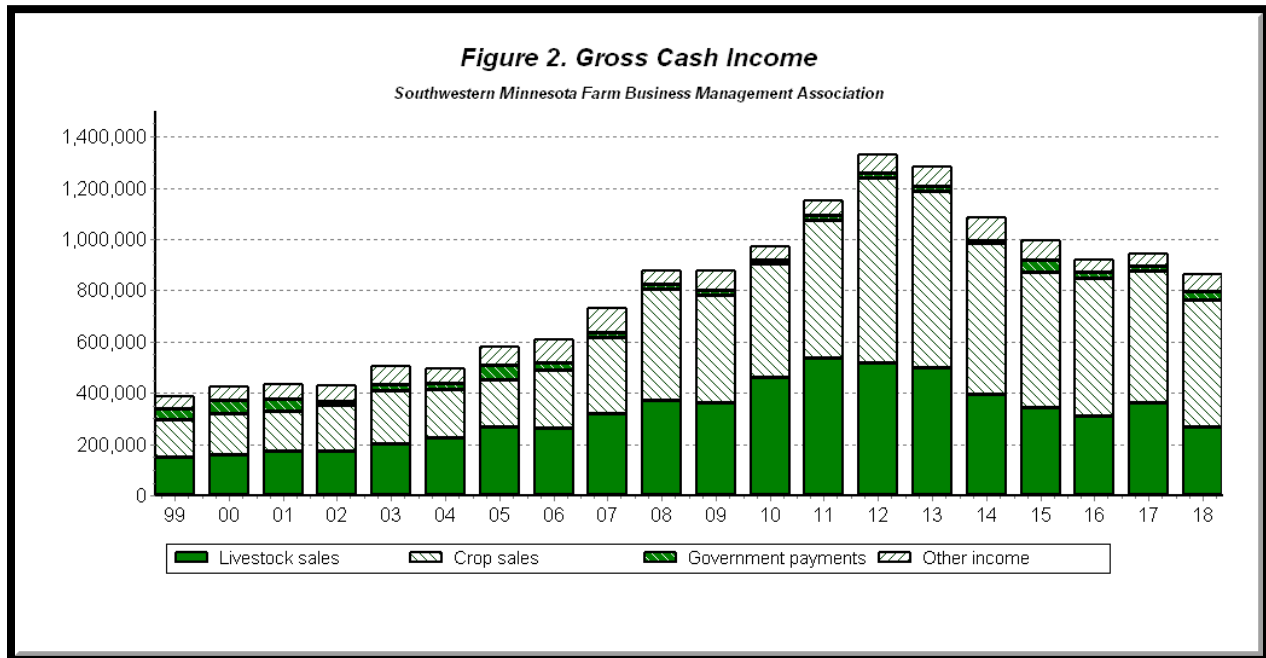
Less than trendline yields, especially in corn, coupled with stagnant prices lead to a fourth consecutive year of decreased profitability for the 101 farms included in the 2018 annual report of the Southwestern Minnesota Farm Business Management Association. The average farm earned \$72,056 in 2018, down from just under \$85,000 in 2017. Earnings received in the recent past are historically low compared to those received in the first half of the decade. The average farm earned a rate of return on assets of only 2%. Crop farm incomes declined due to weather challenges throughout the year, leading to lowest crop yields for most producers in recent years. Earnings for all types of livestock operations were down somewhat from the previous year, as commodity prices for major livestock types were all lower year over year.



Highlights of association financial results for 2018:

- Median net farm income, or the income earned by the middle farm, was \$52,423. This value was below the average net farm income of the group, which is common. This year was like most years, where the average net farm income is skewed higher by high profits of larger operations.
- Typically incomes varied widely around the average and this year is no exception. The average net farm income for the most profitable 20% of the farms was \$247,563 while the least profitable 20% experienced a loss of \$66,027. While still a concern, the average loss experienced on the low end was less than the previous year. Crop insurance indemnities and payments from the Market Facilitation Program likely shielded some of the most vulnerable

farms from larger losses. Farms experienced lower corn yields (down 14%) and prevented plant challenges for the 2018 production year.



- Average gross cash income was down 8% from 2017. Total cash expenses were also down 10%, as compared to the previous year. Both crop and livestock sales were down in 2018. Crop sales were down 2% and livestock sales were down 27% from the previous year. Other types of farm income did increase year over year, this included government payment income (up 74%) and other cash income (up 39%), as compared to 2017.
- Crops accounted for 57% of gross sales while livestock sales were 30% (Figure 2). Government payments increased by 74% to \$32,905 per farm. These payments accounted for 4% of gross cash income. Payments reported are those actually accrued to 2017 production for the ARC and PLC program. In 2018, producers also received payments for the Market Facilitation Program (MFP). This was the USDA program for commodities directly impacted by foreign retaliatory tariffs. MFP payments comprised the bulk of the government payments received by producers, as there were limited ARC or PLC payments received on crop acres for the year.
- The average farm earned a rate of return on assets (ROA) of 2% with assets valued at adjusted cost or book value. Rates of return have remained historically low for the last 6 years and remained at the same level as 2017. The average rate of return on equity capital (ROE) was 0%, falling 1% from the previous year (Figure 3).
- The average farm reported net worth growth of \$76,160, of which \$58,000 resulted from farm and non-farm earnings. The remaining \$18,000 resulted from increases in the estimated market value of capital assets.

- Member balance sheets remain strong. The debt-to-asset ratio of the average sole proprietor farm was constant at 32% with assets valued at estimated market value. This is unchanged over the last four years (Figure 4).
- The average farm's working capital remained constant, with a slight increase of \$734 year over year. Since 2012, working capital has eroded by over \$400,000 for the average farm. This is a loss of 53% since the end of 2012. Even with this loss of liquidity, working capital remained relatively strong for these operations, at 42% of gross revenue.
- Debt repayment capacity declined slightly to an average of 1.25:1, meaning that the average farm generated \$1.25 in income from farm and nonfarm sources for each \$1.00 of scheduled debt payments.

Figure 3: Rates of Return on Assets (ROA) and Equity (ROE)

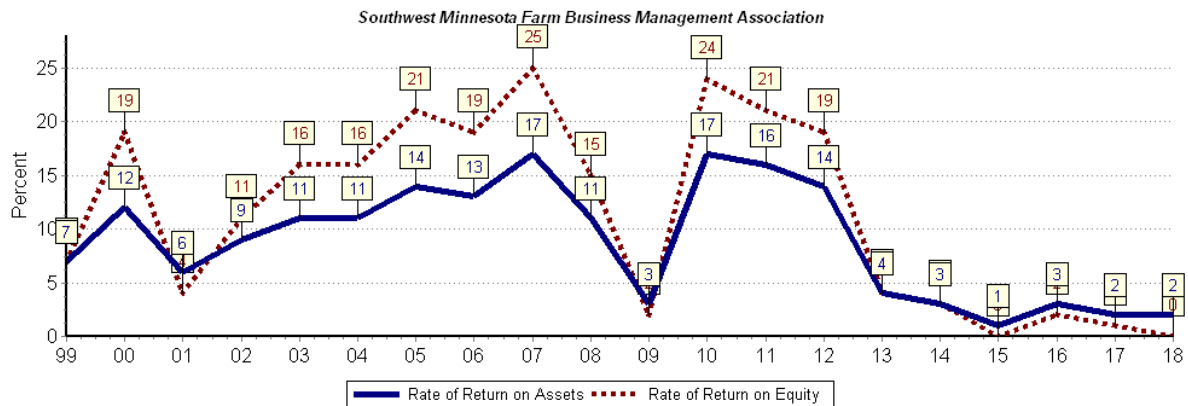


Figure 4: Ending Equity and Ending Debt to Asset Ratio

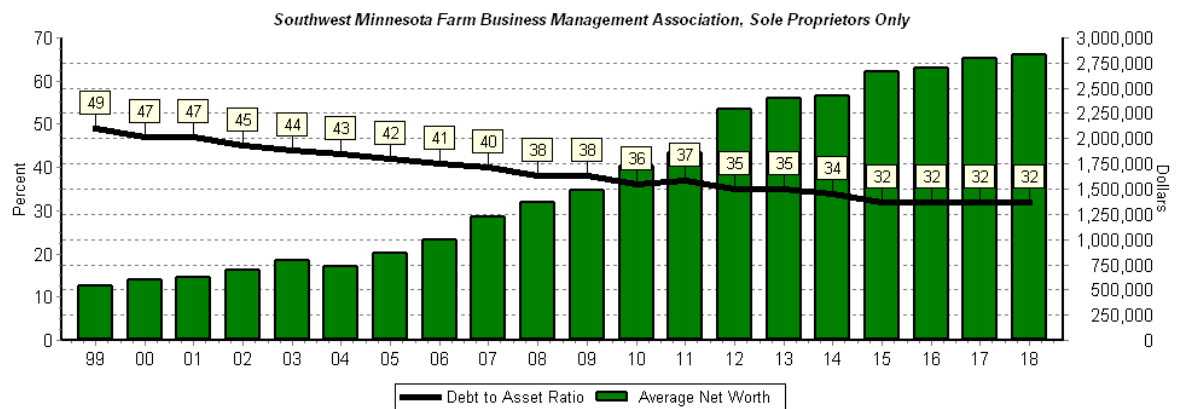


Figure 5: Average Corn and Soybean Yields

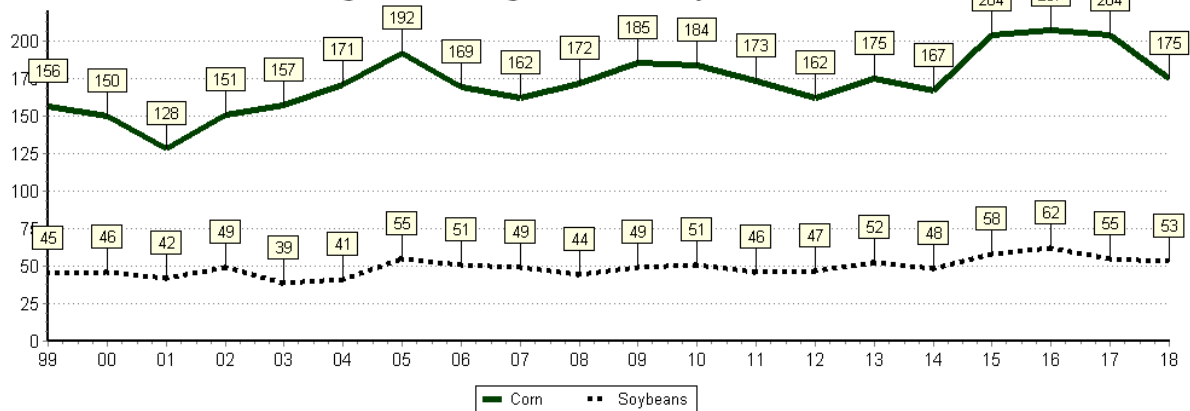


Figure 6: Crop Farms

Southwest Minnesota Farm Business Management Association

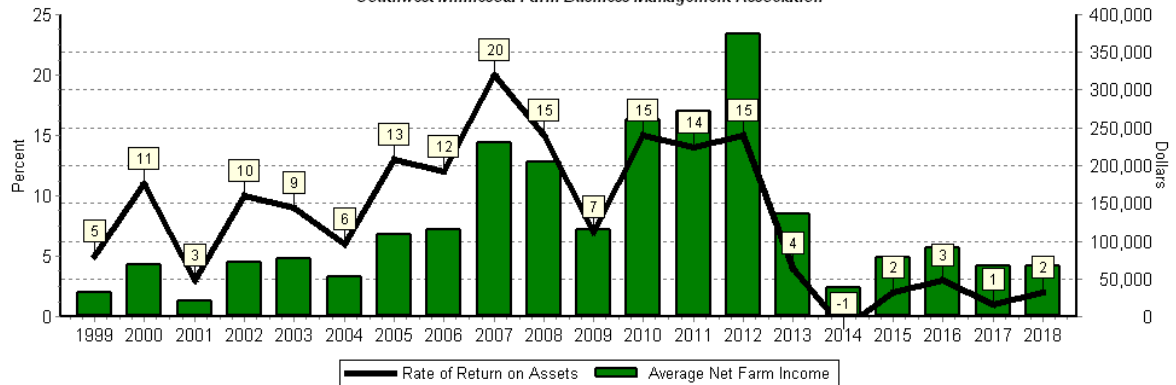


Figure 7: Hog/Crop & Hog Farms

Southwest Minnesota Farm Business Management Association

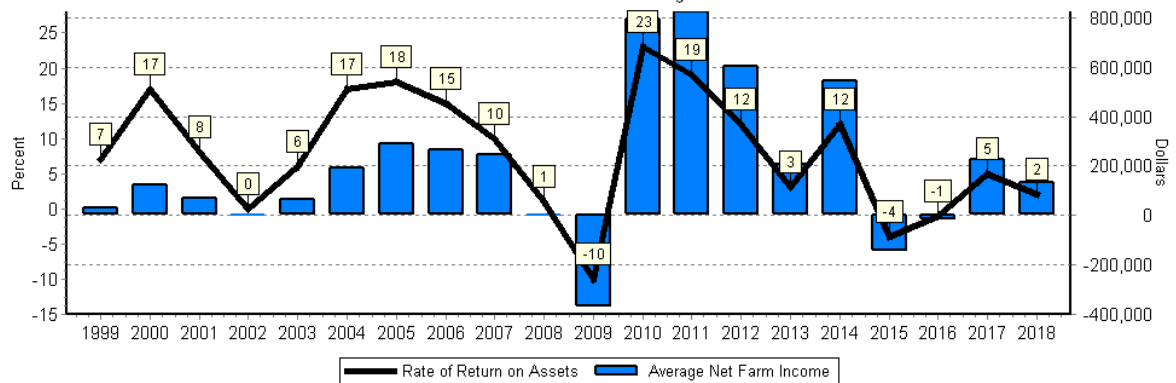
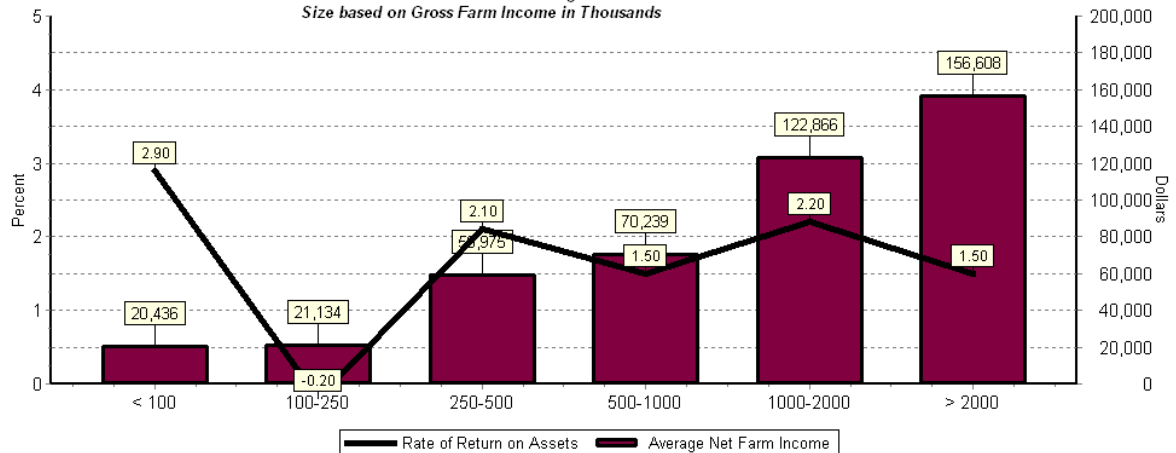


Figure 8: Net Farm Income and Return on Assets by Size of Farm

Southwest Minnesota Farm Business Management Association
Size based on Gross Farm Income in Thousands



Crops

- € Association members harvested a smaller corn crop for the year. Corn yields were down 14% from the previous years near record setting crop. Corn yields averaged 175 bushels per acre, down from 204 in 2017. By comparison, the average corn yield for the ten prior years was 183 bushels per acre. Soybean yields were also down slightly and averaged 53 bushels per acre compared to 55 in 2017. Soybean yields were on par with the association average for the previous 10 years (51 bushels per acre).
- € Crop prices continue to trend below beginning of the decade levels. The average price received for corn did improve modestly for the year. The 2018 average price received was \$3.27 per bushel compared to \$3.17 in 2017. The price received for soybean cash sales was in line with the previous year's price at \$9.20 versus \$9.23 in 2017. By year-end, corn prices had rallied further to \$3.39. Soybean prices had fallen further, to just over \$8. Soybean prices are challenged by large production and stocks nationwide and ongoing trade challenges with major export buyers.
- € The cost to raise an acre of corn (with land rent) was \$664 in 2018, unchanged from the previous year. The input costs for corn production have decreased over time though, decreasing 15% since 2013. Major expenses remained steady from the prior year overall, with seed and rent expenses seeing minor decreases, whereas fertilizer and machinery costs had modest gains. Cash rental rates on corn and soybean acres also remained the same. The average cash rental rate was \$210 per acre, down almost 15% from highs experienced in 2013.
- € The cost to produce a bushel of corn on cash rented land increased by 12% this year to \$3.80. Lower yields were the contributor to this increased cost of production. If the bin busting yields of the previous three years would have continued, cost of production would have fallen to approximately \$3.44, similar to 2017. Soybean costs per bushel decreased dramatically from the previous year from \$9.51 in 2017 to \$8.15. This large decrease is due to the USDA Market Facilitation Payment received for soybean production in 2018. This payment equaled \$1.65 per bushel for soybeans, decreasing cost of production approximately \$87 per acre in 2018. (Yield, prices, and cash expenses for soybean production were similar to 2017, hence having little impact on cost of production.) These costs include a charge for unpaid labor and management, but do not include a charge for equity capital.

Type of Farm

- Crop farm earnings increased slightly in 2018 to \$68,000, up from \$67,000 in 2017. This was true even though gross cash farm income was higher in 2017. The difference was lower total cash farm expenses and a lower depreciation value. The value of inventories also continued to decrease in 2018, an annual occurrence since 2012. The average crop farm earned a 2% rate of return on assets (Figure 6). After all costs of production including the charge for unpaid operator labor and management, member farms lost an average of \$71 per acre on cash rented corn production and made an average of \$21 per acre on rented soybean land.
- Pork producers saw a less profitable year in 2018, as compared to 2017. Specialized hog farms and hog/crop farms in the association (those farms with over 70% of gross income from sale of hogs or a combination of hogs and crops) made an average of only \$132,326 in 2018 as compared to profits of \$226,486 in 2017. Prices for market hogs decreased year

over year, decreasing to \$49.75 per hundred pounds of live weight in 2018 as compared to the \$54.56 received in 2017. The average pork producer made \$2 for every \$100 of assets invested (Figure 7).

- There were not enough specialized beef or dairy farms to summarize these farms by type.

Size of Farm

- Net income increases with size of farm in 2018, as is typically the case (Figure 8). Farms with gross farm incomes over \$2 million had the highest net farm income and the highest median net farm income as well.
- Rates of return were relatively consistent across size groups at around 2%. The smallest farms, those with gross income of less than \$100,000 had the highest rate of return on assets at 2.9%. Farms that grossed between \$1 million and \$2 million earned the next highest rate of return on assets at 2.2%. The largest farm operations, those that grossed over \$2 million earned rates of return on assets of just 1.5%.

Debt Level

- Of the 101 farms in the report, 38 had debt-to-asset ratios above 40%, up from 34 the previous year. Only 11 of those farms had debt-to-assets of greater than 60%, up from 8 farms the previous year.
- Those farms with debt-to-assets 40% and lower had the strongest current ratio and term debt coverage ratios of the association. This is to be expected with lower debt levels and stronger solvency positions.

Operator Age

- There were 22 farms whose principle operator was 40 years of age or less among the 101 farms included in the report. This age group of farmers saw the highest average farm income for the year.
- Earnings did vary greatly with age of operator. In 2018, those producers over the age of 40 saw lower average net farm income and rates of return on assets, as compared to their younger counterparts. This is likely related to the senior generation assisting the junior generation with their start in farming.

Projected Profitability

The Projected Profitability report displays actual results for association members in 2018 along with projected financial results for 2019. Projected results are based on the authors' estimates of changes in revenue, operating expenses, interest rates, and asset values. Assumptions are displayed at the bottom of the page.

- **2018 All Farms Actual** – Average financial results for all farms in 2018. Balance sheet measures reflect the average position of association farms at the end of the year.
- **2018 Improved Margin Management** – Potential impacts of small changes in farm performance. If association farms had, on average, improved sales by 5% and cut costs by 5%, the net farm income of the average farm would have more than doubled.
- **2018 SW Association Crop Farms Actual** – Average financial results for the 64 crop farms in the association for 2018.
- **2019 SW Association Crop Farms Projected** – Even with expected higher crop yields, the average net income for member crop farms is expected to decrease slightly in 2019 because of reduced government payments. This decrease assumes that prices will be unchanged. Government payments and other crop income (like crop insurance) are expected to see large decreases in this model, as the Market Facilitation Program is not expected to provide additional payments in 2019 and crop insurance indemnity payments will be reduced with a return to higher gross revenues. Operating expenses are expected to increase slightly due primarily to higher fertilizer costs.
- **2018 Statewide Livestock Farms Actual** – Average financial results for the 658 farmers in the statewide database who received a major portion of their income from livestock and milk sales for 2018. This includes farms enrolled in Minnesota State Farm Business Management programs.
- **2019 Statewide Livestock Farms Projected** – Statewide livestock farm profits are projected to increase in 2019. Hog producers are expected to see the largest gains in revenue for the coming year. Expectation is for hog producers to sell hogs at over \$5 a hundredweight higher for the coming year. In addition, milk and beef prices are also expected to see modest price increases in the coming year. These increased prices, along with an expected slight decrease in feed expenses equates to this group of producers seeing the greatest positive change in profitability in the coming year.

The assumptions used to project these results are subjective. We offer these projections as a most likely scenario to help members consider management decisions in a period of tightening margins.

Full Report

The complete report provides additional information on whole farm financial performance as well as detailed information on crop and livestock enterprise profitability. The report also includes whole-farm financial condition and performance by business size, type of farm, debt-to-asset ratio, and age of operator.

2018 Annual Report of the Southwestern Minnesota¹ Farm Business Management Association

by

by Pauline A. Van Nurden, Donald L. Nitchie, Garen J. Paulson,
Tonya L. Knorr, Allen Deutz, and Dale W. Nordquist²

This report summarizes the individual farm records of the members of the Southwestern Minnesota Farm Business Management Association for 2018.

Whole-farm information and enterprise costs and returns are reported. The year-end analysis of the individual farms was performed by the Association fieldstaff using the FINPACK software from the Center for Farm Financial Management. The individual analyses were summarized at the Department of Applied Economics using RankEm Central. In addition to the average of all farms, the averages for the high and low income groups are also presented. The tables are divided into four major groups: whole-farm information, crop enterprises, livestock enterprises, and summary information. The summary information includes whole farm historical trends and information by farm size, type of farm, debt to asset ratio, and operator age.

Of the 118 farms in the Southwestern Association, the data for 101 farms are included in this report. The rest were omitted because the records were incomplete at the time that this report was prepared. In addition to this report, members receive an annual farm business analysis; on-farm instructional visits; end-of-year income tax planning and preparation; periodic meetings, tours, and seminars; a monthly newsletter; and other managerial and educational assistance. Each farmer pays an annual fee which covers the majority of the cost, with the balance defrayed by University of Minnesota Extension and research programs of the University of Minnesota.

The livestock enterprise summaries include data from both Southwest Minnesota Farm Management Association farms and Minnesota State Farm Business Management program farms. This provides a greater number of instances for each enterprise with the goal of providing more accurate benchmark information. Minnesota State FBM programs are distributed across the state and include over 2,200 participating farms. We thank the Minnesota State FBM program and participating producers for making this data available to be included in this report.

¹This report was partially funded by a Farm Business Management and Benchmarking Grant from the USDA National Institute of Food and Agriculture.

²Van Nurden and Nordquist are Extension Economists—Center for Farm Financial Management (CFFM), University of Minnesota, Twin Cities; Nitchie is Extension Educator—Farm Management and Fieldmen for the Association; Paulson, Knorr, and Deutz are financial analysts for the Association. Special thanks to Rann Loppnow, Software Development, CFFM; Brittini Lamoreux, Administrative Associate, CFFM; and Gretchen Thillen, Southwest Research and Outreach Center.

Southwestern Minnesota Farm Business Management Association

Distribution of Membership -- 2018

County	Number of Farm Units	Number of Records Submitted
Brown	1	0
Cottonwood	13	13
Faribault	2	2
Jackson	15	14
Lyon	8	2
Martin	1	1
Murray	12	15
Nobles	24	19
Pipestone	12	11
Redwood	9	6
Rock	5	5
Wabasha	2	3
Watonwan	7	4
Others ²	<u>7</u>	<u>6</u>
TOTAL	118	101

Officers and Directors

Wesley Beck, President

Ryan Gravenhof, Vice President

Ian Sandager, Secretary-Treasurer

The directors of the Southwestern Minnesota Farm Business Management Association for 2018/2019 are: Jason Diemer, Ben Fast, Justin Keller, Russell Gundermann, Allen Vander Lugt, and John Volk.

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Whole-Farm Reports

The whole-farm reports summarize the financial performance of member farms in 2018. Each table includes the average of the 101 farms included in the report and the average 20 percent of the farms with the lowest and highest profits (base on Net Farm Income). Appendix I provides detail on how the whole-farm measures are calculated. Below is a short summary of the whole farm reports.

Financial Summary

The Financial Summary report provides a summary of the key financial measures and ratios included on the other detailed whole farm reports. All profitability and repayment capacity measures are based on accrual adjusted net farm income.

Financial Standards Measures

The Farm Financial Standards Council recommends that farms use these twenty-one measures as standard measures of farm financial performance. Many are repeated from the Profitability, Liquidity, and Balance Sheet tables. For a complete description, see the Financial Guidelines for Agricultural Producers at <http://www.ffsc.org/index.php/order-the-guidelines/>

Farm Income Statement

The Income Statement calculates the accrual Net Farm Income generated by the average farm for year 2018. Net Farm Income is reported based on accrual adjustments to the cash income and expenses reported for the year. Net Farm Income is the income earned before any compensation for owner labor and management. If owner compensation was included in farm expenses, it has been excluded here to make all farms uniform. Net Farm Income represents the return to the operator's labor, management, and equity capital (net worth). It is the amount the farm contributed to owner family living, income taxes, and net worth growth. However, it does not include any asset appreciation, debt forgiveness or asset repossessions.

Profitability Measures

The profitability measures are calculated based on both the cost value of assets and the market value. When calculated based on the market value of assets, the profitability measures can be compared to interest rates and returns available on alternative investments. When based on cost values, the returns more closely estimate the actual returns from the actual investment. (Cost values do not reflect the tax basis of farm assets. Instead, a method of calculating depreciation is used that estimates economic depreciation over the useful life of the assets.)

The *Rate of Return on Assets* (ROA) can be thought of as the interest rate earned by all investment in farm assets. *Rate of Return on Equity* (ROE) is the rate earned on the operator's equity or net worth in the farm business. If ROE is higher than ROA, borrowed funds more than paid for their cost in interest expense. *Operating Profit Margin* measures efficiency in farm operations. The higher the margin, the more of the farm income remained in pockets of the farm operator. *Asset Turnover Rate* measures efficiency in use of capital. Again, the higher the better. Farms with high investment in fixed assets will generally have a lower turnover rate than those who lease a major share of their capital.

Liquidity and Repayment Capacity Measures

Liquidity reflects the ability of the farm to meet its financial obligations on time. *Current Ratio* is current farm assets divided by current farm liabilities. *Working Capital* is current farm assets minus current farm liabilities. Businesses with more working capital are generally in a better position to overcome short-term financial downturns or production problems. *Working Capital to Gross Income* measures liquidity relative to business size.

Repayment capacity measures the ability of the business to meet debt payments and replace capital assets. *Term Debt Coverage Ratio* measures the ability of the business to meet its scheduled debt payments. A term debt coverage ratio greater than 1.0 indicates that the business produced more than enough earnings to meet its scheduled debt payments. *Replacement Coverage Ratio* adds the need for capital replacement. A replacement coverage ratio greater than 1.0 indicates that the business produced more than enough earnings to meet its payments and replace its depreciable assets.

Balance Sheets

Balance sheet reports are included for both the cost and market value of assets. Current assets are identical in both tables, with crop and livestock inventories generally valued at market value. This conforms to the methodology recommended by the Farm Financial Standards Council. On the cost-based table, intermediate and long term assets are shown at depreciated value using estimated economic, rather than tax, depreciation. On the market table, they are valued at estimated market value.

Liabilities are the same on the cost and market tables except for the inclusion of *Deferred Liabilities* on the market statements. Deferred liabilities are the estimated taxes that would be paid if assets were liquidated at their market values.

Net Worth Change on the cost value table is the amount of earned net worth growth or loss for the year. Net worth change on the market value table includes both earned growth and changes in the market valuation of capital assets.

Statement of Cash Flows

The Statement of Cash Flows displays the sources and uses of cash for the year. *Cash From Operating Activities* includes sources and uses of cash related to normal farm operations. *Cash From Investing Activities* reflect cash used to buy and sell capital assets. *Cash From Financing Activities* includes sources and uses of borrowed funds as well as cash from nonfarm activities.

Crop Production and Marketing

This table reports farm size in acres farmed, average crop yields for major commodities, and average crop sales prices for the calendar year. Yields and prices are reported for the average of all farms for more commodities than those included in the High and Low columns because a minimum of five farms are required to report the yield or price for any group.

Household and Personal Expenses

This table reports family living and other non-farm expenditures. Only sole proprietors who keep detailed family living records are included.

Operator and Labor Information

All previous tables report results per farm, regardless of the number of families or operators involved in the operation. This report repeats several measures from previous tables on a *Per Operator* basis. It also summarizes estimated labor hours used and labor performance.

Nonfarm Summary

This table summarizes nonfarm earnings for the average farm and details nonfarm assets and liabilities.

Projected Profitability

Based on the past year's results and the author's estimates of changes in next year's production, prices and costs, this page projects the financial performance of these farms in the coming year.

Financial Summary
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Income Statement			
Gross cash farm income	865,101	998,251	1,418,882
Total cash farm expense	703,195	796,851	1,183,474
Net cash farm income	161,907	201,400	235,408
Inventory change	-25,846	-177,955	90,267
Depreciation	-68,737	-91,688	-87,895
Net farm income from operations	67,324	-68,243	237,781
Gain or loss on capital sales	4,732	2,216	9,782
Average net farm income	72,056	-66,027	247,563
Median net farm income	52,423	-30,707	184,329
Profitability (cost)			
Rate of return on assets	1.7 %	-3.1 %	5.2 %
Rate of return on equity	0.3 %	-8.2 %	5.9 %
Operating profit margin	5.9 %	-11.5 %	15.9 %
Asset turnover rate	29.0 %	26.9 %	33.0 %
Profitability (market)			
Rate of return on assets	1.8 %	-0.3 %	4.9 %
Rate of return on equity	1.3 %	-2.4 %	6.3 %
Operating profit margin	9.2 %	-1.9 %	19.3 %
Asset turnover rate	19.8 %	17.7 %	25.2 %
Liquidity & Repayment (end of year)			
Current assets	774,100	578,254	1,399,478
Current liabilities	409,125	477,517	727,933
Current ratio	1.89	1.21	1.92
Working capital	364,975	100,738	671,546
Change in working capital	734	-126,415	116,128
Working capital to gross inc	41.9 %	11.0 %	44.0 %
Term debt coverage ratio	1.25	0.10	2.17
Replacement coverage ratio	0.80	0.07	1.60
Term debt to EBITDA	2.65	9.36	1.80
Solvency (end of year at cost)			
Number of farms	101	20	21
Total assets	2,913,455	3,015,155	4,688,020
Total liabilities	960,176	1,170,551	1,632,731
Net worth	1,953,279	1,844,604	3,055,288
Net worth change	58,396	-102,721	147,566
Farm debt to asset ratio	36 %	42 %	39 %
Total debt to asset ratio	33 %	39 %	35 %
Change in earned net worth %	3 %	-5 %	5 %
Solvency (end of year at market)			
Number of farms	101	20	21
Total assets	4,184,664	4,521,070	6,039,692
Total liabilities	1,479,646	1,719,703	2,327,867
Net worth	2,705,017	2,801,367	3,711,825
Total net worth change	76,160	-41,297	192,076
Farm debt to asset ratio	38 %	41 %	43 %
Total debt to asset ratio	35 %	38 %	39 %
Change in total net worth %	3 %	-1 %	5 %
Nonfarm Information			
Net nonfarm income	41,141	57,497	34,439
Farms reporting living expenses	34	3	8
Total family living expense	72,096	-	73,353
Total living, invest, cap. purch	110,123	-	106,284
Crop Acres			
Total crop acres	947	834	1,690
Total crop acres owned	233	211	281
Total crop acres cash rented	665	612	1,331
Total crop acres share rented	48	10	79
Machinery value per crop acre	747	931	526

Financial Standards Measures
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Liquidity			
Current ratio	1.89	1.21	1.92
Working capital	364,975	100,738	671,546
Working capital to gross inc	41.9 %	11.0 %	44.0 %
Solvency (market)			
Farm debt to asset ratio	38 %	41 %	43 %
Farm equity to asset ratio	62 %	59 %	57 %
Farm debt to equity ratio	0.62	0.69	0.74
Profitability (cost)			
Rate of return on farm assets	1.7 %	-3.1 %	5.2 %
Rate of return on farm equity	0.3 %	-8.2 %	5.9 %
Operating profit margin	5.9 %	-11.5 %	15.9 %
Net farm income	72,056	-66,027	247,563
EBITDA	173,551	68,319	389,563
Repayment Capacity			
Capital debt repayment capacity	99,097	11,696	261,215
Capital debt repayment margin	19,549	-104,884	140,991
Replacement margin	-25,293	-157,048	98,180
Term debt coverage ratio	1.25	0.10	2.17
Replacement coverage ratio	0.80	0.07	1.60
Efficiency			
Asset turnover rate (cost)	29.0 %	26.9 %	33.0 %
Operating expense ratio	80.1 %	92.5 %	74.5 %
Depreciation expense ratio	7.9 %	10.0 %	5.8 %
Interest expense ratio	4.3 %	4.9 %	4.2 %
Net farm income ratio	8.3 %	-7.2 %	16.2 %

Farm Income Statement
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Cash Farm Income			
Corn	274,002	262,719	420,876
Corn Silage	2,308	-	6,510
Hay, Alfalfa	3,081	-	5,177
Oats	274	3	-
Peas, Field	487	-	2,345
Soybeans	208,333	172,073	462,684
Soybeans Seed	5,317	-	9,025
Sweet Corn, Processing	952	-	3,526
Wheat, Spring	180	-	-
Sweet Corn Silage	137	-	-
Hay	958	1,933	954
Miscellaneous crop income	2,479	7,901	1,680
Beef Cow-Calf, Beef Calves	929	441	-
Beef Replacement Heifers	78	394	-
Beef Backgrounding	787	3,976	-
Beef Finishing	43,848	103,446	10,448
Dairy, Milk	76,245	341,473	6,235
Dairy, Dairy Calves	1,113	2,683	1,385
Dairy Replacement Heifers	4,386	-	-
Dairy Finishing	17,046	-	49,497
Hogs, Finish Feeder Pigs	6,591	8,378	-
Sheep, Feeder Lamb Prod, Fdr Lambs	718	-	3,453
Sheep, Lamb Finishing	23	-	113
Sheep, Market Lamb Prod, Mkt Lambs	1,348	-	-
Hogs, Farrow to Weaning, Weaning P	2,097	-	10,087
Hogs, Weaning to Finish	82,365	-	148,860
Other Livestock Income	3,119	-	-
Cull breeding livestock	276	101	-
Misc. livestock income	267	-	395
Crop government payments	1,593	3,785	2,526
CRP payments	941	897	565
Livestock govt payments	587	484	760
Other government payments	29,784	28,076	57,702
Custom work income	23,089	3,457	62,916
Patronage dividends, cash	7,347	13,058	9,295
Crop insurance income	24,834	9,949	54,781
Property insurance income	193	244	580
Contract livestock income	21,178	26,268	43,814
Other farm income	15,810	6,513	42,694
Gross Cash Farm Income	865,101	998,251	1,418,882

Farm Income Statement (continued)
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Cash Farm Expense			
Seed and plants	74,358	64,300	138,957
Fertilizer	50,716	46,916	74,699
Crop chemicals	30,764	21,315	59,175
Crop insurance	13,992	13,853	25,233
Drying expense	5,943	4,190	9,313
Storage	484	57	1,081
Irrigation energy	86	436	-
Crop miscellaneous	2,033	3,321	3,235
Consultants	2,025	880	3,784
Feeder livestock purchase	83,857	25,714	177,227
Purchased feed	70,454	169,885	57,889
Breeding fees	1,862	7,793	-
Veterinary	4,596	11,275	4,479
Supplies	5,705	14,555	5,434
Contract production exp.	10,700	21,460	6,542
Interest	35,925	47,799	57,051
Fuel & oil	27,011	32,720	42,135
Repairs	46,318	57,837	65,646
Custom hire	10,361	11,505	10,950
Hired labor	25,003	54,775	32,621
Land rent	137,569	117,748	291,148
Machinery leases	14,157	8,243	52,377
Building leases	1,523	394	3,515
Real estate taxes	8,565	8,318	9,675
Farm insurance	11,866	13,418	16,631
Utilities	10,438	15,446	12,461
Hauling and trucking	2,912	9,659	1,918
Marketing	3,481	4,685	6,906
Dues & professional fees	4,571	4,275	7,131
Purchase of resale items	448	-	861
Miscellaneous	5,472	4,078	5,399
Total cash expense	703,195	796,851	1,183,474
Net cash farm income	161,907	201,400	235,408
Inventory Changes			
Prepays and supplies	-19,733	-43,539	-13,518
Accounts receivable	22,450	5,182	71,188
Hedging accounts	3,297	-2,377	10,383
Other current assets	860	2,906	-
Crops and feed	-48,444	-49,883	-98,966
Market livestock	21,640	-54,438	112,573
Breeding livestock	4,229	18,255	924
Other assets	2,459	-1,205	10,557
Accounts payable	-11,039	-55,781	3,962
Accrued interest	-1,565	2,925	-6,837
Total inventory change	-25,846	-177,955	90,267
Net operating profit	136,061	23,445	325,675
Depreciation			
Machinery and equipment	-46,032	-55,670	-62,061
Titled vehicles	-3,575	-3,604	-5,672
Buildings and improvements	-19,131	-32,414	-20,161
Total depreciation	-68,737	-91,688	-87,895
Net farm income from operations	67,324	-68,243	237,781
Gain or loss on capital sales	4,732	2,216	9,782
Net farm income	72,056	-66,027	247,563

Profitability Measures
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Profitability (assets valued at cost)			
Net farm income from operations	67,324	-68,243	237,781
Rate of return on assets	1.7 %	-3.1 %	5.2 %
Rate of return on equity	0.3 %	-8.2 %	5.9 %
Operating profit margin	5.9 %	-11.5 %	15.9 %
Asset turnover rate	29.0 %	26.9 %	33.0 %
Farm interest expense	37,490	44,874	63,888
Value of operator lbr and mgmt.	62,773	59,156	96,823
Return on farm assets	42,041	-82,525	204,846
Average farm assets	2,468,074	2,669,597	3,909,716
Return on farm equity	4,551	-127,399	140,958
Average farm equity	1,577,609	1,557,972	2,394,227
Value of farm production	716,296	718,372	1,289,564
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Profitability (assets valued at market)			
Net farm income from operations	90,881	287	281,672
Rate of return on assets	1.8 %	-0.3 %	4.9 %
Rate of return on equity	1.3 %	-2.4 %	6.3 %
Operating profit margin	9.2 %	-1.9 %	19.3 %
Asset turnover rate	19.8 %	17.7 %	25.2 %
Farm interest expense	37,490	44,874	63,888
Value of operator lbr and mgmt.	62,773	59,156	96,823
Return on farm assets	65,599	-13,995	248,737
Average farm assets	3,613,317	4,059,642	5,119,867
Return on farm equity	28,108	-58,870	184,849
Average farm equity	2,230,255	2,408,898	2,949,130
Value of farm production	716,296	718,372	1,289,564

Liquidity & Repayment Capacity Measures
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Liquidity			
Current ratio	1.89	1.21	1.92
Working capital	364,975	100,738	671,546
Working capital to gross inc	41.9 %	11.0 %	44.0 %
Current assets	774,100	578,254	1,399,478
Current liabilities	409,125	477,517	727,933
Gross revenues (accrual)	871,054	913,971	1,525,541
Repayment capacity			
Net farm income from operations	67,324	-68,243	237,781
Depreciation	68,737	91,688	87,895
Personal income	41,141	57,497	34,439
Family living/owner withdrawals	-79,592	-83,298	-101,661
Cash discrepancy	-27	280	-269
Payments on personal debt	-2,658	-3,550	-1,915
Income taxes paid	-18,480	-15,532	-30,561
Interest on term debt	22,653	32,854	35,508
Capital debt repayment capacity	99,097	11,696	261,215
Scheduled term debt payments	-79,549	-116,580	-120,223
Capital debt repayment margin	19,549	-104,884	140,991
Cash replacement allowance	-44,841	-52,164	-42,812
Replacement margin	-25,293	-157,048	98,180
Term debt coverage ratio	1.25	0.10	2.17
Replacement coverage ratio	0.80	0.07	1.60

Balance Sheet at Market Values
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	101		20		21	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Assets						
Current Farm Assets						
Cash and checking balance	54,264	70,430	16,282	27,195	112,894	123,795
Prepaid expenses & supplies	117,066	97,333	131,474	87,935	168,019	154,501
Growing crops	0	538	0	2,719	0	0
Accounts receivable	36,461	58,910	39,453	44,635	98,590	169,778
Hedging accounts	4,491	6,503	2,519	9,029	3,537	10,402
Crops held for sale or feed	491,567	443,123	423,810	373,927	844,091	745,124
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	75,181	96,821	87,066	32,628	83,305	195,878
Other current assets	119	441	0	187	0	0
Total current farm assets	779,148	774,100	700,603	578,254	1,310,435	1,399,478
Intermediate Farm Assets						
Breeding livestock	47,023	47,224	175,071	185,063	3,115	67
Machinery and equipment	673,339	690,032	789,378	783,007	818,757	867,124
Titled vehicles	35,224	36,169	37,516	35,024	44,728	49,182
Other intermediate assets	89,823	81,715	74,059	66,913	258,038	226,905
Total intermediate farm assets	845,409	855,139	1,076,024	1,070,006	1,124,638	1,143,278
Long Term Farm Assets						
Farm land	1,356,921	1,440,689	1,417,112	1,495,086	1,821,766	2,003,432
Buildings and improvements	519,020	538,859	855,113	856,323	560,675	603,626
Other long-term assets	57,716	59,633	36,652	34,110	126,157	146,248
Total long-term farm assets	1,933,656	2,039,180	2,308,877	2,385,519	2,508,598	2,753,306
Total Farm Assets	3,558,214	3,668,420	4,085,505	4,033,780	4,943,672	5,296,062
Total Nonfarm Assets	506,046	516,244	476,966	487,290	737,464	743,630
Total Assets	4,064,259	4,184,664	4,562,471	4,521,070	5,681,136	6,039,692
Liabilities						
Current Farm Liabilities						
Accrued interest	11,951	13,516	16,807	13,882	14,982	21,818
Accounts payable	25,390	36,430	37,917	93,698	42,241	38,278
Current notes	320,670	304,406	335,000	303,643	613,080	578,516
Government crop loans	0	0	0	0	0	0
Principal due on term debt	56,895	54,774	83,726	66,293	84,716	89,320
Total current farm liabilities	414,907	409,125	473,450	477,517	755,018	727,933
Total intermediate farm liabs	82,360	96,622	99,252	95,838	147,269	189,394
Total long term farm liabilities	378,356	399,558	540,378	536,816	553,917	657,447
Total farm liabilities	875,623	905,306	1,113,080	1,110,170	1,456,204	1,574,774
Total nonfarm liabilities	50,662	54,870	47,685	60,381	51,899	57,958
Total liabs excluding deferreds	926,285	960,176	1,160,764	1,170,551	1,508,103	1,632,731
Total deferred liabilities	509,117	519,470	559,043	549,152	653,284	695,135
Total liabilities	1,435,402	1,479,646	1,719,807	1,719,703	2,161,387	2,327,867
Retained earnings	1,894,883	1,953,279	1,947,325	1,844,604	2,907,722	3,055,288
Market valuation equity	733,974	751,739	895,339	956,763	612,026	656,536
Net worth (farm and nonfarm)	2,628,857	2,705,017	2,842,664	2,801,367	3,519,748	3,711,825
Net worth excluding deferreds	3,137,974	3,224,487	3,401,706	3,350,519	4,173,033	4,406,960
Net worth change		76,160		-41,297		192,076
Percent net worth change		3 %		-1 %		5 %
Ratio Analysis						
Current farm liabilities / assets	53 %	53 %	68 %	83 %	58 %	52 %
Intermediate farm liab. / assets	10 %	11 %	9 %	9 %	13 %	17 %
Long term farm liab. / assets	20 %	20 %	23 %	23 %	22 %	24 %
Total debt to asset ratio	35 %	35 %	38 %	38 %	38 %	39 %
Debt to assets excl deferreds	23 %	23 %	25 %	26 %	27 %	27 %

Balance Sheet at Cost Values
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	101		20		21	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Assets						
Current Farm Assets						
Cash and checking balance	54,264	70,430	16,282	27,195	112,894	123,795
Prepaid expenses & supplies	117,066	97,333	131,474	87,935	168,019	154,501
Growing crops	0	538	0	2,719	0	0
Accounts receivable	36,461	58,910	39,453	44,635	98,590	169,778
Hedging accounts	4,491	6,503	2,519	9,029	3,537	10,402
Crops held for sale or feed	491,567	443,123	423,810	373,927	844,091	745,124
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	75,181	96,821	87,066	32,628	83,305	195,878
Other current assets	119	441	0	187	0	0
Total current farm assets	779,148	774,100	700,603	578,254	1,310,435	1,399,478
Intermediate Farm Assets						
Breeding livestock	40,573	41,947	160,154	174,583	1,848	67
Machinery and equipment	446,229	454,871	523,315	512,962	557,307	584,278
Titled vehicles	20,989	20,640	25,694	22,116	26,573	29,851
Other intermediate assets	80,097	71,854	47,495	39,379	257,991	226,859
Total intermediate farm assets	587,887	589,313	756,659	749,040	843,719	841,054
Long Term Farm Assets						
Farmland	659,209	729,783	607,345	648,791	1,141,155	1,283,355
Buildings and improvements	353,803	356,306	632,096	610,424	368,306	372,011
Other long-term assets	50,752	55,845	27,758	28,225	116,126	143,793
Total long-term farm assets	1,063,765	1,141,934	1,267,198	1,287,440	1,625,586	1,799,159
Total Farm Assets	2,430,800	2,505,347	2,724,459	2,614,734	3,779,741	4,039,691
Total Nonfarm Assets	390,368	408,108	383,630	400,421	636,084	648,329
Total Assets	2,821,168	2,913,455	3,108,089	3,015,155	4,415,825	4,688,020
Liabilities						
Current Farm Liabilities						
Accrued interest	11,951	13,516	16,807	13,882	14,982	21,818
Accounts payable	25,390	36,430	37,917	93,698	42,241	38,278
Current notes	320,670	304,406	335,000	303,643	613,080	578,516
Government crop loans	0	0	0	0	0	0
Principal due on term debt	56,895	54,774	83,726	66,293	84,716	89,320
Total current farm liabilities	414,907	409,125	473,450	477,517	755,018	727,933
Total intermediate farm liabs	82,360	96,622	99,252	95,838	147,269	189,394
Total long term farm liabilities	378,356	399,558	540,378	536,816	553,917	657,447
Total farm liabilities	875,623	905,306	1,113,080	1,110,170	1,456,204	1,574,774
Total nonfarm liabilities	50,662	54,870	47,685	60,381	51,899	57,958
Total liabilities	926,285	960,176	1,160,764	1,170,551	1,508,103	1,632,731
Net worth (farm and nonfarm)	1,894,883	1,953,279	1,947,325	1,844,604	2,907,722	3,055,288
Net worth change		58,396		-102,721		147,566
Percent net worth change		3 %		-5 %		5 %
Ratio Analysis						
Current farm liabilities / assets	53 %	53 %	68 %	83 %	58 %	52 %
Intermediate farm liab. / assets	14 %	16 %	13 %	13 %	17 %	23 %
Long term farm liab. / assets	36 %	35 %	43 %	42 %	34 %	37 %
Total debt to asset ratio	33 %	33 %	37 %	39 %	34 %	35 %

Statement Of Cash Flows
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Beginning cash (farm & nonfarm)	68,552	55,608	134,941
Cash Provided By Operating Activities			
Gross cash farm income	865,101	998,251	1,418,882
Total cash farm expense	-703,195	-796,851	-1,183,474
Net cash from hedging transactions	1,285	-8,887	3,518
Cash provided by operating	163,192	192,513	238,926
Cash Provided By Investing Activities			
Sale of breeding livestock	5,232	14,165	2,720
Sale of machinery & equipment	19,702	13,770	50,615
Sale of titled vehicles	459	350	381
Sale of farm land	6,441	-	29,637
Sale of farm buildings	1,384	-	4,762
Sale of other farm assets	16,002	10,858	52,880
Sale of nonfarm assets	12,304	4,372	32,108
Purchase of breeding livestock	-2,378	-10,339	-14
Purchase of machinery & equip.	-70,546	-57,275	-129,585
Purchase of titled vehicles	-3,765	-700	-9,375
Purchase of farm land	-77,428	-41,455	-173,820
Purchase of farm buildings	-22,649	-10,742	-26,859
Purchase of other farm assets	-9,363	-3,688	-38,858
Purchase of nonfarm assets	-28,726	-38,990	-29,717
Cash provided by investing	-153,330	-119,672	-235,126
Cash Provided By Financing Activities			
Money borrowed	603,946	495,013	1,529,397
Principal payments	-579,934	-536,532	-1,405,001
Personal income	41,141	57,497	34,439
Family living/owner withdrawals	-79,553	-83,098	-101,661
Income and social security tax	-21,121	-17,142	-32,739
Capital contributions	7,180	50	24,120
Capital distributions	-4,743	-700	-
Dividends paid	-40	-200	-
Cash gifts and inheritances	49,374	6,328	1,153
Gifts given	-11,918	-	-50,152
Other cash flows	-	-	-
Cash provided by financing	4,331	-78,784	-444
Net change in cash balance	14,193	-5,943	3,355
Ending cash (farm & nonfarm)	82,718	49,944	138,027
Discrepancy	27	-280	269

Crop Production and Marketing Summary
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Acreage Summary			
Total acres owned	240	214	290
Total crop acres	947	834	1,690
Crop acres owned	233	211	281
Crop acres cash rented	665	612	1,331
Crop acres share rented	48	10	79
Total pasture acres	6	28	-
Percent crop acres owned	25 %	25 %	17 %
 Mach invest/crop acre cost	 488	 602	 354
Mach invest/crop acre market	747	931	526
 Average Price Received (Cash Sales Only)			
Soybeans per bushel	9.20	8.93	9.31
Corn per bushel	3.27	3.25	3.27
Hay per ton	93.11	-	-
Hay, Alfalfa per ton	103.12	-	-
Oats per bushel	2.89	-	-
 Average Yield Per Acre			
Corn (bushel)	175.09	175.21	174.60
Soybeans (bushel)	53.42	51.16	55.34
Corn Silage (ton)	17.89	18.67	18.84
Hay, Grass (ton)	1.84	1.87	-
Hay, Alfalfa (ton)	5.29	-	-
Oats (bushel)	111.51	-	-

Household and Personal Expenses
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>High 20%</u>
Number of farms	34	8
Average family size	2.6	2.1
Family Living Expenses		
Food and meals expense	9,306	9,771
Medical care	3,753	5,286
Health insurance	6,438	9,157
Cash donations	4,582	3,540
Household supplies	9,990	9,834
Clothing	2,570	732
Personal care	1,893	2,354
Child / Dependent care	572	68
Alimony and child support	-	-
Gifts	5,170	2,512
Education	1,154	8
Recreation	6,005	9,655
Utilities (household share)	3,757	4,831
Personal vehicle operating exp	3,792	4,199
Household real estate taxes	589	849
Dwelling rent	21	-
Household repairs	953	553
Personal interest	1,123	1,214
Disability / Long term care ins	608	874
Life insurance payments	3,549	3,443
Personal property insurance	570	942
Miscellaneous	5,529	3,275
Total cash family living expense	71,926	73,097
Family living from the farm	170	256
Total family living	72,096	73,353
Other Nonfarm Expenditures		
Income taxes	26,582	26,681
Furnishing & appliance purchases	324	-
Nonfarm vehicle purchases	2,155	6,580
Nonfarm real estate purchases	2,987	-
Other nonfarm capital purchases	-5,332	-
Nonfarm savings & investments	11,481	-74
Total other nonfarm expenditures	38,197	33,187
Total cash family living investment & nonfarm capital purch	110,123	106,284

Operator and Labor Information
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Operator Information			
Average number of operators	1.2	1.1	1.3
Average age of operators	53.4	59.2	51.5
Average number of years farming	29.6	35.5	30.4
Results Per Operator			
Working capital	299,695	95,941	503,659
Total assets (market)	3,436,187	4,305,781	4,529,769
Total liabilities	1,214,994	1,637,813	1,745,900
Net worth (market)	2,221,193	2,667,968	2,783,868
Net worth excl deferred liabs	2,647,750	3,190,970	3,305,220
Gross farm income	715,256	870,449	1,144,156
Total farm expense	659,974	935,442	965,821
Net farm income from operations	55,282	-64,993	178,335
Net nonfarm income	33,782	54,759	25,829
Family living & tax withdrawals	80,553	93,858	99,369
Total acres owned	196.8	203.5	217.8
Total crop acres	777.4	794.4	1,267.8
Crop acres owned	191.6	201.3	210.8
Crop acres cash rented	546.0	583.3	997.9
Crop acres share rented	39.7	9.8	59.1
Total pasture acres	5.0	26.3	-
Labor Analysis			
Number of farms	101	20	21
Total unpaid labor hours	2,205	2,054	2,994
Total hired labor hours	1,000	2,208	955
Total labor hours per farm	3,205	4,263	3,949
Unpaid hours per operator	1,811	1,957	2,245
Value of farm production / hour	223.51	168.52	326.57
Net farm income / unpaid hour	30.53	-33.22	79.42
Average hourly hired labor wage	24.85	25.03	30.40

Nonfarm Summary
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	101	20	21
Nonfarm Income			
Personal wages & salary	21,575	18,048	21,758
Net nonfarm business income	2,877	4,200	4,587
Personal rental income	3,371	8,467	1,487
Personal interest income	668	658	914
Personal cash dividends	744	3,727	-
Tax refunds	851	2,384	154
Other nonfarm income	11,055	20,014	5,538
Total nonfarm income	41,141	57,497	34,439
Gifts and inheritances	49,374	6,328	1,153
Nonfarm Assets (market)			
Checking & savings	12,288	22,750	14,232
Stocks & bonds	61,809	38,633	120,425
Other current assets	5,353	18,085	4,472
Furniture & appliances	11,219	8,365	12,871
Nonfarm vehicles	21,074	20,764	24,464
Cash value of life ins.	20,567	20,291	11,666
Retirement accounts	140,834	170,252	116,073
Other intermediate assets	23,990	16,671	47,189
Nonfarm real estate	123,433	122,529	125,320
Personal bus. investment	46,318	-	196,367
Other long term assets	49,357	48,952	70,552
Total nonfarm assets	516,244	487,290	743,630
Nonfarm Liabilities			
Accrued interest	109	227	160
Accounts payable	696	174	652
Current notes	343	-	-
Princ due on term debt	3,119	3,356	3,055
Total current liabilities	21,841	20,205	32,012
Intermediate liabilities	4,345	2,562	1,001
Long term liabilities	28,684	37,614	24,945
Total nonfarm liabilities	54,870	60,381	57,958
Nonfarm net worth	461,374	426,909	685,672
Nonfarm debt to asset ratio	11 %	12 %	8 %

Projected Profitability

Southwest Minnesota Farm Business Management Association

	2018 All Farms Actual	2018 Improved Margin Mgmt.	2018 SW Assn Crop Farms Actual	2019 SW Assn Crop Farms Projected	2018 Statewide Lvst Farms Actual	2019 Statewide Lvst Farms Projected
Liquidity						
Current ratio	1.9	2.0	2.2	2.2	1.5	1.6
Working capital to gross	42%	44%	58%	58%	23%	24%
Solvency¹						
Debt to asset	25%	24%	22%	22%	30%	30%
Debt to equity	0.33	0.32	0.28	0.28	0.44	0.43
Profitability						
Rate of return on assets ²	1%	3%	1%	1%	1%	2%
Operating profit margin	6%	16	5%	3%	3%	9%
Net farm income ³	\$69,453	\$151,000	\$65,998	\$54,000	\$40,489	\$113,000
Repayment capacity						
Term debt coverage	1.3	2.3	1.3	1.1	1.0	1.6
Replacement coverage	0.8	1.5	0.8	0.7	0.7	1.1
Efficiency						
Asset turnover rate	20%	21%	21%	21%	20%	21%
Operating expense ratio	80%	72%	78%	80%	88%	85%
Net worth growth						
Net worth change	3%	5%	4%	3%	0%	2%

	2018 All Farms Actual	2018 Improved Margin Mgmt.	2018 SW Assn Crop Farms Actual	2019 SW Assn Crop Farms Projected	2018 Statewide Lvst Farms Actual	2018 Statewide Lvst Farms Projected
Projected Changes						
Gross income	-	+5%	-	-1%	-	3%
Operating expenses	-	-5%	-	1%	-	-1%
Interest rates	-	0%	-	0%	-	0%
Current assets	-	+5%	-	-1%	-	3%
Noncurrent assets	-	0%	-	0%	-	0%

¹ Assets at estimated market value excluding deferred liabilities.

² Assets at estimated market value, returns excluding change in market valuation.

³ Differs from previous tables because Owner Wages and Benefits are treated as expenses. In previous tables, owner wages and benefits are moved to Value of Operator Labor and Management to improve comparative analysis.

Crop Reports

The Crop Enterprise Analysis tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. There are potentially three tables for each crop depending on the farmer's tenure on the land: owned land, cash rented land, and share rented land. Farms are classified into low 20% or high 20% on the basis of net return per acre. The classification is done separately for each table.

Gross Return per Acre includes the value of the crop produced plus any other income directly associated with production of the crop, including hedging gains or losses, crop insurance proceeds and any disaster payments that might have been received. It does not include government payments that are decoupled from production such as ARC and PLC payments (see Net Return with Government Payments).

The *Value per Unit* is assigned by the producer. For cash crops, the value is based on the actual sales price for production sold or contracted before year-end and the inventory value for crops still in inventory at year-end. The local harvest-time price is used for forages and other feed crops.

Net Return per Acre is the amount contributed toward operator labor, management, and equity capital. Any wages and benefits paid to the operator are removed from labor costs (and added to *Labor and Management Charge*) so that all farms are on equal footing. Land costs include land rent on the rented land pages but only actual interest paid and real estate taxes on owned land. For this reason, net returns from owned and rented land should not be compared.

Net Return with Government Payments is the net return per acre after decoupled government payments such as ARC and PLC payments have been added. These payments are generally allocated evenly per acre across all crops except vegetables and pasture.

Net Return Over Labor and Management is the return, including government payments, remaining after deducting an opportunity cost for unpaid operator labor and management. This is the per acre return to equity capital.

Cost of Production shows the average cost per unit produced in each cost category. *Total Direct and Overhead Expense per Unit* is the breakeven price needed to cover cash costs and depreciation. *Less Government and Other Income* is the breakeven price if government payments and any miscellaneous income are used to offset some expenses. *With Labor and Management* is the breakeven price to provide a labor and management return for the operator(s).

Machinery Cost per Acre includes fuel and oil, repairs, custom hire, machinery lease payments, machinery depreciation, and interest on intermediate debt.

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Corn on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	58	11	12
Acres	165.08	231.37	111.68
Yield per acre (bu.)	174.13	159.94	192.91
Operator's share of yield %	100.00	100.00	100.00
Value per bu.	3.41	3.40	3.41
Total product return per acre	592.99	544.19	657.05
Hedging gains/losses per acre	1.44	-	8.86
Crop insurance per acre	32.58	21.72	25.79
Other crop income per acre	10.75	4.87	16.82
Gross return per acre	637.77	570.78	708.52
Direct Expenses			
Seed and plants	116.95	121.31	114.86
Fertilizer	95.77	93.54	94.88
Crop chemicals	29.47	26.13	28.16
Crop insurance	14.24	16.78	10.41
Drying expense	14.82	13.72	15.72
Storage	0.58	0.07	1.42
Fuel & oil	22.83	28.34	22.32
Repairs	50.82	69.24	32.56
Custom hire	7.57	6.59	9.07
Hired labor	2.14	2.31	4.91
Machinery leases	1.24	-	-
Utilities	0.56	0.61	2.37
Marketing	1.11	0.58	0.58
Operating interest	11.61	9.30	4.59
Miscellaneous	3.96	6.25	1.56
Total direct expenses per acre	373.65	394.79	343.40
Return over direct exp per acre	264.11	176.00	365.13
Overhead Expenses			
Hired labor	8.29	9.56	3.84
Machinery leases	3.33	7.88	1.31
Building leases	0.58	0.53	-
RE & pers. property taxes	27.98	26.35	25.56
Farm insurance	11.31	12.39	8.28
Utilities	5.88	6.40	4.39
Dues & professional fees	4.47	5.63	5.08
Interest	67.98	91.11	23.15
Mach & bldg depreciation	68.54	79.79	50.96
Miscellaneous	4.42	6.30	2.17
Total overhead expenses per acre	202.80	245.95	124.74
Total dir & ovhd expenses per acre	576.45	640.74	468.14
Net return per acre	61.31	-69.96	240.38
Government payments	-	-	-
Net return with govt pmts	61.31	-69.96	240.38
Labor & management charge	54.97	56.29	65.21
Net return over lbr & mgt	6.34	-126.25	175.18
Cost of Production			
Total direct expense per bu.	2.15	2.47	1.78
Total dir & ovhd exp per bu.	3.31	4.01	2.43
Less govt & other income	3.05	3.84	2.16
With labor & management	3.37	4.19	2.50
Net value per unit	3.41	3.40	3.45
Machinery cost per acre	145.21	179.45	108.92
Est. labor hours per acre	2.47	2.49	2.26

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Corn on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	85	17	17
Acres	375.67	292.07	256.00
Yield per acre (bu.)	175.62	162.70	189.78
Operator's share of yield %	100.00	100.00	100.00
Value per bu.	3.39	3.43	3.41
Other product return per acre	0.10	-	-
Total product return per acre	595.87	558.62	647.40
Hedging gains/losses per acre	2.93	-0.06	18.39
Crop insurance per acre	37.89	29.55	102.25
Other crop income per acre	8.28	6.82	10.17
Gross return per acre	644.97	594.93	778.21
Direct Expenses			
Seed and plants	110.10	119.34	111.56
Fertilizer	90.85	106.20	94.00
Crop chemicals	29.86	35.31	30.47
Crop insurance	15.10	13.96	14.41
Drying expense	13.40	11.68	15.56
Storage	0.81	1.14	1.63
Fuel & oil	25.73	26.15	18.93
Repairs	37.94	44.28	31.73
Custom hire	7.07	9.97	13.25
Hired labor	5.45	4.95	2.21
Land rent	208.52	209.70	195.12
Machinery leases	1.88	3.78	1.04
Utilities	0.17	-	0.63
Hauling and trucking	0.50	-	0.76
Marketing	1.37	1.46	0.96
Operating interest	12.72	11.37	7.05
Miscellaneous	3.42	4.10	4.77
Total direct expenses per acre	564.88	603.39	544.10
Return over direct exp per acre	80.09	-8.46	234.11
Overhead Expenses			
Hired labor	6.73	15.33	9.67
Machinery leases	12.59	3.35	0.46
Building leases	1.85	2.05	1.25
Farm insurance	9.26	13.92	8.06
Utilities	5.06	6.73	6.76
Dues & professional fees	4.48	4.51	6.91
Interest	4.46	5.07	8.46
Mach & bldg depreciation	50.23	70.24	54.36
Miscellaneous	4.67	7.08	5.15
Total overhead expenses per acre	99.34	128.28	101.08
Total dir & ovhd expenses per acre	664.22	731.67	645.18
Net return per acre	-19.25	-136.74	133.03
Government payments	0.01	-	-
Net return with govt pmts	-19.24	-136.74	133.03
Labor & management charge	51.52	55.64	55.13
Net return over lbr & mgt	-70.77	-192.37	77.89
Cost of Production			
Total direct expense per bu.	3.22	3.71	2.87
Total dir & ovhd exp per bu.	3.78	4.50	3.40
Less govt & other income	3.50	4.27	2.71
With labor & management	3.80	4.62	3.00
Net value per unit	3.41	3.43	3.51
Machinery cost per acre	132.41	148.84	121.30
Est. labor hours per acre	2.10	2.36	2.10

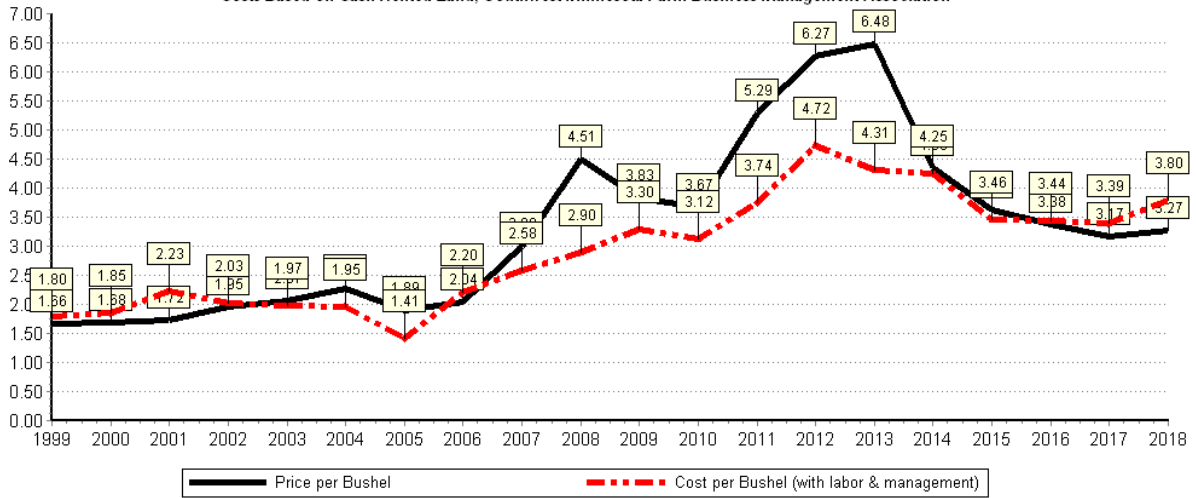
Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Corn on Share Rent

	<u>Avg. Of All Farms</u>
Number of farms	15
Acres	135.30
Yield per acre (bu.)	177.91
Operators share of yield %	56.90
Value per bu.	3.40
Total product return per acre	343.78
Hedging gains/losses per acre	0.43
Crop insurance per acre	20.37
Other crop income per acre	5.37
Gross return per acre	369.95
Direct Expenses	
Seed and plants	71.03
Fertilizer	54.36
Crop chemicals	23.15
Crop insurance	7.94
Drying expense	9.97
Storage	1.92
Fuel & oil	14.93
Repairs	30.52
Custom hire	6.27
Hired labor	1.40
Utilities	0.41
Marketing	1.68
Operating interest	9.11
Miscellaneous	0.55
Total direct expenses per acre	233.23
Return over direct exp per acre	136.72
Overhead Expenses	
Hired labor	6.45
Machinery leases	4.63
Building leases	0.54
Farm insurance	6.30
Utilities	3.69
Dues & professional fees	4.22
Interest	3.58
Mach & bldg depreciation	56.08
Miscellaneous	4.14
Total overhead expenses per acre	89.63
Total dir & ovhd expenses per acre	322.86
Net return per acre	47.09
Government payments	-
Net return with govt pmts	47.09
Labor & management charge	53.35
Net return over lbr & mgt	-6.25
Cost of Production	
Total direct expense per bu.	2.30
Total dir & ovhd exp per bu.	3.19
Less govt & other income	2.93
With labor & management	3.46
Net value per unit	3.40
Machinery cost per acre	111.97
Est. labor hours per acre	2.50

Figure 9: Corn Price and Cost of Production

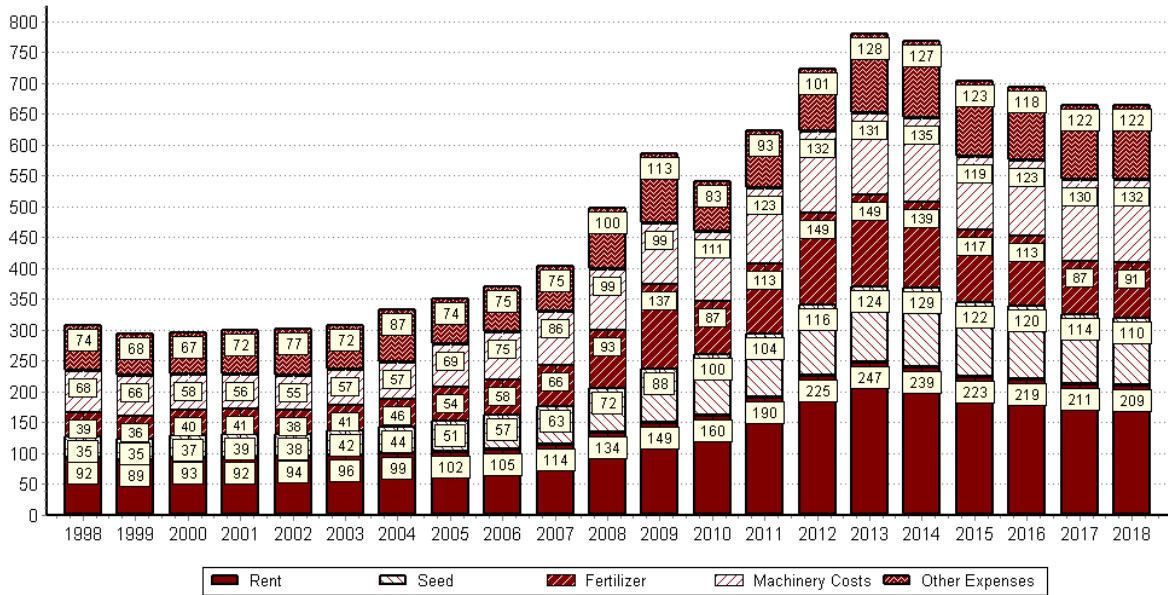
Costs Based on Cash Rented Land, Southwest Minnesota Farm Business Management Association



Price does not include LDP payments and other government support

Figure 10: Corn Cost Per Acre

Cash Rented, Southwest Minnesota Farm Business Management Association



Machinery costs include fuel, repairs, custom hire, lease expense, interest, and depreciation.

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Soybeans on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	61	12	13
Acres	157.22	158.27	118.96
Yield per acre (bu.)	54.05	53.27	53.55
Operators share of yield %	100.00	100.00	100.00
Value per bu.	8.33	8.29	8.47
Total product return per acre	450.47	441.51	453.52
Hedging gains/losses per acre	1.09	-	2.99
Crop insurance per acre	23.93	1.43	79.94
Other crop income per acre	97.85	89.41	94.88
Gross return per acre	573.34	532.36	631.33
Direct Expenses			
Seed and plants	58.49	60.41	63.07
Fertilizer	29.42	37.30	21.97
Crop chemicals	44.03	44.16	43.79
Crop insurance	16.78	21.75	17.99
Storage	0.52	0.00	2.10
Fuel & oil	18.01	20.16	17.41
Repairs	37.07	32.57	29.57
Custom hire	7.49	4.56	6.72
Hired labor	2.26	2.98	6.33
Machinery leases	0.83	-	-
Utilities	0.35	0.55	-
Marketing	1.16	1.09	0.64
Operating interest	10.31	15.15	3.16
Miscellaneous	4.44	4.54	6.49
Total direct expenses per acre	231.16	245.23	219.23
Return over direct exp per acre	342.18	287.13	412.10
Overhead Expenses			
Hired labor	6.13	8.26	3.32
Machinery leases	3.42	11.60	0.17
Building leases	0.31	0.55	-
RE & pers. property taxes	28.69	25.32	25.36
Farm insurance	9.08	8.10	9.92
Utilities	5.20	4.64	6.90
Dues & professional fees	3.05	1.53	3.95
Interest	64.23	141.78	15.58
Mach & bldg depreciation	54.23	49.42	49.78
Miscellaneous	3.82	2.62	1.55
Total overhead expenses per acre	178.16	253.81	116.53
Total dir & ovhd expenses per acre	409.32	499.04	335.75
Net return per acre	164.02	33.31	295.57
Government payments	-	-	-
Net return with govt pmts	164.02	33.31	295.57
Labor & management charge	42.30	36.79	48.27
Net return over lbr & mgt	121.72	-3.48	247.31
Cost of Production			
Total direct expense per bu.	4.28	4.60	4.09
Total dir & ovhd exp per bu.	7.57	9.37	6.27
Less govt & other income	5.30	7.66	2.95
With labor & management	6.08	8.35	3.85
Net value per unit	8.35	8.29	8.53
Machinery cost per acre	113.96	112.67	97.27
Est. labor hours per acre	1.93	1.68	2.01

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Soybeans on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	85	17	17
Acres	367.32	359.63	236.33
Yield per acre (bu.)	53.20	45.99	60.45
Operators share of yield %	100.00	100.00	100.00
Value per bu.	8.54	8.38	8.44
Total product return per acre	454.57	385.29	510.01
Hedging gains/losses per acre	1.83	0.12	4.55
Crop insurance per acre	27.01	25.89	29.83
Other crop income per acre	94.28	58.15	116.55
Gross return per acre	577.69	469.45	660.95
Direct Expenses			
Seed and plants	54.27	55.95	54.59
Fertilizer	27.13	32.28	23.96
Crop chemicals	46.53	42.93	39.57
Crop insurance	17.01	18.07	13.33
Fuel & oil	20.54	19.28	13.42
Repairs	31.66	41.70	20.67
Custom hire	6.67	7.21	8.20
Hired labor	5.66	2.50	0.70
Land rent	212.41	214.44	191.26
Machinery leases	1.41	0.93	-
Hauling and trucking	0.53	0.02	-
Marketing	1.11	0.24	0.20
Operating interest	10.09	13.61	5.82
Miscellaneous	3.95	2.03	4.43
Total direct expenses per acre	438.98	451.19	376.17
Return over direct exp per acre	138.71	18.26	284.78
Overhead Expenses			
Hired labor	4.96	2.61	7.07
Machinery leases	12.12	2.75	4.54
Building leases	1.55	1.61	1.11
Farm insurance	7.04	9.00	6.33
Utilities	3.50	3.94	3.98
Dues & professional fees	3.16	3.25	3.67
Interest	3.29	5.21	4.70
Mach & bldg depreciation	37.82	47.34	41.68
Miscellaneous	3.46	1.85	4.65
Total overhead expenses per acre	76.89	77.55	77.73
Total dir & ovhd expenses per acre	515.88	528.74	453.91
Net return per acre	61.81	-59.29	207.04
Government payments	0.01	-	-
Net return with govt pmts	61.82	-59.29	207.04
Labor & management charge	40.76	42.85	37.27
Net return over lbr & mgt	21.07	-102.14	169.77
Cost of Production			
Total direct expense per bu.	8.25	9.81	6.22
Total dir & ovhd exp per bu.	9.70	11.50	7.51
Less govt & other income	7.38	9.67	5.01
With labor & management	8.15	10.60	5.63
Net value per unit	8.58	8.38	8.51
Machinery cost per acre	107.84	114.97	88.81
Est. labor hours per acre	1.66	1.72	1.29

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Soybeans on Share Rent

	<u>Avg. Of All Farms</u>
Number of farms	16
Acres	161.16
Yield per acre (bu.)	53.67
Operators share of yield %	54.42
Value per bu.	8.32
Total product return per acre	243.03
Hedging gains/losses per acre	1.58
Crop insurance per acre	18.81
Other crop income per acre	54.88
Gross return per acre	318.30
Direct Expenses	
Seed and plants	30.26
Fertilizer	15.09
Crop chemicals	27.17
Crop insurance	11.49
Storage	0.42
Fuel & oil	13.01
Repairs	25.99
Custom hire	4.44
Hired labor	1.87
Machinery leases	0.15
Marketing	0.99
Operating interest	8.30
Miscellaneous	0.35
Total direct expenses per acre	139.52
Return over direct exp per acre	178.78
Overhead Expenses	
Hired labor	4.66
Machinery leases	3.96
Building leases	0.52
Farm insurance	5.34
Utilities	3.20
Dues & professional fees	3.29
Interest	3.76
Mach & bldg depreciation	46.58
Miscellaneous	3.31
Total overhead expenses per acre	74.63
Total dir & ovhd expenses per acre	214.15
Net return per acre	104.15
Government payments	-
Net return with govt pmts	104.15
Labor & management charge	44.64
Net return over lbr & mgt	59.50
Cost of Production	
Total direct expense per bu.	4.78
Total dir & ovhd exp per bu.	7.33
Less govt & other income	4.75
With labor & management	6.28
Net value per unit	8.37
Machinery cost per acre	94.46
Est. labor hours per acre	1.92

Figure 11: Soybean Price and Cost of Production

Cash Rented, Southwest Minnesota Farm Business Management Association

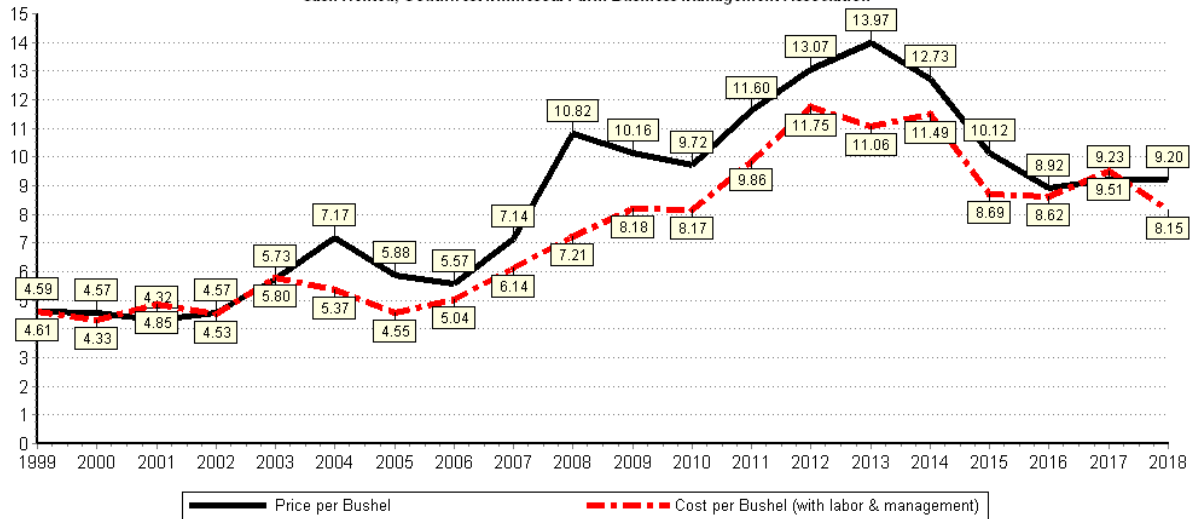
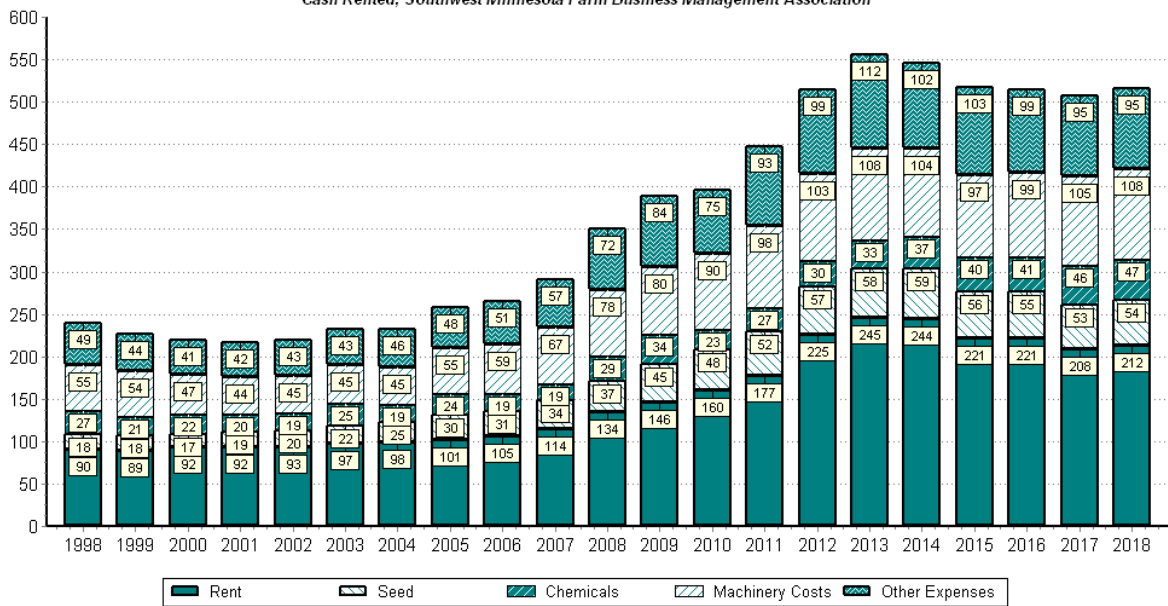


Figure 12: Soybean Cost Per Acre

Cash Rented, Southwest Minnesota Farm Business Management Association



Machinery costs include fuel, repairs, custom hire, lease payments, interest and depreciation.

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Crop Tenure Type)

Corn Silage

	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	11	9
Acres	135.71	45.44
Yield per acre (ton)	16.87	20.67
Operators share of yield %	100.00	100.00
Value per ton	30.69	28.11
Total product return per acre	517.67	580.90
Crop insurance per acre	132.61	7.79
Other crop income per acre	2.25	2.00
Gross return per acre	652.53	590.68
Direct Expenses		
Seed and plants	122.14	93.61
Fertilizer	78.01	99.12
Crop chemicals	29.19	25.69
Crop insurance	9.17	10.23
Fuel & oil	21.37	15.03
Repairs	37.53	34.55
Custom hire	8.18	7.06
Hired labor	0.59	-
Land rent	-	214.38
Marketing	-	3.22
Operating interest	6.48	10.64
Miscellaneous	1.21	1.68
Total direct expenses per acre	313.87	515.21
Return over direct exp per acre	338.66	75.47
Overhead Expenses		
Hired labor	12.52	6.58
Machinery leases	13.94	20.69
RE & pers. property taxes	33.98	-
Farm insurance	4.31	3.83
Utilities	3.06	6.60
Dues & professional fees	2.22	2.69
Interest	44.62	1.45
Mach & bldg depreciation	73.31	55.00
Miscellaneous	2.06	5.33
Total overhead expenses per acre	190.02	102.17
Total dir & ovhd expenses per acre	503.89	617.38
Net return per acre	148.64	-26.70
Government payments	-	-
Net return with govt pmts	148.64	-26.70
Labor & management charge	42.86	48.01
Net return over lbr & mgt	105.78	-74.71
Cost of Production		
Total direct expense per ton	18.61	24.93
Total dir & ovhd exp per ton	29.88	29.87
Less govt & other income	21.88	29.40
With labor & management	24.42	31.72
Net value per unit	30.69	28.11
Machinery cost per acre	152.57	122.88
Est. labor hours per acre	1.85	2.21

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Crop Tenure Type)

Hay, Alfalfa

	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	8	8
Acres	74.69	41.00
Yield per acre (ton)	5.39	5.11
Operators share of yield %	100.00	100.00
Value per ton	129.06	134.12
Total product return per acre	695.06	684.77
Gross return per acre	695.06	684.77
Direct Expenses		
Seed and plants	1.08	-
Fertilizer	79.41	66.01
Crop chemicals	2.40	1.49
Crop insurance	-	0.93
Fuel & oil	16.78	27.75
Repairs	30.59	46.07
Custom hire	0.19	6.48
Hired labor	-	2.47
Land rent	-	212.12
Operating interest	5.19	5.44
Miscellaneous	2.66	1.66
Total direct expenses per acre	138.28	370.42
Return over direct exp per acre	556.78	314.35
Overhead Expenses		
Hired labor	9.96	6.28
Machinery leases	12.65	3.96
RE & pers. property taxes	37.25	-
Farm insurance	7.24	9.68
Utilities	4.92	8.69
Dues & professional fees	1.57	3.71
Interest	100.92	4.32
Mach & bldg depreciation	81.00	77.46
Miscellaneous	6.07	5.71
Total overhead expenses per acre	261.58	119.80
Total dir & ovhd expenses per acre	399.87	490.22
Net return per acre	295.20	194.55
Government payments	-	-
Net return with govt pmts	295.20	194.55
Labor & management charge	48.46	57.27
Net return over lbr & mgt	246.73	137.29
Cost of Production		
Total direct expense per ton	25.68	72.55
Total dir & ovhd exp per ton	74.25	96.02
Less govt & other income	74.25	96.02
With labor & management	83.25	107.23
Net value per unit	129.06	134.12
Machinery cost per acre	134.36	159.21
Est. labor hours per acre	2.34	2.52

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

CRP on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	13
Acres	31.23
Yield per acre (\$)	152.73
Operators share of yield %	100.00
Value per \$	1.00
Total product return per acre	152.73
Gross return per acre	152.73
Direct Expenses	
Seed and plants	5.63
Fuel & oil	3.31
Repairs	5.02
Custom hire	0.54
Hired labor	0.64
Operating interest	0.49
Total direct expenses per acre	15.64
Return over direct exp per acre	137.09
Overhead Expenses	
Hired labor	1.21
RE & pers. property taxes	20.85
Farm insurance	1.32
Utilities	1.11
Dues & professional fees	0.65
Interest	9.43
Mach & bldg depreciation	11.76
Miscellaneous	0.69
Total overhead expenses per acre	47.02
Total dir & ovhd expenses per acre	62.66
Net return per acre	90.07
Government payments	-
Net return with govt pmts	90.07
Labor & management charge	8.46
Net return over lbr & mgt	81.61
Cost of Production	
Total direct expense per \$	0.10
Total dir & ovhd exp per \$	0.41
Less govt & other income	0.41
With labor & management	0.47
Net value per unit	1.00
Machinery cost per acre	19.51
Est. labor hours per acre	0.47

Livestock Reports

The Livestock Enterprise Analysis tables show the average physical production, gross margin over purchase costs, direct costs, overhead costs, and net returns per unit.

The livestock enterprise summaries include data from both Southwest Minnesota Farm Management Association farms and Minnesota State Farm Business Management program farms. This provides a greater numbers farms reporting for each enterprise, providing more accurate benchmark information. Minnesota State FBM programs are distributed across the state and include over 2,200 participating farms. We want to thank the Minnesota State FBM program and participating producers for making this data available to be included in this report.

The “Dairy” table, if included, contains the information for only the milking herd (which includes dry cows). “Dairy Replacement Heifers” are those heifers kept for replacement into the milking herd. The “Dairy and Replacement Heifers” table is for the whole herd and includes those farms in the “Dairy” and “Dairy Replacement Heifers” tables; it does not include “Dairy Steers.”

Gross Margin is the accrual gross value added by the enterprise. It includes income from sale of offspring and livestock products, cull income, non-cash transfers to other enterprises, and the value of production used in the home or for feed. It also includes the value of inventory change from beginning to the end of the year. The cost of livestock purchased and the value of animals transferred in are deducted.

Net Return is the amount contributed by the enterprise toward operator labor, management, and equity capital. Any wages and benefits paid to the operator are removed from labor costs (and added to *Labor and Management Charge*) so that all farms are on equal footing.

Net Return Over Labor and Management is the return remaining after deducting an opportunity cost for unpaid labor and management. This is the return to equity capital.

Cost of Production shows the average cost per unit sold in each cost category. *Total direct and overhead expense per unit* is the breakeven price needed to cover cash costs and depreciation. For grow/finish enterprises, this includes the purchase cost or transfer in value of the animal. *With other revenue adjustments* is the breakeven price adjusted for cull sales, other offspring sales, the cost of replacement stock, and any other miscellaneous income. This assumes that some costs can be covered by these other income sources. *With labor and management* is the final breakeven price to provide a labor and management return for the operator(s).

Other Information contains both economic and technical efficiency measures for each enterprise.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain livestock enterprise, that information is not reported. If there are fewer than 25 farms, the high and low groups are not reported.

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Hogs, Farrow To Finish -- Average Per Litter

	<u>Avg. Of All Farms</u>	
Number of farms	9	
	Quantity	Value
Raised Hogs sold (lb)	2,491.9	1,170.50
Transferred out (lb)	0.1	0.08
Cull sales (lb)	91.0	30.05
Government payments		19.01
Other income		25.23
Purchased (lb)	-19.4	-24.65
Inventory change (lb)	45.0	-20.66
Gross margin		1,199.56
Direct Expenses		
Protein Vit Minerals (lb.)	1,048.2	180.58
Complete Ration (lb.)	1,688.4	294.91
Corn (bu.)	99.9	324.84
Other feed stuffs (lb)	145.1	14.93
Veterinary		46.41
Supplies		83.59
Fuel & oil		12.32
Repairs		15.86
Hired labor		72.71
Livestock leases		38.97
Operating interest		25.29
Total direct expenses		1,110.39
Return over direct expense		89.16
Overhead Expenses		
Building leases		62.18
Farm insurance		22.52
Utilities		21.70
Interest		10.30
Mach & bldg depreciation		30.83
Miscellaneous		24.12
Total overhead expenses		171.65
Total dir & ovhd expenses		1,282.04
Net return		-82.49
Labor & management charge		39.89
Net return over lbr & mgt		-122.38
Cost of Production/Cwt. Carcass Sold		
Total direct expense per unit		61.77
Total dir & ovhd expense per unit		71.32
With other revenue adjustments		69.44
With labor and management		71.66
Est. labor hours per unit		3.46
Other Information		
Average number of sows		255.8
Litters farrowed		520
Litters per sow		2.03
Litters per crate		10.09
Pigs born per litter		10.95
Pigs weaned per litter		10.06
Pigs weaned per sow		19.50
Pigs sold per litter		9.31
Percent substandard hogs		1
Lb. of feed / lb. of gain		3.25
Feed cost / cwt. of gain		31.23
Feed cost per litter		815.25
Hired labor per sow		160.99
Avg wgt/Raised Hogs sold		268
Avg price / cwt.		46.97
Average carcass weight		196
Average price / cwt. carcass		64.67

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Hogs, Farrow To Finish -- Average Per Cwt. Carcass Sold

	<u>Avg. Of All Farms</u>	
Number of farms	9	
	Quantity	Value
Raised Hogs sold (lb)	138.62	65.11
Transferred out (lb)	0.01	0.00
Cull sales (lb)	5.06	1.67
Government payments		1.06
Other income		1.40
Purchased (lb)	-1.08	-1.37
Inventory change (lb)	2.50	-1.15
Gross margin		66.73
Direct Expenses		
Protein Vit Minerals (lb.)	58.31	10.04
Complete Ration (lb.)	93.92	16.41
Corn (bu.)	5.56	18.07
Stover (lb.)	0.67	0.02
Other feed stuffs (lb)	7.41	0.81
Veterinary		2.58
Supplies		6.82
Fuel & oil		0.69
Repairs		0.88
Hired labor		4.04
Operating interest		1.41
Total direct expenses		61.77
Return over direct expense		4.96
Overhead Expenses		
Building leases		3.46
Farm insurance		1.25
Utilities		1.21
Interest		0.57
Mach & bldg depreciation		1.72
Miscellaneous		1.34
Total overhead expenses		9.55
Total dir & ovhd expenses		71.32
Net return		-4.59
Labor & management charge		2.22
Net return over lbr & mgt		-6.81
Cost of Production/Cwt. Carcass Sold		
Total direct expense per unit		61.77
Total dir & ovhd expense per unit		71.32
With other revenue adjustments		69.44
With labor and management		71.66
Est. labor hours per unit		0.19
Other Information		
Average number of sows		255.8
Litters farrowed		520
Litters per sow		2.03
Litters per crate		10.09
Pigs born per litter		10.95
Pigs weaned per litter		10.06
Pigs weaned per sow		19.50
Pigs sold per litter		9.31
Percent substandard hogs		1
Lb. of feed / lb. of gain		3.25
Feed cost / cwt. of gain		31.23
Feed cost per litter		815.25
Hired labor per sow		160.99
Avg wgt/Raised Hogs sold		268
Avg price / cwt.		46.97
Average carcass weight		196
Average price / cwt. carcass		64.67

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Hogs, Finish Feeder Pigs -- Average Per Head

	<u>Avg. Of All Farms</u>		<u>High 20%</u>	
Number of farms	24		5	
	Quantity	Value	Quantity	Value
Finish Hogs sold (lb)	280.3	139.11	263.5	142.94
Transferred out (lb)	0.5	0.30	-	-
Cull sales (lb)	1.4	0.27	-	-
Government payments		2.12		2.30
Other income		1.60		5.06
Purchased (lb)	-36.6	-48.30	-45.6	-56.00
Transferred in (lb)	-3.2	-7.21	-2.2	-2.23
Inventory change (lb)	-2.5	-4.73	17.1	9.10
Gross margin		83.16		101.18
Direct Expenses				
Protein Vit Minerals (lb.)	135.5	25.37	127.4	25.16
Complete Ration (lb.)	195.1	11.79	46.4	3.64
Corn (bu.)	6.9	22.79	7.4	24.63
Other feed stuffs (lb)	13.4	1.11	38.1	2.91
Veterinary		1.15		1.20
Supplies		2.19		1.58
Contract production exp.		3.39		4.10
Fuel & oil		0.79		1.14
Repairs		1.11		1.65
Custom hire		0.54		0.82
Hauling and trucking		1.82		3.26
Operating interest		1.07		2.19
Total direct expenses		73.11		72.28
Return over direct expense		10.05		28.90
Overhead Expenses				
Hired labor		1.61		1.69
Building leases		5.95		3.81
Farm insurance		0.82		1.39
Utilities		0.98		1.05
Interest		1.03		2.30
Mach & bldg depreciation		2.76		3.40
Miscellaneous		1.09		0.84
Total overhead expenses		14.25		14.47
Total dir & ovhd expenses		87.36		86.75
Net return		-4.20		14.43
Labor & management charge		2.77		3.41
Net return over lbr & mgt		-6.97		11.02
Cost of Production/Cwt. Carcass Sold				
Total direct expense per unit		64.12		62.06
Total dir & ovhd expense per unit		70.99		69.47
With other revenue adjustments		69.25		65.84
With labor and management		70.58		67.59
Est. labor hours per unit		0.25		0.24
Other Information				
No. purchased or trans in		8,876		8,411
Number sold or trans out		8,767		7,592
Percentage death loss		4.5		3.5
Percent substandard hogs		2		1
Avg. daily gain (lb.)		1.69		1.61
Lb. of feed / lb. of gain		2.72		2.67
Feed cost per cwt. of gain		25.43		24.15
Feed cost per head		61.06		56.35
Hired labor per head		1.93		1.69
Average purchase weight		41		45
Avg wgt / Finish Hogs sold		276		278
Avg purch price / head		54.40		55.59
Avg sales price / cwt.		49.62		54.25
Average carcass weight		208		208
Average price / cwt. carcass		66.67		73.01

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Hogs, Finish Feeder Pigs -- Average Per Cwt. Carcass Sold

	<u>Avg. Of All Farms</u>		<u>High 20%</u>	
Number of farms	24		5	
	Quantity	Value	Quantity	Value
Finish Hogs sold (lb)	135.17	67.08	134.99	73.24
Transferred out (lb)	0.24	0.15	-	-
Cull sales (lb)	0.68	0.13	-	-
Government payments		1.02		1.18
Other income		0.77		2.59
Purchased (lb)	-17.65	-23.29	-23.36	-28.69
Transferred in (lb)	-1.54	-3.47	-1.13	-1.14
Inventory change (lb)	-1.22	-2.28	8.77	4.66
Gross margin		40.10		51.84
Direct Expenses				
Protein Vit Minerals (lb.)	65.32	12.23	65.29	12.89
Complete Ration (lb.)	94.08	5.69	23.77	1.87
Corn (bu.)	3.32	10.99	3.77	12.62
Other feed stuffs (lb)	6.47	0.53	19.53	1.49
Veterinary		0.56		0.61
Supplies		1.05		0.81
Contract production exp.		1.63		2.10
Fuel & oil		0.38		0.58
Repairs		0.53		0.85
Custom hire		0.26		0.42
Hauling and trucking		0.88		1.67
Operating interest		0.51		1.12
Total direct expenses		35.25		37.03
Return over direct expense		4.85		14.81
Overhead Expenses				
Hired labor		0.77		0.86
Building leases		2.87		1.95
Farm insurance		0.40		0.71
Utilities		0.47		0.54
Interest		0.50		1.18
Mach & bldg depreciation		1.33		1.74
Miscellaneous		0.53		0.43
Total overhead expenses		6.87		7.41
Total dir & ovhd expenses		42.13		44.44
Net return		-2.03		7.39
Labor & management charge		1.33		1.75
Net return over lbr & mgt		-3.36		5.65
Cost of Production/Cwt. Carcass Sold				
Total direct expense per unit		64.12		62.06
Total dir & ovhd expense per unit		70.99		69.47
With other revenue adjustments		69.25		65.84
With labor and management		70.58		67.59
Est. labor hours per unit		0.12		0.12
Other Information				
No. purchased or trans in		8,876		8,411
Number sold or trans out		8,767		7,592
Percentage death loss		4.5		3.5
Percent substandard hogs		2		1
Avg. daily gain (lb.)		1.69		1.61
Lb. of feed / lb. of gain		2.72		2.67
Feed cost per cwt. of gain		25.43		24.15
Feed cost per head		61.06		56.35
Hired labor per head		1.93		1.69
Average purchase weight		41		45
Avg wgt / Finish Hogs sold		276		278
Avg purch price / head		54.40		55.59
Avg sales price / cwt.		49.62		54.25
Average carcass weight		208		208
Average price / cwt. carcass		66.67		73.01

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Hogs, Weaning to Finish -- Average Per Head

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	26		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Wean-Fin Pig sold (lb)	278.4	138.52	274.0	121.21	288.9	149.57
Transferred out (lb)	0.0	0.01	0.2	0.10	-	-
Cull sales (lb)	2.0	0.41	-	-	0.6	0.11
Government payments		1.49		-		1.74
Other income		3.93		0.08		5.30
Purchased (lb)	-16.8	-48.04	-14.3	-39.38	-18.0	-50.76
Transferred in (lb)	-0.5	-1.49	-0.2	-0.41	-	-
Inventory change (lb)	0.6	0.28	2.1	-6.96	-7.8	1.48
Gross margin		95.11		74.64		107.44
Direct Expenses						
Protein Vit Minerals (lb.)	147.5	27.81	96.0	23.19	146.8	28.22
Complete Ration (lb.)	87.8	9.98	2.0	1.55	120.7	11.01
Corn (bu.)	6.9	22.72	9.8	33.57	6.4	21.57
Protein Supplement (lb.)	5.4	0.88	84.2	13.69	-	-
DDGS, dry (lb.)	70.9	5.08	6.5	0.51	85.7	5.86
Other feed stuffs (lb)	1.8	0.30	1.8	0.28	4.0	0.44
Veterinary		3.86		7.02		2.56
Supplies		2.98		2.12		2.54
Contract production exp.		2.90		5.63		3.40
Repairs		1.52		3.55		1.48
Custom hire		2.05		-		1.15
Hired labor		1.19		0.11		2.34
Hauling and trucking		1.83		0.28		1.79
Marketing		0.71		1.89		0.27
Operating interest		1.28		5.00		0.75
Total direct expenses		85.10		98.40		83.38
Return over direct expense		10.00		-23.76		24.06
Overhead Expenses						
Hired labor		2.26		7.62		0.71
Building leases		9.80		-		12.80
Mach & bldg depreciation		1.99		1.69		2.21
Miscellaneous		4.23		3.62		3.12
Total overhead expenses		18.27		12.93		18.84
Total dir & ovhd expenses		103.38		111.33		102.22
Net return		-8.27		-36.69		5.22
Labor & management charge		3.21		4.83		3.74
Net return over lbr & mgt		-11.48		-41.52		1.48
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		64.99		71.56		62.03
Total dir & ovhd expense per unit		73.85		77.94		70.84
With other revenue adjustments		71.23		77.90		67.56
With labor and management		72.79		80.28		69.31
Est. labor hours per unit		0.27		0.47		0.20
Other Information						
No. purchased or trans in		17,020		5,304		29,042
Number sold or trans out		15,366		4,981		27,211
Percentage death loss		6.3		5.3		4.3
Percent substandard hogs		2		1		2
Avg. daily gain (lb.)		1.57		1.52		1.48
Lb. of feed / lb. of gain		2.62		2.50		2.71
Feed cost per cwt. of gain		25.31		27.81		25.44
Feed cost per head		66.77		72.80		67.10
Hired labor per head		3.45		7.72		3.04
Average purchase weight		15		13		15
Avg wgt / Wean-Fin Pig sold		266		271		255
Avg purch price / head		42.60		36.86		42.00
Avg sales price / cwt.		49.75		44.23		51.78
Average carcass weight		201		203		192
Average price / cwt. carcass		66.78		59.32		69.59

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Hogs, Weaning to Finish -- Average Per Cwt. Carcass Sold

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	26		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Wean-Fin Pig sold (lb)	135.10	67.21	135.12	59.76	135.19	70.00
Transferred out (lb)	0.01	0.00	0.08	0.05	-	-
Cull sales (lb)	0.98	0.20	-	-	0.30	0.05
Government payments		0.72		-		0.81
Other income		1.91		0.04		2.48
Purchased (lb)	-8.14	-23.31	-7.07	-19.42	-8.43	-23.76
Transferred in (lb)	-0.22	-0.72	-0.08	-0.20	-	-
Inventory change (lb)	0.27	0.14	1.03	-3.43	-3.65	0.69
Gross margin		46.15		36.80		50.28
Direct Expenses						
Protein Vit Minerals (lb.)	71.58	13.49	47.32	11.43	68.71	13.21
Complete Ration (lb.)	42.59	4.84	0.99	0.77	56.50	5.15
Corn (bu.)	3.33	11.02	4.82	16.55	2.99	10.10
Protein Supplement (lb.)	2.64	0.43	41.50	6.75	-	-
DDGS, dry (lb.)	34.38	2.47	3.21	0.25	40.10	2.74
Other feed stuffs (lb)	0.88	0.14	0.87	0.14	1.87	0.21
Veterinary		1.87		3.46		1.20
Supplies		1.44		1.05		1.19
Contract production exp.		1.41		2.77		1.59
Repairs		0.74		1.75		0.69
Custom hire		1.00		-		0.54
Hired labor		0.58		0.05		1.09
Hauling and trucking		0.89		0.14		0.84
Marketing		0.35		0.93		0.13
Operating interest		0.62		2.47		0.35
Total direct expenses		41.29		48.52		39.02
Return over direct expense		4.85		-11.71		11.26
Overhead Expenses						
Hired labor		1.09		3.76		0.33
Building leases		4.75		-		5.99
Mach & bldg depreciation		0.97		0.83		1.03
Miscellaneous		2.05		1.79		1.46
Total overhead expenses		8.87		6.38		8.82
Total dir & ovhd expenses		50.16		54.89		47.84
Net return		-4.01		-18.09		2.44
Labor & management charge		1.56		2.38		1.75
Net return over lbr & mgt		-5.57		-20.47		0.69
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		64.99		71.56		62.03
Total dir & ovhd expense per unit		73.85		77.94		70.84
With other revenue adjustments		71.23		77.90		67.56
With labor and management		72.79		80.28		69.31
Est. labor hours per unit		0.13		0.23		0.09
Other Information						
No. purchased or trans in		17,020		5,304		29,042
Number sold or trans out		15,366		4,981		27,211
Percentage death loss		6.3		5.3		4.3
Percent substandard hogs		2		1		2
Avg. daily gain (lb.)		1.57		1.52		1.48
Lb. of feed / lb. of gain		2.62		2.50		2.71
Feed cost per cwt. of gain		25.31		27.81		25.44
Feed cost per head		66.77		72.80		67.10
Hired labor per head		3.45		7.72		3.04
Average purchase weight		15		13		15
Avg wgt / Wean-Fin Pig sold		266		271		255
Avg purch price / head		42.60		36.86		42.00
Avg sales price / cwt.		49.75		44.23		51.78
Average carcass weight		201		203		192
Average price / cwt. carcass		66.78		59.32		69.59

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Hogs, Finish Feeder Pigs (Contract Grower) -- Average Per Pig Space

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	44		8		9	
	Quantity	Value	Quantity	Value	Quantity	Value
Transferred out (lb)	-	13.60	-	1.43	-	28.75
Other income		24.32		31.05		15.30
Gross margin		37.92		32.48		44.05
Direct Expenses						
Supplies		1.29		1.73		0.60
Contract production exp.		0.87		1.59		1.18
Fuel & oil		1.48		2.92		1.57
Repairs		4.12		4.99		2.28
Custom hire		0.84		2.14		1.38
Hired labor		2.45		5.78		1.45
Utilities		2.10		1.36		2.22
Operating interest		0.41		0.05		0.24
Total direct expenses		13.55		20.55		10.92
Return over direct expense		24.37		11.93		33.13
Overhead Expenses						
Building leases		0.36		1.20		-
RE & pers. property taxes		0.67		1.64		0.36
Farm insurance		2.08		2.81		0.83
Utilities		1.06		1.81		0.44
Dues & professional fees		0.21		0.08		0.09
Interest		3.19		3.92		2.73
Mach & bldg depreciation		8.34		8.33		6.02
Miscellaneous		0.70		0.68		0.52
Total overhead expenses		16.61		20.47		10.98
Total dir & ovhd expenses		30.16		41.02		21.90
Net return		7.76		-8.53		22.15
Labor & management charge		6.34		7.03		5.83
Net return over lbr & mgt		1.42		-15.56		16.31
Cost of Production Per Pig Space						
Total direct expense per unit		13.55		20.55		10.92
Total dir & ovhd expense per unit		30.16		41.02		21.90
Est. labor hours per unit		0.42		0.51		0.41
Other Information						
Number of pigs		6,945		6,723		6,500
Pigs per pig space (per year)		2.34		2.35		2.49
Pigs per 100 sq. ft. (per yr)		30.49		30.58		32.52
Net return per 100 sq. ft.		101.35		-111.09		289.70
Net return per labor hour		18.48		-16.61		54.64
Square feet per pig space		7.66		7.68		7.64

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Hogs, Weaning to Finish (Contract Grower) -- Average Per Pig Space

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	61		12		13	
	Quantity	Value	Quantity	Value	Quantity	Value
Transferred out (lb)	-	13.56	-	2.60	-	19.92
Other income		26.16		31.53		25.36
Gross margin		39.71		34.13		45.28
Direct Expenses						
Veterinary		0.09		0.06		0.32
Supplies		1.40		2.26		0.85
Contract production exp.		1.34		0.55		0.05
Fuel & oil		1.80		1.85		1.70
Repairs		3.72		6.84		2.30
Custom hire		0.48		1.01		0.08
Hired labor		1.52		2.94		1.88
Machinery leases		0.06		0.30		-
Utilities		1.36		1.29		1.49
Operating interest		0.56		1.60		0.12
Total direct expenses		12.32		18.71		8.78
Return over direct expense		27.40		15.42		36.51
Overhead Expenses						
Hired labor		0.35		0.20		0.49
Building leases		1.09		1.29		0.73
RE & pers. property taxes		0.68		1.34		0.39
Farm insurance		1.82		1.93		1.59
Utilities		1.44		1.71		1.45
Dues & professional fees		0.32		0.43		0.17
Interest		4.43		4.88		4.27
Mach & bldg depreciation		9.22		10.87		5.93
Miscellaneous		0.72		0.42		0.92
Total overhead expenses		20.08		23.06		15.95
Total dir & ovhd expenses		32.39		41.77		24.72
Net return		7.32		-7.64		20.56
Labor & management charge		6.60		6.64		5.85
Net return over lbr & mgt		0.72		-14.28		14.72
Cost of Production Per Pig Space						
Total direct expense per unit		12.32		18.71		8.78
Total dir & ovhd expense per unit		32.39		41.77		24.72
Est. labor hours per unit		0.36		0.37		0.26
Other Information						
Number of pigs		7,747		7,402		8,170
Pigs per pig space (per year)		2.33		2.41		2.36
Pigs per 100 sq. ft. (per yr)		29.40		30.29		24.67
Net return per 100 sq. ft.		92.20		-96.21		215.41
Net return per labor hour		20.10		-20.67		78.95
Square feet per pig space		7.94		7.94		9.54

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	137		27		28	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	303.2	448.22	288.4	417.82	338.4	497.65
Transferred out (lb)	152.6	248.73	139.1	188.98	140.8	203.51
Cull sales (lb)	98.4	113.17	232.6	276.87	54.6	99.16
Other income		7.48		17.30		4.14
Purchased (lb)	-44.8	-118.15	-68.2	-186.74	-39.4	-151.10
Transferred in (lb)	-23.2	-48.29	-19.8	-32.98	-35.1	-51.01
Inventory change (lb)	15.3	63.28	-127.8	-227.64	78.6	319.32
Gross margin		714.45		453.59		921.66
Direct Expenses						
Protein Vit Minerals (lb.)	377.6	46.95	818.1	59.42	477.5	54.57
Complete Ration (lb.)	1,741.9	12.57	71.3	9.38	10,017.5	31.09
Corn Silage (lb.)	4,072.0	61.16	2,106.4	31.02	1,855.8	28.94
Hay, Alfalfa (lb.)	1,022.3	51.76	1,854.1	87.91	832.1	30.37
Hay, Grass (lb.)	2,384.7	78.97	2,659.3	93.03	1,932.9	61.24
Pasture (aum)	3.6	52.48	3.5	53.17	2.5	47.34
Hay (lb.)	2,624.4	93.42	3,516.0	154.09	2,066.6	80.82
Other feed stuffs (lb)	1,996.0	45.90	1,609.7	35.70	2,452.0	85.82
Veterinary		33.25		38.22		25.66
Supplies		51.91		96.33		30.68
Fuel & oil		29.64		45.07		21.29
Repairs		46.09		78.41		37.88
Operating interest		15.96		38.72		7.74
Total direct expenses		620.07		820.48		543.45
Return over direct expense		94.38		-366.89		378.22
Overhead Expenses						
Machinery leases		3.95		23.74		0.26
Farm insurance		14.06		29.41		8.53
Utilities		14.83		35.37		5.95
Interest		47.39		66.72		42.28
Mach & bldg depreciation		41.87		101.85		33.33
Miscellaneous		30.97		49.08		16.32
Total overhead expenses		153.08		306.17		106.67
Total dir & ovhd expenses		773.15		1,126.65		650.12
Net return		-58.70		-673.06		271.55
Labor & management charge		91.29		113.16		99.00
Net return over lbr & mgt		-149.99		-786.22		172.55
Cost of Production Per Cwt. Produced						
Total direct expense per unit		122.70		183.84		99.81
Total dir & ovhd expense per unit		152.99		252.45		119.40
With other revenue adjustments		150.98		273.55		89.36
With labor and management		169.05		298.90		107.54
Est. labor hours per unit		8.63		13.32		9.51
Other Information						
Number of cows		79.5		49.9		65.5
Pregnancy percentage		95.0		94.2		97.5
Pregnancy loss percentage		1.6		3.2		0.7
Culling percentage		11.3		22.6		9.9
Calving percentage		93.5		91.2		96.8
Weaning percentage		86.4		83.9		92.2
Calves sold per cow		0.80		0.75		0.78
Calf death loss percent		7.6		10.0		4.4
Cow death loss percent		3.2		6.2		3.0
Cows per FTE		324.4		210.2		294.6
Average weaning weight		550		528		560
Lb. weaned/exposed female		475		443		516
Feed cost per cow		443.22		523.73		420.19
Avg wgt/ Beef Calves sold		636		649		621
Avg price / cwt.		147.81		144.86		147.07

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	137		27		28	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	60.01	88.70	64.64	93.64	62.15	91.41
Transferred out (lb)	30.20	49.22	31.18	42.35	25.86	37.38
Cull sales (lb)	19.47	22.40	52.13	62.05	10.03	18.21
Other income		1.48		3.88		0.76
Purchased (lb)	-8.87	-23.38	-15.29	-41.85	-7.24	-27.75
Transferred in (lb)	-4.59	-9.56	-4.44	-7.39	-6.45	-9.37
Inventory change (lb)	3.04	12.52	-28.65	-51.02	14.44	58.65
Gross margin		141.38		101.65		169.30
Direct Expenses						
Protein Vit Minerals (lb.)	74.72	9.29	183.33	13.32	87.71	10.02
Complete Ration (lb.)	344.71	2.49	15.98	2.10	1,840.05	5.71
Corn Silage (lb.)	805.81	12.10	472.06	6.95	340.89	5.32
Hay, Alfalfa (lb.)	202.30	10.24	415.52	19.70	152.84	5.58
Hay, Grass (lb.)	471.91	15.63	595.96	20.85	355.04	11.25
Pasture (aum)	0.71	10.38	0.79	11.92	0.46	8.70
Hay (lb.)	519.36	18.49	787.95	34.53	379.60	14.85
Other feed stuffs (lb)	395.00	9.08	360.74	8.00	450.39	15.76
Veterinary		6.58		8.57		4.71
Supplies		10.27		21.59		5.64
Fuel & oil		5.86		10.10		3.91
Repairs		9.12		17.57		6.96
Operating interest		3.16		8.68		1.42
Total direct expenses		122.71		183.88		99.82
Return over direct expense		18.68		-82.22		69.47
Overhead Expenses						
Machinery leases		0.78		5.32		0.05
Farm insurance		2.78		6.59		1.57
Utilities		2.93		7.93		1.09
Interest		9.38		14.95		7.77
Mach & bldg depreciation		8.29		22.83		6.12
Miscellaneous		6.13		11.00		3.00
Total overhead expenses		30.29		68.61		19.59
Total dir & ovhd expenses		153.00		252.49		119.42
Net return		-11.62		-150.84		49.88
Labor & management charge		18.07		25.36		18.18
Net return over lbr & mgt		-29.68		-176.20		31.69
Cost of Production Per Cwt. Produced						
Total direct expense per unit		122.70		183.84		99.81
Total dir & ovhd expense per unit		152.99		252.45		119.40
With other revenue adjustments		150.98		273.55		89.36
With labor and management		169.05		298.90		107.54
Est. labor hours per unit		1.71		2.98		1.75
Other Information						
Number of cows		79.5		49.9		65.5
Pregnancy percentage		95.0		94.2		97.5
Pregnancy loss percentage		1.6		3.2		0.7
Culling percentage		11.3		22.6		9.9
Calving percentage		93.5		91.2		96.8
Weaning percentage		86.4		83.9		92.2
Calves sold per cow		0.80		0.75		0.78
Calf death loss percent		7.6		10.0		4.4
Cow death loss percent		3.2		6.2		3.0
Cows per FTE		324.4		210.2		294.6
Average weaning weight		550		528		560
Lb. weaned/exposed female		475		443		516
Feed cost per cow		443.22		523.73		420.19
Avg wgt/ Beef Calves sold		636		649		621
Avg price / cwt.		147.81		144.86		147.07

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Beef Finishing -- Average Per Head

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	75		15		15	
	Quantity	Value	Quantity	Value	Quantity	Value
Finish Beef sold (lb)	1,339.3	1,555.08	1,447.1	1,606.86	1,295.1	1,444.28
Transferred out (lb)	7.3	8.54	34.2	43.94	15.1	20.39
Insurance income		0.17		-		-
Other income		12.15		15.36		33.02
Purchased (lb)	-690.4	-1,055.39	-770.2	-1,101.49	-389.7	-555.05
Transferred in (lb)	-42.1	-62.33	-122.3	-183.81	-162.0	-225.15
Inventory change (lb)	62.8	64.86	139.6	154.75	34.1	47.02
Gross margin		523.08		535.60		764.50
Direct Expenses						
Protein Vit Minerals (lb.)	1,247.7	65.19	407.9	114.30	248.5	48.98
Complete Ration (lb.)	137.3	11.72	-	-	455.9	54.42
Corn (bu.)	49.6	156.38	61.1	193.95	53.0	168.67
Corn Silage (lb.)	2,269.6	35.50	3,373.9	50.55	4,496.6	65.95
Hay, Alfalfa (lb.)	312.9	15.27	750.0	27.85	204.9	10.21
DDGS, dry (lb.)	622.5	29.11	128.7	10.36	-	-
DDGS, wet (lb.)	242.6	8.72	562.9	17.86	173.4	11.26
Other feed stuffs (lb)	1,372.6	37.63	1,814.9	48.81	949.1	38.05
Veterinary		13.77		22.77		10.24
Supplies		22.48		54.25		19.80
Fuel & oil		18.86		25.92		6.52
Repairs		19.77		55.13		8.04
Hauling and trucking		15.64		27.01		4.77
Operating interest		18.93		35.26		4.98
Total direct expenses		468.98		684.02		451.88
Return over direct expense		54.11		-148.42		312.62
Overhead Expenses						
Hired labor		14.66		15.43		2.41
Utilities		6.04		14.83		4.92
Interest		7.58		16.87		3.59
Mach & bldg depreciation		32.85		75.45		13.92
Miscellaneous		21.65		40.65		13.42
Total overhead expenses		82.79		163.22		38.26
Total dir & ovhd expenses		551.77		847.24		490.15
Net return		-28.69		-311.64		274.36
Labor & management charge		35.71		59.65		30.02
Net return over lbr & mgt		-64.39		-371.30		244.34
Cost of Production Per Cwt. Produced						
Total direct expense per unit		112.33		121.46		87.93
Total dir & ovhd expense per unit		118.48		132.48		90.85
With other revenue adjustments		118.24		132.48		90.85
With labor and management		120.90		136.50		93.14
Est. labor hours per unit		2.47		6.42		2.74
Other Information						
No. purchased or trans in		243		158		60
Number sold or trans out		228		134		56
Percentage death loss		1.0		1.0		1.3
Avg. daily gain (lb.)		2.79		2.37		2.19
Lb. of conc / lb. of gain		7.78		7.10		4.72
Lb. of feed / lb. of gain		10.09		10.65		7.88
Feed cost per cwt. of gain		52.49		62.40		48.66
Feed cost per head		359.52		463.68		397.54
Hired labor per head		16.66		25.62		2.41
Average purchase weight		743		726		611
Avg wgt / Finish Beef sold		1,417		1,373		1,400
Avg purch price / cwt.		152.87		143.01		142.42
Avg sales price / cwt.		116.11		111.04		111.52

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Beef Finishing -- Average Per Cwt. Produced

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	75		15		15	
	Quantity	Value	Quantity	Value	Quantity	Value
Finish Beef sold (lb)	195.55	227.05	194.74	216.24	158.52	176.78
Transferred out (lb)	1.07	1.25	4.60	5.91	1.85	2.50
Insurance income		0.02		-		-
Other income		1.77		2.07		4.04
Purchased (lb)	-100.80	-154.09	-103.65	-148.23	-47.70	-67.94
Transferred in (lb)	-6.14	-9.10	-16.46	-24.74	-19.83	-27.56
Inventory change (lb)	9.16	9.47	18.79	20.83	4.18	5.75
Gross margin		76.37		72.08		93.57
Direct Expenses						
Protein Vit Minerals (lb.)	182.18	9.52	54.90	15.38	30.42	5.99
Complete Ration (lb.)	20.05	1.71	-	-	55.80	6.66
Corn (bu.)	7.24	22.83	8.22	26.10	6.49	20.64
Corn Silage (lb.)	331.38	5.18	454.04	6.80	550.37	8.07
Hay, Alfalfa (lb.)	45.68	2.23	100.93	3.75	25.08	1.25
DDGS, dry (lb.)	90.88	4.25	17.33	1.39	-	-
DDGS, wet (lb.)	35.42	1.27	75.75	2.40	21.22	1.38
Other feed stuffs (lb)	200.41	5.49	244.24	6.57	116.16	4.66
Veterinary		2.01		3.06		1.25
Supplies		3.28		7.30		2.42
Fuel & oil		2.75		3.49		0.80
Repairs		2.89		7.42		0.98
Hauling and trucking		2.28		3.64		0.58
Operating interest		2.76		4.75		0.61
Total direct expenses		68.47		92.05		55.31
Return over direct expense		7.90		-19.97		38.26
Overhead Expenses						
Hired labor		2.14		2.08		0.30
Utilities		0.88		2.00		0.60
Interest		1.11		2.27		0.44
Mach & bldg depreciation		4.80		10.15		1.70
Miscellaneous		3.16		5.47		1.64
Total overhead expenses		12.09		21.97		4.68
Total dir & ovhd expenses		80.56		114.02		59.99
Net return		-4.19		-41.94		33.58
Labor & management charge		5.21		8.03		3.67
Net return over lbr & mgt		-9.40		-49.97		29.91
Cost of Production Per Cwt. Produced						
Total direct expense per unit		112.33		121.46		87.93
Total dir & ovhd expense per unit		118.48		132.48		90.85
With other revenue adjustments		118.24		132.48		90.85
With labor and management		120.90		136.50		93.14
Est. labor hours per unit		0.36		0.86		0.34
Other Information						
No. purchased or trans in		243		158		60
Number sold or trans out		228		134		56
Percentage death loss		1.0		1.0		1.3
Avg. daily gain (lb.)		2.79		2.37		2.19
Lb. of conc / lb. of gain		7.78		7.10		4.72
Lb. of feed / lb. of gain		10.09		10.65		7.88
Feed cost per cwt. of gain		52.49		62.40		48.66
Feed cost per head		359.52		463.68		397.54
Hired labor per head		16.66		25.62		2.41
Average purchase weight		743		726		611
Avg wgt / Finish Beef sold		1,417		1,373		1,400
Avg purch price / cwt.		152.87		143.01		142.42
Avg sales price / cwt.		116.11		111.04		111.52

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Dairy -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	341		68		69	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	23,611.0	3,923.24	22,392.5	3,548.80	23,675.4	4,258.54
Dairy Calves sold (hd)	0.3	31.35	0.2	23.74	0.3	34.19
Transferred out (hd)	0.7	31.00	0.8	12.72	0.7	40.91
Cull sales (hd)	0.3	214.04	0.3	231.17	0.3	184.08
Insurance income		13.35		16.73		10.11
Government payments		51.33		45.71		47.67
Other income		53.30		38.72		68.38
Purchased (hd)	0.0	-31.87	0.0	-20.49	0.0	-26.00
Transferred in (hd)	0.4	-41.64	0.4	-48.73	0.4	-26.30
Inventory change (hd)	0.1	64.98	0.0	29.32	0.1	131.34
Dairy repl net cost		-632.31		-754.95		-560.93
Gross margin		3,676.76		3,122.74		4,161.99
Direct Expenses						
Protein Vit Minerals (lb.)	3,141.6	667.78	2,004.9	499.34	4,007.5	765.25
Complete Ration (lb.)	1,709.1	327.30	2,235.9	431.52	1,170.9	215.87
Corn (bu.)	66.4	212.49	54.1	175.76	64.8	197.80
Corn Silage (lb.)	18,738.6	299.13	18,820.2	308.44	18,773.0	280.84
Hay, Alfalfa (lb.)	2,337.8	146.76	2,008.1	130.38	1,917.4	123.63
Haylage, Alfalfa (lb.)	4,174.4	135.81	4,006.5	119.25	4,222.6	145.10
Other feed stuffs (lb)	3,059.5	143.98	3,921.7	229.09	3,049.0	176.09
Breeding fees		45.64		54.61		54.40
Veterinary		103.85		98.10		86.41
Supplies		338.99		407.54		316.78
Fuel & oil		85.58		108.24		74.79
Repairs		139.02		153.25		147.31
Custom hire		61.16		54.17		89.80
Hired labor		294.25		252.16		252.68
Bedding		75.09		84.79		55.93
Total direct expenses		3,076.82		3,106.66		2,982.67
Return over direct expense		599.95		16.08		1,179.32
Overhead Expenses						
Hired labor		155.03		228.44		148.05
Interest		93.01		117.92		75.77
Mach & bldg depreciation		163.83		186.21		166.22
Miscellaneous		211.98		232.68		183.23
Total overhead expenses		623.86		765.24		573.27
Total dir & ovhd expenses		3,700.67		3,871.90		3,555.93
Net return		-23.91		-749.16		606.05
Labor & management charge		172.63		118.04		204.79
Net return over lbr & mgt		-196.54		-867.20		401.26
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		12.93		13.80		12.51
Total dir & ovhd expense per unit		15.55		17.20		14.92
With other revenue adjustments		16.70		19.17		15.43
With labor and management		17.42		19.70		16.29
Est. labor hours per unit		39.21		40.96		35.73
Other Information						
Number of cows		222.4		207.1		245.2
Milk produced per cow		23,791		22,509		23,833
Total milk sold		5,250,281		4,636,725		5,804,140
Lb. of milk sold per FTE		1,686,141		1,530,695		1,855,202
Culling percentage		30.5		31.9		27.0
Turnover rate		37.0		39.0		33.4
Cow death loss percent		6.1		6.7		5.9
Percent of barn capacity		114.3		109.7		111.1
Feed cost per day		5.30		5.19		5.22
Feed cost per cwt. of milk		8.13		8.41		7.99
Feed cost per cow		1,933.24		1,893.80		1,904.58
Hired labor per cow		449.28		480.60		400.73
Avg. milk price per cwt.		16.62		15.85		17.99
Milk price / feed margin		8.49		7.43		10.00

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Dairy -- Average Per Cwt. Of Milk

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	341		68		69	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	99.24	16.49	99.48	15.77	99.34	17.87
Dairy Calves sold (hd)	0.00	0.13	0.00	0.11	0.00	0.14
Transferred out (hd)	0.00	0.13	0.00	0.06	0.00	0.17
Cull sales (hd)	0.00	0.90	0.00	1.03	0.00	0.77
Insurance income		0.06		0.07		0.04
Government payments		0.22		0.20		0.20
Other income		0.22		0.17		0.29
Purchased (hd)	0.00	-0.13	0.00	-0.09	0.00	-0.11
Transferred in (hd)	0.00	-0.18	0.00	-0.22	0.00	-0.11
Inventory change (hd)	0.00	0.27	0.00	0.13	0.00	0.55
Dairy repl net cost		-2.66		-3.35		-2.35
Gross margin		15.45		13.87		17.46
Direct Expenses						
Protein Vit Minerals (lb.)	13.20	2.81	8.91	2.22	16.81	3.21
Complete Ration (lb.)	7.18	1.38	9.93	1.92	4.91	0.91
Corn (bu.)	0.28	0.89	0.24	0.78	0.27	0.83
Corn Silage (lb.)	78.76	1.26	83.61	1.37	78.77	1.18
Hay, Alfalfa (lb.)	9.83	0.62	8.92	0.58	8.05	0.52
Haylage, Alfalfa (lb.)	17.55	0.57	17.80	0.53	17.72	0.61
Other feed stuffs (lb)	12.86	0.61	17.42	1.02	12.79	0.74
Breeding fees		0.19		0.24		0.23
Veterinary		0.44		0.44		0.36
Supplies		1.42		1.81		1.33
Fuel & oil		0.36		0.48		0.31
Repairs		0.58		0.68		0.62
Custom hire		0.26		0.24		0.38
Hired labor		1.24		1.12		1.06
Bedding		0.32		0.38		0.23
Total direct expenses		12.93		13.80		12.51
Return over direct expense		2.52		0.07		4.95
Overhead Expenses						
Hired labor		0.65		1.01		0.62
Interest		0.39		0.52		0.32
Mach & bldg depreciation		0.69		0.83		0.70
Miscellaneous		0.89		1.03		0.77
Total overhead expenses		2.62		3.40		2.41
Total dir & ovhd expenses		15.55		17.20		14.92
Net return		-0.10		-3.33		2.54
Labor & management charge		0.73		0.52		0.86
Net return over lbr & mgt		-0.83		-3.85		1.68
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		12.93		13.80		12.51
Total dir & ovhd expense per unit		15.55		17.20		14.92
With other revenue adjustments		16.70		19.17		15.43
With labor and management		17.42		19.70		16.29
Est. labor hours per unit		0.16		0.18		0.15
Other Information						
Number of cows		222.4		207.1		245.2
Milk produced per cow		23,791		22,509		23,833
Total milk sold		5,250,281		4,636,725		5,804,140
Lb. of milk sold per FTE		1,686,141		1,530,695		1,855,202
Culling percentage		30.5		31.9		27.0
Turnover rate		37.0		39.0		33.4
Cow death loss percent		6.1		6.7		5.9
Percent of barn capacity		114.3		109.7		111.1
Feed cost per day		5.30		5.19		5.22
Feed cost per cwt. of milk		8.13		8.41		7.99
Feed cost per cow		1,933.24		1,893.80		1,904.58
Hired labor per cow		449.28		480.60		400.73
Avg. milk price per cwt.		16.62		15.85		17.99
Milk price / feed margin		8.49		7.43		10.00

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Dairy Replacement Heifers -- Average Per Head

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	315		63		63	
	Quantity	Value	Quantity	Value	Quantity	Value
Replacements sold (hd)	0.1	37.23	0.1	35.08	0.1	64.15
Transferred out (hd)	0.4	544.31	0.4	374.02	0.4	710.92
Cull sales (hd)	0.0	3.94	0.0	7.46	0.0	3.01
Other income		1.22		1.34		1.93
Purchased (hd)	0.0	-14.63	0.0	-16.06	0.1	-34.95
Transferred in (hd)	0.6	-105.06	0.6	-94.39	0.6	-118.01
Inventory change (hd)	0.1	24.39	0.0	-52.90	0.1	88.59
Gross margin		491.41		254.56		715.63
Direct Expenses						
Protein Vit Minerals (lb.)	480.0	87.82	613.5	134.92	154.1	34.87
Milk Replacer (lb.)	14.4	17.91	13.1	15.41	25.0	31.05
Complete Ration (lb.)	305.0	52.16	334.1	57.23	346.0	66.67
Corn (bu.)	6.5	20.56	6.1	18.57	3.0	10.20
Corn Silage (lb.)	4,516.5	69.63	4,901.1	74.46	4,187.5	60.16
Hay, Alfalfa (lb.)	822.1	46.24	913.7	55.40	606.4	33.36
Hay, Grass (lb.)	491.8	17.95	491.0	17.81	805.3	26.61
Haylage, Alfalfa (lb.)	946.3	30.81	2,087.4	74.08	284.7	7.61
Other feed stuffs (lb)	1,747.2	67.73	1,495.0	60.30	1,369.2	42.98
Breeding fees		15.32		13.68		18.34
Veterinary		17.71		16.71		18.04
Supplies		27.30		39.98		20.92
Contract production exp.		83.79		104.83		122.47
Fuel & oil		14.12		14.95		12.49
Repairs		22.92		26.19		22.03
Hired labor		36.00		38.61		47.09
Bedding		19.39		16.71		19.19
Total direct expenses		647.36		779.84		594.10
Return over direct expense		-155.96		-525.27		121.53
Overhead Expenses						
Hired labor		29.45		26.20		16.63
Interest		16.96		18.89		19.42
Mach & bldg depreciation		28.40		35.07		22.12
Miscellaneous		34.45		39.17		30.50
Total overhead expenses		109.26		119.33		88.68
Total dir & ovhd expenses		756.62		899.17		682.77
Net return		-265.22		-644.61		32.86
Labor & management charge		29.45		39.29		23.68
Net return over lbr & mgt		-294.67		-683.90		9.18
Cost of Production Per Head Per Day						
Total direct expense per unit		2.02		2.56		1.79
Total dir & ovhd expense per unit		2.32		2.89		2.03
With other revenue adjustments		2.32		2.89		2.03
With labor and management		2.40		2.99		2.10
Est. labor hours per unit		6.37		6.77		6.51
Other Information						
No. purchased or trans in		130		83		145
Number sold or trans out		106		77		106
Average number of head		197		135		205
Percentage death loss		8.1		13.4		6.8
Feed cost per average head		410.82		508.18		313.51
Hired labor per average head		65.45		64.81		63.73
Feed cost/head sold/trans		762.57		887.38		604.82
Total cost/head sold/trans		1,626.41		1,908.59		1,477.57
Feed cost per head per day		1.13		1.39		0.86
Avg. purch price / head		484.25		1,086.11		464.02
Avg. sales price / head		377.78		238.26		844.65

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Dairy and Repl Heifers -- Average Per Cow

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	298		59		60	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	23,813.4	3,962.83	22,319.5	3,535.32	23,616.8	4,294.33
Dairy Calves sold (hd)	-	55.77	-	46.40	-	53.48
Transferred out (hd)	-	21.66	-	7.73	-	37.46
Cull sales (hd)	-	223.89	-	249.50	-	201.48
Insurance income		14.02		15.91		6.31
Government payments		50.57		44.00		46.91
Other income		56.89		42.71		77.02
Purchased (hd)	-	-34.48	-	-25.68	-	-20.09
Transferred in (hd)	-	-11.36	-	-30.45	-	-5.60
Inventory change (hd)	-	83.65	-	-9.66	-	211.67
Gross margin		4,423.42		3,875.78		4,902.97
Direct Expenses						
Protein Vit Minerals (lb.)	3,429.6	732.07	2,535.2	629.44	4,615.6	866.47
Complete Ration (lb.)	2,056.8	390.95	2,119.7	435.48	1,215.7	192.76
Corn (bu.)	72.3	231.23	64.9	205.70	70.8	216.49
Corn Silage (lb.)	22,818.8	362.37	24,156.8	393.61	22,647.7	330.33
Hay, Alfalfa (lb.)	3,129.7	191.51	2,782.2	170.52	2,668.7	168.73
Haylage, Alfalfa (lb.)	4,940.3	157.15	5,532.2	168.41	4,792.1	164.00
Other feed stuffs (lb)	5,185.6	240.95	6,476.8	343.06	5,216.8	316.77
Breeding fees		61.64		71.84		71.92
Veterinary		120.56		107.65		100.25
Supplies		514.47		583.64		495.45
Contract production exp.		110.42		57.34		93.66
Fuel & oil		99.18		129.41		87.84
Repairs		161.62		178.84		165.97
Hired labor		336.72		251.96		298.87
Total direct expenses		3,710.84		3,726.91		3,569.53
Return over direct expense		712.58		148.87		1,333.44
Overhead Expenses						
Hired labor		176.94		262.31		162.09
Interest		105.37		138.56		94.53
Mach & bldg depreciation		187.17		225.70		193.29
Miscellaneous		243.17		268.76		221.13
Total overhead expenses		712.65		895.32		671.05
Total dir & ovhd expenses		4,423.49		4,622.23		4,240.58
Net return		-0.07		-746.45		662.39
Labor & management charge		196.00		138.51		246.40
Net return over lbr & mgt		-196.07		-884.96		415.99
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		15.46		16.60		15.01
Total dir & ovhd expense per unit		18.43		20.59		17.83
With other revenue adjustments		16.62		19.16		15.38
With labor and management		17.44		19.78		16.42
Est. labor hours per unit		45.75		46.80		41.30
Other Information						
Number of cows		232.9		213.0		243.7
Milk produced per cow		23,999		22,450		23,785
Total milk sold		5,546,505		4,753,492		5,754,514
Lb. of milk sold per FTE		1,457,585		1,335,334		1,601,026
Culling percentage		30.5		32.8		27.2
Turnover rate		37.0		39.8		33.2
Cow death loss percent		6.0		6.6		5.5
Percent of barn capacity		114.3		108.9		111.5
Feed cost per day		6.32		6.43		6.18
Feed cost per cwt. of milk		9.61		10.45		9.48
Feed cost per cow		2,306.23		2,346.23		2,255.55
Hired labor per cow		513.66		514.28		460.97
Avg. milk price per cwt.		16.64		15.84		18.18
Milk price / feed margin		7.03		5.39		8.70

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Dairy Finishing -- Average Per Head

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	106		21		22	
	Quantity	Value	Quantity	Value	Quantity	Value
Dairy Finish sold (lb)	1,424.9	1,351.72	1,692.8	1,514.42	1,424.8	1,435.00
Transferred out (lb)	0.8	0.78	1.4	1.91	2.5	2.10
Other income		12.53		10.09		5.57
Purchased (lb)	-348.4	-395.82	-439.6	-452.68	-264.4	-317.61
Transferred in (lb)	-20.8	-27.81	-6.7	-13.85	-35.2	-57.05
Inventory change (lb)	6.8	-2.86	-318.0	-335.46	11.7	13.43
Gross margin		938.54		724.43		1,081.45
Direct Expenses						
Protein Vit Minerals (lb.)	605.8	128.31	644.0	148.35	558.2	104.81
Milk (lb.)	41.9	7.20	-	-	165.6	28.79
Complete Ration (lb.)	373.7	57.15	137.5	40.33	466.2	74.54
Corn (bu.)	110.9	340.84	121.1	391.61	98.7	284.14
Corn Silage (lb.)	1,727.0	27.66	1,117.0	18.68	786.2	12.21
Hay, Grass (lb.)	240.6	11.44	462.7	22.81	56.4	2.47
Other feed stuffs (lb)	1,357.3	58.73	1,930.8	60.43	936.4	42.59
Veterinary		24.19		21.28		9.85
Supplies		52.39		56.55		37.09
Contract production exp.		4.55		-		17.63
Fuel & oil		17.42		30.35		9.18
Repairs		28.89		65.32		15.43
Hired labor		9.67		0.37		17.19
Operating interest		19.73		24.58		4.64
Total direct expenses		788.18		880.66		660.55
Return over direct expense		150.36		-156.22		420.90
Overhead Expenses						
Farm insurance		12.50		23.89		5.68
Interest		18.53		39.09		8.72
Mach & bldg depreciation		41.72		83.74		18.91
Miscellaneous		45.15		66.36		37.59
Total overhead expenses		117.90		213.07		70.90
Total dir & ovhd expenses		906.08		1,093.73		731.46
Net return		32.46		-369.30		350.00
Labor & management charge		48.42		72.21		34.80
Net return over lbr & mgt		-15.96		-441.50		315.20
Cost of Production Per Cwt. Produced						
Total direct expense per unit		84.52		98.72		71.20
Total dir & ovhd expense per unit		92.79		111.30		76.17
With other revenue adjustments		92.59		111.30		76.17
With labor and management		95.98		115.56		78.60
Est. labor hours per unit		5.34		6.54		4.25
Other Information						
No. purchased or trans in		191		78		215
Number sold or trans out		173		110		202
Percentage death loss		3.7		2.0		2.5
Avg. daily gain (lb.)		2.53		2.31		2.97
Lb. of conc / lb. of gain		7.56		8.93		6.28
Lb. of feed / lb. of gain		8.67		10.59		6.94
Feed cost per cwt. of gain		58.82		72.51		47.98
Feed cost per head		631.33		682.21		549.54
Hired labor per head		21.71		14.64		33.67
Average purchase weight		385		584		466
Avg wgt / Dairy Finish sold		1,384		1,460		1,350
Avg purch price / head		437.97		601.05		559.83
Avg sales price / cwt.		94.86		89.46		100.71

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Dairy Finishing -- Average Per Cwt. Produced

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	106		21		22	
	Quantity	Value	Quantity	Value	Quantity	Value
Dairy Finish sold (lb)	132.76	125.94	179.92	160.96	124.39	125.28
Transferred out (lb)	0.07	0.07	0.14	0.20	0.22	0.18
Other income		1.17		1.07		0.49
Purchased (lb)	-32.46	-36.88	-46.72	-48.11	-23.08	-27.73
Transferred in (lb)	-1.93	-2.59	-0.71	-1.47	-3.07	-4.98
Inventory change (lb)	0.64	-0.27	-33.80	-35.65	1.02	1.17
Gross margin		87.45		76.99		94.41
Direct Expenses						
Protein Vit Minerals (lb.)	56.44	11.96	68.44	15.77	48.74	9.15
Milk (lb.)	3.90	0.67	-	-	14.46	2.51
Complete Ration (lb.)	34.82	5.32	14.61	4.29	40.70	6.51
Corn (bu.)	10.34	31.76	12.87	41.62	8.61	24.81
Corn Silage (lb.)	160.91	2.58	118.72	1.99	68.64	1.07
Hay, Grass (lb.)	22.42	1.07	49.18	2.42	4.92	0.22
Other feed stuffs (lb)	126.46	5.47	205.20	6.42	81.75	3.72
Veterinary		2.25		2.26		0.86
Supplies		6.21		6.05		6.28
Fuel & oil		1.62		3.23		0.80
Repairs		2.69		6.94		1.35
Operating interest		1.84		2.61		0.41
Total direct expenses		73.44		93.60		57.67
Return over direct expense		14.01		-16.60		36.75
Overhead Expenses						
Farm insurance		1.16		2.54		0.50
Utilities		1.03		1.80		0.78
Interest		1.73		4.15		0.76
Mach & bldg depreciation		3.89		8.90		1.65
Miscellaneous		3.18		5.26		2.50
Total overhead expenses		10.98		22.65		6.19
Total dir & ovhd expenses		84.42		116.24		63.86
Net return		3.02		-39.25		30.56
Labor & management charge		4.51		7.67		3.04
Net return over lbr & mgt		-1.49		-46.92		27.52
Cost of Production Per Cwt. Produced						
Total direct expense per unit		84.52		98.72		71.20
Total dir & ovhd expense per unit		92.79		111.30		76.17
With other revenue adjustments		92.59		111.30		76.17
With labor and management		95.98		115.56		78.60
Est. labor hours per unit		0.50		0.69		0.37
Other Information						
No. purchased or trans in		191		78		215
Number sold or trans out		173		110		202
Percentage death loss		3.7		2.0		2.5
Avg. daily gain (lb.)		2.53		2.31		2.97
Lb. of conc / lb. of gain		7.56		8.93		6.28
Lb. of feed / lb. of gain		8.67		10.59		6.94
Feed cost per cwt. of gain		58.82		72.51		47.98
Feed cost per head		631.33		682.21		549.54
Hired labor per head		21.71		14.64		33.67
Average purchase weight		385		584		466
Avg wgt / Dairy Finish sold		1,384		1,460		1,350
Avg purch price / head		437.97		601.05		559.83
Avg sales price / cwt.		94.86		89.46		100.71

Summary Tables

Financial Summary by Years

A better picture of the current financial performance can be seen by comparing this year to previous years in the *Summary by Years* table. All items are taken from the annual report for that year. Monetary values are left in nominal terms unadjusted for inflation. The one exception is the *Net Farm Income (Constant \$)* using the Consumer Price Index (CPI-U) from the U.S. Department of Commerce. This shows the changes in “buying power” for the farmers, compared to the current year. The CPI used is reported below.

<u>Year</u>	<u>CPI-U</u> <u>1982-84=100</u>	<u>Year</u>	<u>CPI-U</u> <u>1982-84=100</u>
1999	166.6	2009	214.5
2000	172.2	2010	218.1
2001	177.1	2011	224.9
2002	179.9	2012	229.6
2003	184.0	2013	233.0
2004	188.9	2014	236.7
2005	195.3	2015	237.0
2006	201.6	2016	240.0
2007	207.3	2017	244.7
2008	215.3	2018	250.5

Financial Summary by Farm Size (Gross Farm Income)

This table summarizes whole-farm financial performance by size of farm. Farms are categorized based on gross farm income.

Financial Summary by Farm Type

This table summarizes whole-farm financial performance by type of farm. Farm type is assigned based on greater than 70 percent of sales from that commodity or combination of commodities.

Financial Summary by Debt To Asset Ratio

This table summarizes whole-farm financial performance by debt level. Farms are categorized based on total farm and nonfarm Debt To Asset Ratio.

Financial Summary by Age of Operator

This table summarizes whole-farm financial performance based on age of the primary operator.

SUMMARY OF THE WHOLE FARM ANALYSIS BY YEARS
Southwestern Minnesota Farm Business Management Association
(Overall averages for all farms reporting)

Row	Items	1999	2000	2001	2002	2003	2004	2005	2006	2007
		----	----	----	----	----	----	----	----	----
1	Number of Farms	216	212	207	188	175	125	107	110	107
	Farm Income Statement									
2	Gross Cash Farm Income	388,731	422,897	433,698	428,084	504,022	496,771	579,201	609,886	731,897
3	Total Cash Farm Expense	324,802	348,711	358,506	352,995	400,605	404,743	477,476	494,409	592,841
4	Inventory Change	15,633	25,296	-17,297	19,571	18,977	31,076	74,307	66,397	135,843
5	Depr. & Cap. Adj.	-35,800	-17,731	-21,280	-24,654	-25,990	-24,741	-28,170	-27,176	-32,631
6	Net Farm Income from Operations	43,762	81,750	36,614	70,007	96,404	98,362	147,862	154,698	242,267
7	Gain of Loss on Capital Sales	0	0	0	0	0	0	0	0	0
8	Net Farm Income	43,762	81,750	36,614	70,007	96,404	98,362	147,862	154,698	242,267
9	Net Farm Income (Constant \$)	67,254	122,919	53,263	99,022	134,237	133,911	196,080	198,422	301,031
	Profitability*									
10	Rate of Return on Assets (%)	7	12	6	9	11	11	14	13	17
11	Rate of Return on Equity (%)	7	19	4	11	16	16	21	19	25
12	Operating Profit Margin (%)	16	27	14	20	24	23	28	28	35
13	Asset Turnover Rate (%)	43	45	39	44	44	46	51	48	50
14	Value of Farm Production	274,411	313,232	282,583	345,743	379,505	378,450	478,073	512,081	648,768
15	Farm Interest Paid	27,488	27,002	27,203	26,739	25,262	21,824	22,210	27,677	30,714
	Liquidity, Repayment and Efficiency									
16	Current Ratio	1.6	1.7	1.5	1.6	1.7	1.9	2.1	2.2	2.5
17	Working Capital	95,737	112,896	83,500	117,135	143,632	155,804	218,745	268,567	393,911
18	Working Capital to Gross Revenue (%)	24	25	20	25	28	30	34	40	46
19	Term Debt Coverage Ratio	1.9	2.3	1.0	1.6	2.2	2.1	3.0	3.1	4.1
20	Operating Expense Ratio (%)	73.1	71.4	79.5	73.6	71.5	72.1	69.2	68.7	64.1
21	Interest Expense Ratio (%)	6.7	6.2	6.6	5.8	4.8	4.2	3.5	4.3	3.7
	Solvency (Year-end, Sole Proprietors Only)*									
22	No. of Sole Proprietors	185	181	178	161	149	109	91	93	91
23	Total Assets	1,061,579	1,150,838	1,158,071	1,277,823	1,407,919	1,286,775	1,487,232	1,694,428	2,034,365
24	Total Liabilities	517,040	545,689	539,918	578,253	619,279	554,962	618,105	698,239	810,184
25	Net Worth	544,539	605,149	618,197	699,570	788,640	731,813	869,127	996,189	1,224,181
26	Debt to Asset Ratio (%)	49	47	47	45	44	43	42	41	40
	Acreage Information									
27	Total Acres Owned	241	250	252	265	263	236	241	243	241
28	Total Crop Acres Farmed	709	730	759	784	794	766	792	797	825
29	Crop Acres Owned	204	214	214	226	239	193	199	197	208
30	Crop Acres Cash Rented	430	445	468	490	489	494	532	526	546
31	Crop Acres Share Rented	75	70	77	68	67	79	61	74	71
	Crop Yields									
32	Corn per acre (bu.)	156	150	128	151	157	171	192	169	162
33	Soybeans per acre (bu.)	45	46	42	49	39	41	55	51	49
	Crop Prices Received (cash sales)									
34	Corn per Bushel	1.66	1.68	1.72	1.95	2.07	2.28	1.89	2.04	3.00
35	Soybeans per Bushel	4.59	4.57	4.32	4.57	5.73	7.17	5.88	5.57	7.14
	Household Information									
36	No. Farms Reporting HseHld Info	125	120	124	108	102	73	67	66	60
37	Average Family Size	3.6	3.5	3.5	3.6	3.4	3.4	3.4	3.3	3.1
38	Family living expense	35,186	38,932	39,793	41,882	43,383	48,371	50,608	51,569	56,229
39	Total Family Use of Cash	50,326	62,349	63,980	51,826	68,470	68,029	74,513	82,670	98,388
40	Net Nonfarm Income	18,430	21,436	20,082	20,846	22,480	23,733	24,774	31,059	25,164

* Beginning in 1993, profitability is analyzed using assets valued at adjusted cost basis while solvency is at estimated fair market value. Prior to 1993, profitability and solvency were analyzed using land valued with a conservative market value and all other assets valued at cost basis.

SUMMARY OF THE WHOLE FARM ANALYSIS BY YEARS (continued)
Southwestern Minnesota Farm Business Management Association
(Overall averages for all farms reporting)

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Row
----	----	----	----	----	----	----	----	----	----	----	----
99	95	97	107	110	117	109	103	103	104	101	1
876,375	878,404	970,471	1,150,686	1,332,519	1,285,081	1,086,085	997,581	918,546	941,931	865,101	2
720,364	743,487	781,053	898,752	1,057,018	1,029,631	856,705	798,226	748,909	783,231	703,195	3
70,051	-21,159	178,977	136,582	157,209	-53,364	-49,479	-68,430	-8,515	-7,784	-25,846	4
-39,437	-43,972	-48,085	-55,244	-66,085	-69,322	-70,801	-73,028	-71,987	-74,624	-68,737	5
186,625	69,787	320,310	333,272	366,624	132,764	109,100	57,897	89,135	76,292	67,324	6
4,276	0	1,855	3,015	10,447	4,404	9,296	1,944	-418	8,475	4,732	7
190,901	69,787	322,165	336,287	377,071	137,168	118,396	59,841	88,717	84,767	72,056	8
230,684	81,197	376,235	386,244	419,992	149,654	127,288	63,330	93,771	86,635	72,056	9
11	3	17	16	14	4	3	1	3	2	2	10
15	2	24	21	19	4	3	0	2	1	0	11
26	9	36	35	30	11	10	4	8	7	6	12
43	37	47	46	46	34	34	31	31	30	29	13
658,576	608,181	819,691	871,265	1,052,663	819,449	790,270	729,443	738,186	735,601	716,296	14
30,232	29,727	34,124	28,447	27,141	27,405	26,239	27,225	30,723	35,049	37,490	15
2.6	2.3	2.9	3.3	3.1	2.7	2.6	2.2	1.9	1.8	1.9	16
446,350	404,104	568,438	659,446	771,719	646,719	562,147	455,840	395,033	367,795	364,975	17
49	45	50	52	52	52	54	49	42	39	42	18
2.9	1.1	5.2	5.6	4.6	1.8	1.4	0.9	1.4	1.3	1.3	19
71.6	83.6	64.8	66.9	69.1	81.4	80.0	83.0	79.0	80.1	80.1	20
3.3	3.3	3.0	2.3	1.8	2.2	2.6	3.0	3.0	3.8	4.3	21
85	80	80	87	85	89	84	81	81	83	80	22
2,208,883	2,376,886	2,719,826	2,922,324	3,515,081	3,667,344	3,670,892	3,953,187	3,994,222	4,126,516	4,140,478	23
837,830	892,734	987,753	1,068,183	1,057,882	1,271,925	1,241,969	1,283,940	1,297,771	1,329,095	1,313,213	24
1,371,053	1,484,151	1,732,074	1,854,181	2,288,721	2,395,419	2,428,924	2,669,246	2,696,451	2,797,420	2,827,265	25
38	38	36	37	35	35	34	32	32	32	32	26
249	250	240	232	216	211	208	210	210	226	240	27
822	831	831	791	886	845	902	940	939	940	947	28
222	224	221	202	205	203	208	226	236	233	233	29
536	555	550	532	617	592	626	661	651	661	665	30
64	52	61	57	63	50	67	53	53	46	48	31
172	185	184	173	162	175	167	204	207	204	175	32
44	49	51	46	47	52	48	58	62	55	53	33
4.51	3.83	3.67	5.29	6.27	6.48	4.35	3.63	3.38	3.17	3.27	34
10.83	10.15	9.72	11.58	13.07	13.97	12.73	10.12	8.92	9.23	9.20	35
62	52	46	43	42	32	41	32	44	45	34	36
3.0	3.3	3.0	3.0	2.9	3.0	2.8	3.1	3.0	2.6	2.6	37
59,939	62,182	63,848	73,704	73,904	72,592	73,073	64,621	73,384	69,964	71,926	38
100,933	123,590	108,468	119,913	135,406	159,539	140,853	158,913	125,223	116,348	110,123	39
28,456	29,369	29,543	35,042	30,841	35,723	42,073	36,083	39,590	38,552	41,141	40

Financial Summary
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Gross Farm Income)

	<u>Avg. Of All Farms</u>	<u>Less than 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>1,000,001 - 2,000,000</u>	<u>Over 2,000,000</u>
Number of farms	101	6	10	25	40	14	6
Income Statement							
Gross cash farm income	865,101	61,326	184,263	374,804	694,241	1,243,966	5,101,563
Total cash farm expense	703,195	40,187	151,650	268,623	546,605	926,752	4,618,455
Net cash farm income	161,907	21,139	32,613	106,181	147,636	317,214	483,108
Inventory change	-25,846	8,695	12,960	-5,090	-19,005	-88,843	-110,155
Depreciation	-68,737	-9,398	-24,759	-42,187	-66,218	-116,340	-217,720
Net farm income from operations	67,324	20,436	20,814	58,905	62,412	112,031	155,233
Gain or loss on capital sales	4,732	-	320	70	7,826	10,835	1,375
Average net farm income	72,056	20,436	21,134	58,975	70,239	122,866	156,608
Median net farm income	52,423	20,489	29,756	52,118	83,754	81,940	160,528
Profitability (cost)							
Rate of return on assets	1.7 %	2.9 %	-0.2 %	2.1 %	1.5 %	2.2 %	1.5 %
Rate of return on equity	0.3 %	2.6 %	-0.8 %	1.4 %	0.2 %	0.8 %	-1.5 %
Operating profit margin	5.9 %	24.8 %	-0.6 %	7.9 %	5.7 %	8.8 %	3.3 %
Asset turnover rate	29.0 %	11.5 %	24.1 %	26.4 %	26.5 %	24.5 %	43.8 %
Profitability (market)							
Rate of return on assets	1.8 %	2.3 %	0.3 %	1.3 %	1.5 %	3.2 %	1.7 %
Rate of return on equity	1.3 %	2.4 %	0.0 %	1.0 %	0.9 %	3.3 %	0.0 %
Operating profit margin	9.2 %	35.3 %	2.1 %	8.1 %	8.6 %	17.0 %	4.9 %
Asset turnover rate	19.8 %	6.5 %	13.6 %	16.0 %	17.0 %	18.9 %	34.7 %
Liquidity & Repayment (end of year)							
Current assets	774,100	97,991	301,938	393,848	760,675	1,206,533	2,902,027
Current liabilities	409,125	23,975	59,918	181,697	290,810	800,528	2,199,405
Current ratio	1.89	4.09	5.04	2.17	2.62	1.51	1.32
Working capital	364,975	74,016	242,020	212,151	469,864	406,005	702,622
Change in working capital	734	-1,184	-1,907	-10,185	19,362	21,352	-119,742
Working capital to gross inc	41.9 %	107.2 %	118.1 %	55.8 %	68.8 %	33.6 %	13.3 %
Term debt coverage ratio	1.25	2.19	2.95	1.23	1.22	1.12	1.26
Replacement coverage ratio	0.80	2.08	1.08	0.75	0.72	0.77	0.96
Term debt to EBITDA	2.65	1.51	1.06	1.89	2.89	2.17	3.80
Solvency (end of year at cost)							
Number of farms	101	6	10	25	40	14	6
Total assets	2,913,455	911,958	1,199,001	1,843,350	2,809,286	4,956,809	8,157,783
Total liabilities	960,176	150,445	212,167	465,274	827,219	1,647,435	4,361,461
Net worth	1,953,279	761,513	986,834	1,378,075	1,982,067	3,309,374	3,796,322
Net worth change	58,396	24,949	114,525	12,341	63,342	101,269	57,172
Farm debt to asset ratio	36 %	11 %	15 %	28 %	33 %	36 %	54 %
Total debt to asset ratio	33 %	16 %	18 %	25 %	29 %	33 %	53 %
Change in earned net worth %	3 %	3 %	13 %	1 %	3 %	3 %	2 %
Solvency (end of year at market)							
Number of farms	101	6	10	25	40	14	6
Total assets	4,184,664	1,379,063	1,991,109	2,890,611	4,277,807	6,376,892	10,301,923
Total liabilities	1,479,646	255,267	479,593	832,511	1,418,254	2,366,364	5,407,457
Net worth	2,705,017	1,123,796	1,511,515	2,058,100	2,859,553	4,010,528	4,894,466
Total net worth change	76,160	31,306	121,361	1,298	78,914	171,228	117,423
Farm debt to asset ratio	38 %	16 %	24 %	32 %	36 %	40 %	53 %
Total debt to asset ratio	35 %	19 %	24 %	29 %	33 %	37 %	52 %
Change in total net worth %	3 %	3 %	9 %	0 %	3 %	4 %	2 %
Nonfarm Information							
Net nonfarm income	41,141	63,261	67,063	47,385	38,500	25,781	3,242
Farms reporting living expenses	34	4	3	10	15	2	-
Total family living expense	72,096	-	-	70,663	80,924	-	-
Total living, invest, cap. purch	110,123	-	-	111,412	118,354	-	-
Crop Acres							
Total crop acres	947	51	308	545	943	1,449	3,432
Total crop acres owned	233	-	126	153	277	403	290
Total crop acres cash rented	665	51	177	302	622	986	3,142
Total crop acres share rented	48	-	5	91	43	60	-
Machinery value per crop acre	747	147	1,050	893	818	886	347

Financial Summary
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Farm Type)

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Crop and Hog</u>	<u>Other</u>
Number of farms	101	64	5	19
Income Statement				
Gross cash farm income	865,101	690,157	1,803,527	627,247
Total cash farm expense	703,195	527,812	1,877,561	471,009
Net cash farm income	161,907	162,346	-74,034	156,238
Inventory change	-25,846	-44,564	272,717	19,527
Depreciation	-68,737	-55,788	-95,541	-71,336
Net farm income from operations	67,324	61,994	103,142	104,429
Gain or loss on capital sales	4,732	5,697	-	4,756
Average net farm income	72,056	67,691	103,142	109,185
Median net farm income	52,423	52,271	177,981	37,140
Profitability (cost)				
Rate of return on assets	1.7 %	1.6 %	2.4 %	3.4 %
Rate of return on equity	0.3 %	0.3 %	-0.1 %	2.7 %
Operating profit margin	5.9 %	4.9 %	8.0 %	15.1 %
Asset turnover rate	29.0 %	32.2 %	30.3 %	22.4 %
Profitability (market)				
Rate of return on assets	1.8 %	1.5 %	3.2 %	3.9 %
Rate of return on equity	1.3 %	0.9 %	2.6 %	4.3 %
Operating profit margin	9.2 %	7.1 %	12.9 %	23.5 %
Asset turnover rate	19.8 %	21.1 %	24.6 %	16.6 %
Liquidity & Repayment (end of year)				
Current assets	774,100	691,882	1,474,248	617,586
Current liabilities	409,125	308,480	1,287,452	371,023
Current ratio	1.89	2.24	1.15	1.66
Working capital	364,975	383,402	186,797	246,563
Change in working capital	734	14,153	-153,411	73,006
Working capital to gross inc	41.9 %	58.1 %	8.9 %	36.9 %
Term debt coverage ratio	1.25	1.27	0.72	1.51
Replacement coverage ratio	0.80	0.76	0.65	1.13
Term debt to EBITDA	2.65	2.48	4.28	2.03
Solvency (end of year at cost)				
Number of farms	101	64	5	19
Total assets	2,913,455	2,386,947	4,813,856	3,278,008
Total liabilities	960,176	733,339	2,637,831	974,918
Net worth	1,953,279	1,653,609	2,176,025	2,303,090
Net worth change	58,396	76,181	27,604	52,121
Farm debt to asset ratio	36 %	33 %	58 %	34 %
Total debt to asset ratio	33 %	31 %	55 %	30 %
Change in earned net worth %	3 %	5 %	1 %	2 %
Solvency (end of year at market)				
Number of farms	101	64	5	19
Total assets	4,184,664	3,581,402	5,965,300	4,296,049
Total liabilities	1,479,646	1,226,989	3,207,072	1,398,733
Net worth	2,705,017	2,354,413	2,758,227	2,897,317
Total net worth change	76,160	86,959	91,501	97,986
Farm debt to asset ratio	38 %	37 %	57 %	36 %
Total debt to asset ratio	35 %	34 %	54 %	33 %
Change in total net worth %	3 %	4 %	3 %	4 %
Nonfarm Information				
Net nonfarm income	41,141	47,107	36,474	28,435
Farms reporting living expenses	34	21	1	9
Total family living expense	72,096	77,898	-	64,919
Total living, invest, cap. purch	110,123	106,632	-	122,760
Crop Acres				
Total crop acres	947	1,031	1,498	694
Total crop acres owned	233	222	266	221
Total crop acres cash rented	665	756	1,232	427
Total crop acres share rented	48	54	-	46
Machinery value per crop acre	747	663	616	934

Financial Summary
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Debt to Asset Ratio)

	<u>Avg. Of All Farms</u>	<u>Less than 20%</u>	<u>20% - 40%</u>	<u>40% - 60%</u>	<u>60% - 80%</u>	<u>Over 80%</u>
Number of farms	101	19	44	27	6	5
Income Statement						
Gross cash farm income	865,101	423,135	719,662	1,055,275	2,288,782	1,089,085
Total cash farm expense	703,195	299,996	549,638	934,862	1,875,738	928,592
Net cash farm income	161,907	123,139	170,024	120,413	413,044	160,493
Inventory change	-25,846	-1,317	-26,774	-2,089	-187,551	-45,125
Depreciation	-68,737	-50,303	-66,647	-89,937	-70,032	-41,148
Net farm income from operations	67,324	71,519	76,603	28,387	155,460	74,220
Gain or loss on capital sales	4,732	2,271	2,593	7,557	-	23,335
Average net farm income	72,056	73,790	79,196	35,944	155,460	97,555
Median net farm income	52,423	78,612	52,271	58,696	20,203	99,843
Profitability (cost)						
Rate of return on assets	1.7 %	1.5 %	1.7 %	0.9 %	4.2 %	2.5 %
Rate of return on equity	0.3 %	1.5 %	1.1 %	-2.9 %	3.1 %	-331.9 %
Operating profit margin	5.9 %	6.9 %	7.5 %	3.0 %	8.5 %	3.0 %
Asset turnover rate	29.0 %	22.2 %	23.3 %	30.5 %	49.1 %	84.7 %
Profitability (market)						
Rate of return on assets	1.8 %	0.5 %	1.9 %	1.5 %	2.9 %	11.8 %
Rate of return on equity	1.3 %	0.5 %	1.9 %	-0.5 %	1.2 %	118.8 %
Operating profit margin	9.2 %	4.1 %	12.0 %	6.6 %	7.8 %	18.0 %
Asset turnover rate	19.8 %	11.9 %	15.8 %	23.4 %	36.6 %	65.5 %
Liquidity & Repayment (end of year)						
Current assets	774,100	660,130	756,006	715,412	1,620,708	667,407
Current liabilities	409,125	40,015	272,564	636,928	1,173,109	866,571
Current ratio	1.89	16.50	2.77	1.12	1.38	0.77
Working capital	364,975	620,115	483,442	78,484	447,599	-199,165
Change in working capital	734	27,583	11,493	-53,265	158,181	-93,316
Working capital to gross inc	41.9 %	143.3 %	67.4 %	7.1 %	21.0 %	-18.3 %
Term debt coverage ratio	1.25	3.41	1.49	0.85	1.55	-0.45
Replacement coverage ratio	0.80	1.08	0.87	0.61	1.28	-0.42
Term debt to EBITDA	2.65	0.67	1.85	4.46	3.83	1.63
Solvency (end of year at cost)						
Number of farms	101	19	44	27	6	5
Total assets	2,913,455	2,547,568	2,999,592	3,128,794	3,913,016	1,183,514
Total liabilities	960,176	92,114	673,360	1,622,871	2,622,274	1,209,732
Net worth	1,953,279	2,455,454	2,326,233	1,505,922	1,290,743	-26,218
Net worth change	58,396	146,764	42,663	41,064	70,858	-60,321
Farm debt to asset ratio	36 %	3 %	25 %	53 %	70 %	102 %
Total debt to asset ratio	33 %	4 %	22 %	52 %	67 %	102 %
Change in earned net worth %	3 %	6 %	2 %	3 %	6 %	-177 %
Solvency (end of year at market)						
Number of farms	101	19	44	27	6	5
Total assets	4,184,664	4,367,278	4,327,271	4,062,699	5,269,933	1,592,066
Total liabilities	1,479,646	680,579	1,246,148	2,024,512	3,297,166	1,447,593
Net worth	2,705,017	3,686,699	3,081,124	2,038,187	1,972,767	144,473
Total net worth change	76,160	143,076	55,348	63,638	67,223	83,371
Farm debt to asset ratio	38 %	17 %	31 %	51 %	65 %	91 %
Total debt to asset ratio	35 %	16 %	29 %	50 %	63 %	91 %
Change in total net worth %	3 %	4 %	2 %	3 %	4 %	136 %
Nonfarm Information						
Net nonfarm income	41,141	39,505	43,787	41,769	47,797	12,686
Farms reporting living expenses	34	9	20	4	1	-
Total family living expense	72,096	65,287	78,040	-	-	-
Total living, invest, cap. purch	110,123	120,616	110,403	-	-	-
Crop Acres						
Total crop acres	947	582	807	978	2,781	1,193
Total crop acres owned	233	245	283	175	286	-
Total crop acres cash rented	665	316	477	729	2,464	1,144
Total crop acres share rented	48	20	47	74	31	49
Machinery value per crop acre	747	974	899	847	241	390

Financial Summary
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Age of Operator)

	<u>Avg. Of All Farms</u>	<u>Less Than 31</u>	<u>31 - 40</u>	<u>41 - 50</u>	<u>51 - 60</u>	<u>Over 60</u>
Number of farms	101	7	15	13	17	49
Income Statement						
Gross cash farm income	865,101	1,564,343	609,324	927,380	820,943	842,306
Total cash farm expense	703,195	1,210,360	463,763	916,596	675,099	657,169
Net cash farm income	161,907	353,983	145,561	10,784	145,844	185,138
Inventory change	-25,846	-162,776	4,128	123,265	-8,537	-61,025
Depreciation	-68,737	-28,884	-57,418	-67,154	-72,950	-76,854
Net farm income from operations	67,324	162,322	92,272	66,895	64,357	47,258
Gain or loss on capital sales	4,732	-	9,558	4,482	7,018	3,204
Average net farm income	72,056	162,322	101,829	71,377	71,375	50,463
Median net farm income	52,423	56,371	99,572	28,696	85,571	42,329
Profitability (cost)						
Rate of return on assets	1.7 %	5.6 %	4.4 %	1.5 %	2.0 %	0.6 %
Rate of return on equity	0.3 %	6.9 %	4.4 %	-0.3 %	0.3 %	-0.7 %
Operating profit margin	5.9 %	8.8 %	14.7 %	4.4 %	7.7 %	2.5 %
Asset turnover rate	29.0 %	64.1 %	29.7 %	35.0 %	25.9 %	24.5 %
Profitability (market)						
Rate of return on assets	1.8 %	5.4 %	4.6 %	1.3 %	0.7 %	1.5 %
Rate of return on equity	1.3 %	7.8 %	6.0 %	0.0 %	-0.7 %	1.2 %
Operating profit margin	9.2 %	9.2 %	19.1 %	4.9 %	4.3 %	9.6 %
Asset turnover rate	19.8 %	58.4 %	24.2 %	26.4 %	16.0 %	15.9 %
Liquidity & Repayment (end of year)						
Current assets	774,100	1,032,773	453,661	912,312	881,943	761,157
Current liabilities	409,125	516,058	256,723	605,137	488,539	360,948
Current ratio	1.89	2.00	1.77	1.51	1.81	2.11
Working capital	364,975	516,714	196,938	307,175	393,404	400,209
Change in working capital	734	180,282	5,960	-66,492	-20,256	-1,398
Working capital to gross inc	41.9 %	36.3 %	31.9 %	29.0 %	47.5 %	47.9 %
Term debt coverage ratio	1.25	3.05	1.46	0.77	1.31	1.06
Replacement coverage ratio	0.80	2.96	1.10	0.54	0.70	0.65
Term debt to EBITDA	2.65	2.05	3.50	2.36	3.03	2.41
Solvency (end of year at cost)						
Number of farms	101	7	15	13	17	49
Total assets	2,913,455	2,309,192	2,374,562	2,679,833	3,002,266	3,195,915
Total liabilities	960,176	1,170,926	1,025,807	1,176,451	1,070,946	814,169
Net worth	1,953,279	1,138,266	1,348,755	1,503,382	1,931,320	2,381,746
Net worth change	58,396	198,739	108,397	16,851	100,360	19,503
Farm debt to asset ratio	36 %	50 %	50 %	46 %	39 %	28 %
Total debt to asset ratio	33 %	51 %	43 %	44 %	36 %	25 %
Change in earned net worth %	3 %	21 %	9 %	1 %	5 %	1 %
Solvency (end of year at market)						
Number of farms	101	7	15	13	17	49
Total assets	4,184,664	2,557,032	2,866,209	3,470,378	4,767,989	4,807,917
Total liabilities	1,479,646	1,445,223	1,298,325	1,610,144	1,700,391	1,428,864
Net worth	2,705,017	1,111,809	1,567,884	1,860,234	3,067,598	3,379,053
Total net worth change	76,160	194,933	129,884	22,380	79,584	55,827
Farm debt to asset ratio	38 %	57 %	52 %	49 %	39 %	32 %
Total debt to asset ratio	35 %	57 %	45 %	46 %	36 %	30 %
Change in total net worth %	3 %	21 %	9 %	1 %	3 %	2 %
Nonfarm Information						
Net nonfarm income	41,141	57,396	44,884	35,001	22,153	45,889
Farms reporting living expenses	34	1	3	5	6	19
Total family living expense	72,096	-	-	63,227	72,757	74,786
Total living, invest, cap. purch	110,123	-	-	88,629	134,604	110,713
Crop Acres						
Total crop acres	947	2,194	730	1,051	937	811
Total crop acres owned	233	95	122	159	271	294
Total crop acres cash rented	665	2,050	544	843	639	466
Total crop acres share rented	48	49	64	49	27	51
Machinery value per crop acre	747	109	731	683	1,004	916

Appendix I

Whole Farm Analysis Procedures and Measures

The whole-farm reports include summary financial statements and measures for all farms included in this report. Rounding of individual items may have caused minor discrepancies between those items and the printed totals which are calculated before rounding.

Financial Summary

This table summarizes key measures reported in several of the following tables.

Income Statement

This section summarizes key totals from the Income Statement table. *Average Net Farm Income* is the mean or average farm earnings of the group calculated on an accrual adjusted basis. *Median Net Farm Income* is the farm earnings of the median or middle farm in the group. If it is lower than the average, the average earnings are skewed because some farms had much higher earnings than the rest of the group. If it is higher than the average, the average earnings are skewed because some farms had much lower earnings than the rest of the group.

Profitability

See the Profitability Measures section below for an explanation of these measures.

Liquidity and Repayment

See the Financial Standards Measures and Liquidity Measures sections below for an explanation of these measures.

Solvency

This section summarizes key measures from the Balance Sheet reports.

Nonfarm Information

This section summarizes non-farm earnings for all farms and family living withdrawals for those sole proprietors who kept accurate family living records. More detail is included on the Household and Personal Expenses and Nonfarm Summary pages.

Crop Acres

This section summarizes acres used for cropping from the Crop Production and Marketing table.

Financial Standards Measures

This table contains the Farm Financial Standards Council's 21 financial measures for evaluating a farm's financial position and performance.

Liquidity

Current Ratio is calculated by dividing the total current farm assets by the total current farm liabilities.

Working Capital is calculated by subtracting current farm liabilities from current farm assets.

Working Capital to Gross Income is *Working Capital* divided by *Gross Revenues (accrual)*.

Solvency

Farm Debt to Asset Ratio is calculated by dividing the total farm liabilities by the total farm assets. It measures the proportion of farm assets financed by debt capital.

Farm Equity to Asset Ratio is calculated by dividing farm equity or net worth by the total farm assets. It measures the proportion of the farm assets financed by the owner's equity as opposed to debt. This is the opposite of the debt to asset ratio. These two measures always add up to 100% because they describe how total farm assets are financed.

Farm Debt to Equity Ratio measures farm debt relative to farm equity. It is calculated by dividing the total farm liabilities by the total farm net worth. The debt to equity ratio measures the amount of borrowed capital being employed for every dollar of equity capital.

Profitability

Rate of Return on Farm Assets can be thought of as the average interest rate being earned on all investments in the farm or ranch business. If assets are valued at market value, the rate of return on assets can be looked at as the “opportunity cost” of farming versus alternate investments. If assets are valued at cost value, the rate of return on assets more closely represents the actual return on the average dollar invested in the farm. The rate of return on farm assets is calculated as follows: $\text{Rate of Return on Assets} = \text{Return on Farm Assets} \div \text{Average Farm Investment}$, where: $\text{Return on Farm Assets} = \text{Net Farm Income} + \text{Farm Interest} - \text{Value of Operator's Labor \& Management}$, and $\text{Average Farm Investment} = (\text{Beginning Total Farm Assets} + \text{Ending Total Farm Assets}) \div 2$.

Rate of Return on Farm Equity represents the interest rate being earned on farm net worth. If assets are valued at market value, this return can be compared to returns available if the assets were liquidated and invested in alternate investments. If assets are valued at cost value, this more closely represents the actual return on the funds that have been invested or retained in the business. The rate of return on farm equity is calculated as follows: $\text{Rate of Return on Equity} = \text{Return on Farm Equity} \div \text{Average Farm Net Worth}$, where: $\text{Return on Farm Equity} = \text{Net Farm Income} - \text{Value of Operator's Labor \& Management}$, and $\text{Average Farm Net Worth} = (\text{Beginning Farm Net Worth} + \text{Ending Farm Net Worth}) \div 2$.

Operating Profit Margin is a measure of the operating efficiency of the business. It is calculated as follows: $\text{Operating Profit Margin} = \text{Return to Farm Assets} \div \text{Value of Farm Production}$. If expenses are held in line relative to the value of output produced, the farm will have a healthy operating profit margin. A low net profit margin may be caused by low prices, high operating expenses, or inefficient production.

Net Farm Income represents the returns to unpaid labor, management, and equity capital invested in the business.

EBITDA is Earnings Before Interest, Taxes, Depreciation and Amortization. It is Net Farm Income from Operations from the income statement plus interest expense and depreciation expense. This measure is common in commercial financial analysis but is not commonly used in agriculture.

Repayment Capacity

Capital Debt Repayment Capacity is *Net Farm Income From Operations* plus *Depreciation, Personal Income*, and *Interest on Term Debt* minus *Family Living/Owner Withdrawals*, *Payments on Personal Debt* and *Income Taxes Paid*. This represents total earnings available for debt repayment and cash capital replacement.

Capital Debt Repayment Margin is *Capital Debt Repayment Capacity* minus *Scheduled Term Debt Payments*. This is the amount by which earnings available for debt repayment exceeded payments due.

Replacement Margin is *Capital Debt Repayment Margin* minus *Cash Replacement Allowance*. This is the amount by which earnings available for debt repayment and replacement exceed payments due and cash replacement needs.

Term Debt Coverage Ratio measures whether the business generated enough income to cover term debt payments. It is calculated by dividing the funds generated by the business for debt repayment (net cash farm income + nonfarm income + interest expense - family living expense - income taxes) by total term debt payments (annual scheduled principal and interest payments on intermediate and long term debt). A ratio less than 1.0 indicates that the business did not generate sufficient cash to meet scheduled payments in the past year. A ratio greater than 1.0 indicates the business generated enough cash to pay all term debt payments.

Replacement Coverage Ratio measures whether the business generated enough income to cover scheduled term debt payments plus estimated cash capital replacement needs. A ratio less than 1.0 indicates that the business did not generate sufficient income to meet replacement needs. A ratio greater than 1.0 indicates the business generated enough income to pay all term debt payments and cover an allowance for capital replacement.

Efficiency

Asset Turnover Rate is a measure of efficiency in using capital. It is calculated as follows:
$$\text{Asset Turnover Rate} = \text{Value of Farm Production} \div \text{Total Farm Assets}.$$

The last four ratios reflect the distribution of gross income to cover operating expenses and generate farm income. The sum of the operating expense ratio, the depreciation expense ratio, and the interest expense ratio equals the percent of gross income used to pay business expenses. The amount remaining is net farm income. The gross farm income used to calculate these ratios is the accrual gross farm income.

Operating Expense Ratio is calculated as $(\text{Total Farm Operating Expense} - \text{Farm Interest Expense}) \div \text{Gross Farm Income}$. This ratio indicates the percent of the gross farm income that

was used to pay operating expenses. Total farm operating expense is the accrual total operating expense.

Depreciation Expense Ratio is calculated as $\text{Depreciation} \div \text{Gross Farm Income}$. This ratio indicates the percent of the gross farm income that was used to cover depreciation and other capital adjustments.

Interest Expense Ratio is calculated as $\text{Farm Interest Expense} \div \text{Gross Farm Income}$. This ratio indicates the percent of the gross farm income used for farm interest expenses. This is the same ratio as the accrual interest as a percent of income from the Liquidity table.

Net Farm Income Ratio is calculated as $\text{Net Farm Income} \div \text{Gross Farm Income}$. This ratio indicates the percent of the gross farm income that remained after all expenses.

Farm Income Statement

The Farm Income Statement is a summary of income, expenses, and resultant profit or loss from farming operations during the calendar year. The first section lists cash farm income from all sources. The second section lists *cash* expenses. “Interest” includes only interest actually paid. No opportunity charges on farm equity capital or unpaid labor are included. The difference between *Gross Cash Farm Income* and *Total Cash Expense* is the *Net Cash Farm Income*. This is net farm income on a *cash* basis.

The third and fourth sections deal with noncash changes in the farm business. The *Inventory Changes* and *Depreciation* sections are used to convert the cash income statement (Net Cash Farm Income) derived from the first two sections into an accrual income statement. The resulting “Net Farm Income” represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources which are owned by the farm family and, hence, not purchased or paid a wage. However, it does not include any asset appreciation, debt forgiveness or asset repossessions.

Profitability Measures

Profitability is measured using assets valued first at cost and then at market. The reports include five measures of profit followed by the values used to calculate the measures.

Net Farm Income is repeated from the Farm Income Statement report. When assets are valued at market, it includes the change in market valuation of capital for the year.

Rate of Return on Assets is the *Return to Farm Assets* divided by *Average Farm Assets*.

Rate of Return on Equity is the *Return to Farm Equity* divided by *Average Farm Equity*.

Operating Profit Margin is the *Return to Farm Assets* divided by *Value of Farm Production*.

Asset Turnover Rate is the *Value of Farm Production* divided by *Average Farm Assets*.

Farm Interest Expense is the accrued interest cost so it will be different from the cash interest paid shown in the Farm Income Statement.

Value of Operator's Labor and Management is its opportunity cost. It is assigned by farm within suggested guidelines.

Return on Farm Assets is calculated by adding *Farm Interest Expense* and *Net Farm Income* and then subtracting the *Value of Operator's Labor and Management*.

Average Farm Assets is the average of beginning and ending total farm assets for all farms, not just those included in the Balance Sheet report.

Return to Farm Equity is calculated by subtracting the *Value of Operator's Labor and Management* from *Net Farm Income*.

Average Farm Equity is the average of beginning and ending farm net worth.

Value of Farm Production is gross farm income minus feeder livestock and feed purchased and adjusted for inventory changes in crops, market livestock and breeding livestock.

Liquidity and Repayment Capacity Measures

Current Ratio is total *Current Assets* divided by total *Current Liabilities*.

Working Capital is total *Current Assets* minus total *Current Liabilities*.

Working Capital to Gross Income is *Working Capital* divided by *Gross Revenues (accrual)*.

Current Assets are taken from the ending balance sheet and include all assets that will be sold or used up in production within one business year.

Current Liabilities are taken from the ending balance sheet and include all loans and other debt due to be repaid within one business year. Principal due within a twelve months on intermediate and long term loans is included.

Gross Revenues (accrual) is gross cash farm income from the income statement adjusted for inventory changes in crops and feed, market livestock, accounts receivable, hedging accounts, breeding livestock and other income related inventories.

Net Farm Income from Operations is from the Income Statement.

Depreciation is the total depreciation from the Income Statement. It is added as a source of repayment because it is a non-cash expense that was subtracted to arrive at *Net Farm Income From Operations*.

Personal Income is the average for all farms, not including *Gifts and Inheritances*.

Family Living/Owner Withdrawals is the amount of owner withdrawals for family living, partnership withdrawals, and corporate dividends. Reported withdrawals are adjusted to include any discrepancy with actual cash disappearance.

Payments on personal debt is the total principal payments made during the year on all non-farm loans.

Income Taxes Paid are total federal, state, and social security taxes paid during the year on farm and personal earnings.

Interest on Term Debt is the amount of interest paid on intermediate and long term loans during the year. Interest is added as a source of repayment because it was previously subtracted to arrive at *Net Farm Income from Operations*.

Capital Debt Repayment Capacity is *Net Farm Income From Operations* plus *Depreciation, Personal Income*, and *Interest on Term Debt* minus *Family Living/Owner Withdrawals, Payments on Personal Debt* and *Income Taxes Paid*. This represents total earnings available for debt repayment and cash capital replacement.

Scheduled Term Debt Payments is the scheduled amount of principal and interest payments due on farm intermediate and long term loans from the beginning balance sheet.

Capital Debt Repayment Margin is *Capital Debt Repayment Capacity* minus *Scheduled Term Debt Payments*. This is the amount by which earnings available for debt repayment exceeded payments due.

Cash Replacement Allowance is the estimated amount of cash needed to cover the portion of capital replacement needs that normally come from cash flow. It is estimated for each operator based on their financial structure.

Replacement Margin is *Capital Debt Repayment Margin* minus *Cash Replacement Allowance*. This is the amount by which earnings available for debt repayment and replacement exceed payments due and cash replacement needs.

Term Debt Coverage Ratio is *Capital Debt Repayment Capacity* divided by *Scheduled Term Debt Payments*. This is how many times scheduled payments are covered by repayment capacity.

Replacement Coverage Ratio is *Capital Debt Repayment Capacity* divided by the total of *Scheduled Term Debt Payments* and the *Cash Replacement Allowance*. This represents how many times scheduled payments and cash replacement needs are covered by repayment capacity.

Balance Sheets at Cost and Market Values

These tables include all farm and personal assets and liabilities reported by these farms on their beginning and ending balance sheets. Government crop loans are treated consistently as loans on these tables, meaning that the full asset value is included as an asset and total accrued interest and outstanding principal balances are included as liabilities. Capital assets are valued at original purchase price minus economic depreciation on the Cost Value table. Assets are valued

at a conservative market value on the Market Value table. Deferred liabilities are included on the Market Value table. Deferred liabilities are an estimate of the taxes that would be due if the business was liquidated on the date of the balance sheet.

Statement of Cash Flows

This table reports the sources from which cash was available or obtained and where that cash was used or remains at the end of the year.

Crop Production and Marketing Summary

This table contains three sections. The first section reports average acreage by tenure and general use. The next two sections show average price received from cash sales and average yields for major crops.

Household and Personal Expenses

For those farms that kept records, the household and personal expenses are summarized in this table. Since not all farms keep these records, the number of farms may be different for each group. Averages are determined by the number of farms keeping these records.

Operator and Labor Information

This table has four sections. The first reports the averages for the number of operators per farm, the operator's age, and the number of years farming. The second section reports various measures and results per operator compared to per farm in other reports.

The third section reports the amount of labor used and the returns to that labor. *Total Unpaid Labor Hours* and *Total Hired Labor Hours* are based on farmers' estimates of labor use. No labor records are kept for unpaid labor. *Value of Farm Production/Hour* is the Value of Farm Production divided by Total Labor Hours per Farm. *Net Farm Income/Unpaid Hour* is Net Farm Income divided by Total Unpaid Labor Hours.

The fourth section reports the number of partnerships and withdrawals in each grouping.

Nonfarm Summary

This table reports the income from nonfarm sources which is included in a farmer's total net income. Not all farms have nonfarm income, but the figure reported is the average over all farms not just those reporting nonfarm income. Also reported are the beginning and ending values for nonfarm assets for all farms (not just sole proprietors).

Appendix II

Crop Enterprise Analysis Procedures and Measures

The Crop Enterprise Analysis tables show the profitability of each crop enterprise produced by five or more farms.

Gross Return is the average Yield multiplied by the Value Per Unit plus any other production or income related to the crop. Value Per Unit for cash crops is the average sales price for crops sold before the end of the year and the average ending inventory value for crops remaining unsold. For feed crops, it is the estimated harvest-time value. LDP payments and other commodity-specific income are added to estimate the total value received for crop production. *Direct Expenses* include expenses that are directly related to the production of the specific crop. Most direct expenses are directly assigned to production of the crop and simply divided by acres. Some, such as Fuel and Oil and Repairs, which are difficult to assign directly to specific fields or crops, are determined by allocating the total annual expense across all enterprises using allocation factors entered for each crop.

Overhead Expenses are also determined by allocating the total annual expense across all enterprises using allocation factors entered for each crop.

Net Return per Acre is the Gross Return per Acre minus Total Direct and Overhead Expenses.

Net return with government payments is Net Return per Acre plus Government Payments. Government Payments includes only direct payments and counter-cyclical payments. Payments that are directly attached to production of the crop, such as LDP and disaster payments are included in Gross Return. Because direct government payments have been decoupled from actual production, these payments are generally allocated to all crops excluding vegetables and pasture. This is done for each farm by allocating the direct payments from the whole farm to these crops.

Net Return over Labor and Management is calculated by allocating the farmer's charge for unpaid labor and management across all enterprises and subtracting it from Net Return With Government Payments.

Cost of Production is calculated by dividing the total expense for each category by the yield per acre. *Total Expense Less Government and Other Income* is total expense minus government payments, income from secondary products, and other income, divided by yield per acre.

Machinery Cost Per Acre is the sum of fuel and oil, repairs, custom hire expense, machinery lease payments, machinery depreciation, and interest on intermediate debt divided by acres.

Estimated Labor Hours Per Acre is calculated by allocating the farmer's estimate of total operator and hired labor hours for the year across all enterprises.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain crop enterprise, that information is not reported. If there are fewer than 25 farms, the high and low groups are not reported.

Appendix III

Livestock Enterprise Analysis Procedures and Measures

The Livestock Enterprise Analysis tables show the profitability of each livestock enterprise produced by five or more farms.

Gross Margin includes product and livestock sales, cull sales, the value of offspring transferred out of the enterprise, the value of inventory change from beginning to end of year, and any other income assigned to the enterprise. Livestock purchases and the value of animals transferred in from other enterprises are subtracted.

Direct Expenses include expenses that are directly related to the specific livestock enterprise. Feed and most other direct expenses are directly assigned based on farm records. Some, such as Fuel and Oil and Repairs, which are difficult to assign directly to enterprises, are determined by allocating the total annual expense across all enterprises using allocation factors entered for each farm.

Overhead Expenses are also determined by allocating the total annual expense across all enterprises using allocation factors entered for each farm.

Net Return is the Gross Return minus Total Direct and Overhead Expenses.

Net Return over Labor and Management is calculated by allocating the farmer's charge for unpaid labor and management across all enterprises and subtracting it from Net Return.

Estimated Labor Hours is calculated by allocating the farmer's estimate of total operator and hired labor hours for the year across all enterprises.

Cost of Production is calculated by dividing the total expense for each category by Total Production. For grow/finish enterprises, the Purchases and Transfers In are included in direct expense. Cull sales, other offspring sales, and any other miscellaneous income are subtracted and replacement purchases and transfers in are added to arrive at the cost *With other revenue adjustments*. *With Labor and Management* is the cost with other revenue adjustments plus the producer's charge for operator's labor and management. This is the breakeven price for the primary product to provide a return for operator labor and management.

The last section of each livestock table contains both economic and technical efficiency measures. *Lbs. feed per lb. of gain* is the pounds of total feed divided by Total production. For grains, these pounds per bushel are used: corn, 56; oats, 32; barley, 48; grain sorghum, 56; wheat, 60; and millet, 48. For these forages, the units are converted to pounds and then adjusted by these factors: alfalfa haylage, 0.5; corn silage, 0.33; oatlage, 0.5; sorghum silage, 0.33; and small grain silage, 0.33.

The calving and weaning percentages are calculated as the number of calves which are calved and weaned, respectively, divided by the number of cows which are supposed to bear young.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain livestock enterprise, that information is not reported. If there are fewer than 25 farms, the high and low groups are not reported.

Appendix IV

Prices Used In the Analysis Report

Item	Beginning Inventory	Feed	Ending Inventory
All Corn/bu.	3.05	3.20	3.39
Oats/bu.	2.06	2.44	2.64
All Wheat/bu.	5.71	5.48	5.12
Soybeans/bu.	8.80	8.50	8.08
Alfalfa hay/t. (avg quality)	110.00	114.00	140.00
Alfalfa haylage/t	47.00	49.00	60.00
Grass/Mixed hay/r	100.00	105.00	120.00
Corn silage/t.	24.00	26.00	27.00
Oats straw/bale/ton	3.75/125	3.75/125	3.75/125
Cornstalks/t.	30.00	30.00	30.00
Oatlage/t.	20.00	20.00	22.00

Enterprise production valued at actual selling price if sold or contracted, inventory price for balance.
All feeds are valued on an as fed moisture basis.

Other Prices Used:

Pasture: \$50.00/acre (adjusted for quality and carrying capacity)
Value of milk fed calves \$ 1.50/gallon

Depreciation is calculated by using a 5% rate for buildings, 10% for machinery, 20% for beef cattle and sheep and 33% for breeding hogs and dairy cows. The economic depreciation is calculated by taking the beginning cost (book) value, plus new purchases (boot), less book value of sold items multiplied by the appropriate percentage rate.

Value of unpaid operator's labor is calculated by using this formula: For sole proprietors and partnerships, labor and management is valued at \$25,000 per operator plus 5% of the value of farm production, with a minimum of \$30,000 for a full-time farm operator. This value is used in calculating ROA, ROE and other whole farm ratios and is also allocated as an opportunity cost to crop and livestock enterprises.



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