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## EXECUTIVE SUMMARY

# 1998 ANNUAL REPORT OF THE SOUTHEASTERN MINNESOTA FARM BUSINESS MANAGEMENT ASSOCIATION 

by

Kent D. Olson, Lorin L. Westman, and Dale W. Nordquist

The average net farm income is $\$ 65,739$ for the 60 farms included in the 1998 annual report of the Southeastern Minnesota Farm Business Management Association (Table 1, page 10-11, and Figure 1). This is a decrease of $12 \%$ from 1997. Even though gross cash farm income increased, cash expenses also increased and inventory values changed little (instead of increasing as in 1997). Thus, 1998 net farm income is lower. However, income is still at a high level compared to the early 1990 s and the 1980s. When adjusted by the Consumer Price Index (to provide a constant dollar or buying power comparison), the 1998 accrual net farm income is exceeded in only 6 of the last 20 years: 1979, 1980, 1990, 1995, 1996 and 1997. (Net farm income is an accrual measure calculated by subtracting cash farm expenses and depreciation from total cash farm income and adjusting the difference for changes in other capital and inventory items.) After subtracting an opportunity cost for equity capital, unpaid labor and management earnings follow a similar but lower pattern (Table 4, p. 14).

Figure 1. Average Net Farm Income


As in previous years, the income levels experienced by individual farms vary greatly from the overall average. The high $20 \%$ of these farms had an average net farm income of $\$ 216,266$ in 1998; farms in the low $20 \%,-\$ 20,101$. Once again, this is an increase for the high group, and a decrease for the low group.

Average gross cash farm income in 1998 was $\$ 320,356$ for these 60 farms. This is a $9 \%$ increase from 1997. High milk prices pushed milk sales to $42 \%$ of gross income in 1998 (Figure 2). Corn and soybean sales were almost a third of gross income in 1998. Compared to 1997, milk sales increased by $33 \%$; corn sales, by $6 \%$. Hog sales decreased by $38 \%$ compared to 1997 . Soybean sales decreased by $14 \%$, and beef finishing sales, by $30.2 \%$.

Government payments (of all types) almost doubled from an average of \$12,907 in 1997 to $\$ 23,322$ in 1998. Government payments were $7.3 \%$ of gross income in 1998, compared to $4.4 \%$ in 1997. In 1998, the total government payment came from several sources: $\$ 11,284$ from FAIR transition payments for the 1998 year; $\$ 792$ for FAIR transition payments for the 1999 year but received in 1998; $\$ 5,529$ for (emergency) market loss payments; $\$ 5,107$ for loan deficiency payments (LDPs); $\$ 425$ for the conservation reserve program (CRP); and $\$ 185$ for other government payments.

Entire Report Available at: http://www.apecon.agri.umn.edu/faculty/kolson/currentres.html

Fig. 2 SE -- 1997 Income


Fig. 2 SE -- 1998 Income


Average total cash expenses were $\$ 239,611$ in 1998. This is an increase of $6.3 \%$ from the 1997 average. As a percentage of both cash expenses and depreciation, feed expenses were $17 \%$ in 1998, down slightly from 1997 (Figure 3). Seed, fertilizer, and crop chemicals were $21 \%$ of the total, up from 1997. Interest expense was $7.5 \%$ of the total, almost unchanged. Real estate taxes amounted to $2.2 \%$ in 1998; they were $2.1 \%$ in 1997.

Fig. 3 SE -- 1997 Expenses


Fig. 3 SE -- 1998 Expenses


Both the rate of return on assets (ROA) and the rate of return to equity (ROE) decreased from 1997 (Figure 4). However, ROE was still higher than ROA indicating that debt capital was earning more than it was costing (Table 4, page 14).

Figure 4. Rates of Return on
Assets (ROA) and Equity (ROE)


Average total equity (of the 45 sole proprietors) was $\$ 474,219$ at the end of 1998 , an increase of $\$ 44,697$ during the year (Table 5, page 15). (Assets were valued on a cost basis.) Except for a decline during 1993, average equity has improved steadily since 1986 (Figure 5). At the end of 1998, the average debt-asset ratio was down slightly to $35 \%$.

Figure 5. Ending Equity and Ending Debt-Asset Ratio


Crop yields were at record levels in 1998 for the Association (Figure 6). The average corn yield was 167 bushels per acre; soybeans were at 50 bushels per acre.

Figure 6. Average Corn \& Soybean Yield


## Results by Type of Farm

The 60 farms in the report are classified as a certain type (e.g., dairy) on the basis of having 70 percent or more of their gross sales from that category. Using this 70 percent rule, there are 18 crop farms, 16 dairy farms, and 10 crop and dairy farms. There are 8 farms which do not have a single source (or pair of sources) of income over $70 \%$.

As it has in the past 5 years, the average crop and dairy farm had the highest average net farm income $(\$ 125,540)$ in 1998 (Figure 7). The average dairy farm had the second highest net farm income.

In terms of the rate of return to assets (ROA), the dairy farms have the highest ROA (11\%) in 1998 (Figure 8). (Assets are valued on a cost basis.) The crop and diary farms may dominate the other types due to size and not efficiency; they have not had the highest ROA in the past 5 years.

Figure 7. Net Farm Income by Type


Figure 8. ROA by Type


None of the different types have an average debt-asset ratio greater than $40 \%$ (Figure 9).
Figure 9. Debt-Asset Ratio by Type


The report provides additional information on profitability, liquidity, and solvency as well as other whole-farm information and detailed information on crop and livestock enterprises. Also reported are wholefarm financial condition and performance by county, sales size class, and type of farm and corn and soybean returns by county.

# 1998 ANNUAL REPORT OF THE SOUTHEASTERN MINNESOTA FARM BUSINESS MANAGEMENT ASSOCIATION 

by<br>Kent D. Olson, Lorin L. Westman, and Dale W. Nordquist ${ }^{1}$

This report summarizes the individual farm records of the members of the Southeastern Minnesota Farm Business Management Association for 1998.

Whole-farm information and enterprise costs and returns are reported. The year-end analysis of the individual farms was performed by the fieldman using FINPACK 8.0 from the Center for Farm Financial Management within the Department of Applied Economics. The individual analyses were summarized at the Department of Applied Economics using FINANSUM. 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 three major groups. Tables 1 through 10 present whole-farm information. Tables in the 11-x series provide information on crop enterprises. Tables in the $12-x$ series provide information on livestock enterprises. Table 13 contains information on the prices used in the analysis. A summary of the average whole-farm information over time is presented in Table 14 . Tables $15,16,17$, and 18 categorize the whole-farm information by county, gross income class, type of farm, and operator age, respectively.

Of the 95 farms in the Southeastern Association, the data for 60 farms are included in this report. The rest were omitted because the records were incomplete at the time that this report was prepared. In two separate studies the farmers who belong to a management association were found to be larger than the average farm reported by the agricultural census and were more likely to have livestock.

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 a large part of the cost, with the balance defrayed by the Minnesota Extension Service and research programs of the University of Minnesota.

[^0]
## DISTRIBUTION OF MEMBERSHIP -- 1998

| County | Number of Members | Number of Records Submitted | Association Directors |
| :---: | :---: | :---: | :---: |
| Dakota | 10 | 7 | Orin Legare |
| Dodge | 5 | 3 | Gary Henslin |
| Mower | 2 | 1 |  |
| Steele | 2 | 2 |  |
| Faribault | 2 | 1 | Mike Krenik |
| Freeborn | 2 | 1 |  |
| LeSueur | 1 | 0 |  |
| Nicollet | 1 | 1 |  |
| Waseca | 2 | 0 |  |
| Goodhue | 18 | 13 | Marie Tipcke |
| Houston | 7 | 3 | James Luehmann |
| Winona | 13 | 7 |  |
| Olmsted | 14 | 11 | James Vermilya |
| Fillmore | 1 | 0 |  |
| Rice | 3 | 2 | Paul Krueger |
| Scott | 4 | 4 |  |
| Wabasha | 8 | 4 | John Sloan |
| TOTAL | 95 | 60 |  |
| James Vermilya, President |  |  |  |
| Robert Lamprecht, Secretary-Treasurer |  |  |  |

## SOUTHEASTERN MINNESOTA FARM BUSINESS MANAGEMENT ASSOCIATION

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## EXPLANATORY NOTES FOR THE WHOLE-FARM REPORTS

Tables 1 through 4, and 6 through 8 include the same number of farms, which were all of the farms whose records were judged to be of sufficient quality. Table 5, the Balance Sheet, includes only sole proprietors; partnerships and corporations are excluded because some debt is held outside of the business causing potential misinterpretations of the average financial condition.

Rounding of individual items may have caused minor discrepancies between those items and the printed totals which are calculated before rounding.

## Table 1. Farm Income Statement

This statement is a summary of income, expenses, and resultant profit or loss from farming operations during the calendar year. The first section of Table 1 lists cash farm income from all sources. The second section of Table 1 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 of Table 1 deal with noncash changes in the farm business. The "Inventory Changes" and "Depreciation and Other Capital Adjustments" 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.

## Table 2. Inventory Changes

This is the detailed statement of inventory changes which is summarized in Table 1. It includes beginning and ending inventories and the calculated changes.

## Table 3. Depreciation and Other Capital Adjustments

This is the detailed statement of depreciation and other capital adjustments which is summarized in Table 1. It includes beginning and ending inventories, sales, purchases, and depreciation.

## Table 4. Profitability and Liquidity Analysis

Various measures of performance are calculated for the farms in this report. Measures of profitability and liquidity are included in Table 4. Solvency measures are in Table 5. In Tables 1-3, no opportunity costs are used. In Table 4, opportunity costs for labor, capital, and management are used. The measures and their components are described below.

## Profitability

Profitability is measured using assets valued in cost basis terms.
"Labor and management earnings" equals "Net Farm Income" from Table 1 minus an opportunity interest cost of $6 \%$ on average farm net worth.
"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."
"Interest on farm net worth" is the "Average farm net worth" multiplied by a $6 \%$ opportunity interest cost charge.
"Farm interest expense" is the accrued interest cost so it will be different from the cash interest paid shown in Table 1.
"Value of operator's labor and management" is its opportunity cost. It is calculated by multiplying the suggested value per operator (listed in Table 13) by the number of operators per farm (see Table 10).
"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 Table 5.
"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 purchased and adjusted for inventory changes in crops, market livestock and breeding livestock.

## Liquidity

"Net cash farm income" is from Table 1.
"Net nonfarm income" is the average for all farms, not including "gifts and inheritances" (Table 10).
"Family living and taxes" is the apparent total family expenses and income and social security taxes paid averaged for all farms, not just those in Table 9.
"Real estate principal payments" are taken from the farmer's data.
"Cash available for intermediate debt service" on the cash basis is "Total net income" minus "Family living and taxes" and "Real estate principal payments." "Available for intermediate debt service" on the accrual basis is "Net accrual operating income" plus 'Net nonfarm income" and minus "Family living and taxes" and "Real estate principal payments."
"Average intermediate debt" is the average of beginning and ending intermediate farm liabilities.
"Years to turn over intermediate debt" is "Average intermediate debt" divided by "Cash available for intermediate debt service." If either the cash-based or accrual-based "Cash available for intermediate debt" is a negative number, debt repayment is not possible because of negative cash flow and "Years to turn over intermediate debt" cannot be calculated.
"Expense as a percent of income" (cash basis) is "Total cash expense" divided by "Gross cash farm income." "Expense as a percent of income" (accrual basis) is "Total accrual farm expense" divided by "Total accrual farm income."
"Interest as a percent of income" (cash basis) is "Interest" divided by "Gross cash farm income." "Interest as a percent of income" (accrual basis) is "Interest" minus beginning accrued interest plus ending accrued interest divided by "Total accrual farm income."

## Table 5. Balance Sheets

The beginning and ending balance sheets and solvency measures are presented in Table 5. This table includes only sole proprietors; partnerships and corporations are excluded because some assets and debts are held outside of the farm business causing potential misinterpretations of the average financial condition.

## Table 6. 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.

## Table 7. Financial Guidelines Measures and Labor Analysis

This table contains two sections: first, the financial measures and, second, the labor summary. In the first section, the Farm Financial Standards Council's 16 financial measures for evaluating a farm's financial position and performance are reported. These 16 measures are explained below following the descriptions found in the FINPACK manual.

## Liquidity

The "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.

## Solvency (Cost)

The "farm debt to asset ratio" is calculated by dividing the total farm liabilities by the total farm assets. It is similar to the total percent in debt ratio listed earlier. The difference is that nonfarm assets and liabilities are included in the total percent in debt but not in the farm debt to asset ratio.

The "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.

The "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

The "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: Rate of Return on Assets $=$ Return on Farm Assets $\div$ Average Farm Investment, where: Return on Farm Assets $=$ Net Farm Income + Farm Interest - Value of Operator's Labor \& Management, and Average Farm Investment = (Beginning Total Farm Assets + Ending Total Farm Assets) $\div 2$.

The "rate of return on farm equity" represents the interest rate being earned on your 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: Rate of Return on Equity $=$ Return on Farm Equity $\div$

Average Farm Net Worth, where: Return on Farm Equity = Net Farm Income - Value of Operator's Labor \& Management, and Average Farm Net Worth = (Beginning Farm Net Worth + Ending Farm Net Worth) $\div 2$.
"Operating profit margin" is a measure of the operating efficiency of the business. It is calculated as follows: Operating Profit Margin $=$ Return to Farm Assets $\div$ Value of Farm Production. If expenses are held in line relative to the value of output produced, the farm will have a healthy net 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.

## Repayment Capacity

The "term debt coverage ratio" measures whether the business generated enough cash 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 100 percent indicates that the business did not generate sufficient cash to meet scheduled payments in the past year. A ratio greater than 100 indicates the business generated enough cash to pay all term debt payments.

The "capital replacement margin" is the amount of money remaining after all operating expenses, taxes, family living costs, and scheduled debt payments have been made. It is the cash generated by the farm business that is available for financing capital replacement such as machinery and equipment. FINAN calculates the capital replacement margin by first adding interest due on intermediate and long term loans to the amount available for principal payments. It then subtracts scheduled principal and interest payments from this total.

## Efficiency

"Asset turnover rate" is a measure of efficiency in using capital. It is calculated as follows: Asset Turnover Rate $=$ Value of Farm Production $\div$ Total Farm Assets. This will be a market or cost rate depending on how the assets are valued.

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.

The "operating expense ratio" is calculated as (Total Farm Operating Expense - Farm Interest Expense) $\div$ 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.

The "depreciation expense ratio" is calculated as Depreciation $\div$ Gross Farm Income. This ratio indicates the percent of the gross farm income that was used to cover depreciation and other capital adjustments.

The "interest expense ratio" is calculated as Farm Interest Expense $\div$ 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 section in Table 4.

The "net farm income ratio" is calculated as Net Farm Income $\div$ Gross Farm Income. This ratio indicates the percent of the gross farm income that remained after all expenses.

## Labor Analysis

"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" (Table 4) divided by "Total labor hours per farm."
"Net farm income/unpaid hours" is "Net Farm Income" (Table 1) divided by "Total unpaid labor hours."

## Table 8. 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.

## Table 9. Household and Personal Expenses

For those farms that kept records, the household and personal expenses are summarized in Table 9. The farms are grouped based on profit as in Table 1. 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.

## Table 10. Nonfarm Income and Operator Information

Table 10 reports the averages for the number of operators per farm, the operator's age, and the number of years farming. This table also 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 as in Table 5).

## TABLE 1a <br> FARM INCOME STATEMENT, 1998 <br> Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)

|  | Average of All Farms | Average Of <br> Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of Farms | 60 | 12 | 12 |
| CASH FARM INCOME |  |  |  |
| Alfalfa seed | 194 | - | - |
| Apples | 826 | 4130 | - |
| Barley | 272 | - | 1187 |
| Beans, green | 405 | - | 758 |
| Corn | 60805 | 36448 | 133063 |
| Corn silage | 58 | - | - |
| Hay, alfalfa | 1664 | 1522 | 2920 |
| Haylage, alfalfa | 58 | - | - |
| Oats | 141 | 152 | 440 |
| Peas | 2324 | 1605 | 7101 |
| Soybeans | 43160 | 26777 | 88143 |
| Straw | 154 | 607 | 35 |
| Sweet corn | 1185 | 1056 | 1712 |
| Wheat, spring | 344 | 508 | 696 |
| Beef, cow-calf | 150 | - | 748 |
| Beef, custom fed | 102 | - | - |
| Beef, finish calves | 7472 | 12942 | - |
| Dairy, milk | 134157 | 5669 | 234149 |
| Dairy, calves | 1319 | - | 2688 |
| Dairy, heifers | 4610 | - | 5217 |
| Dairy, steers | 5941 | 722 | 19036 |
| Hogs, farrow to finish | 7624 | 26755 | - |
| Hogs, finish feeder pigs | 6049 | 13008 | 8567 |
| Cull breeding livestock | 6770 | 2207 | 11083 |
| Deficiency payments | 17597 | 10255 | 41598 |
| CRP payments | 425 | 625 | 1134 |
| Other government payments | 5300 | 1313 | 9379 |
| Custom work income | 2199 | 2819 | 3278 |
| Patronage dividends, cash | 1972 | 395 | 4663 |
| Insurance income | 1479 | 2143 | 583 |
| Cash from hedging accts | 635 | 1564 | 833 |
| Other farm income | 4968 | 5820 | 5477 |
| Gross Cash Farm Income | 320356 | 159041 | 584489 |

## TABLE $1 b$

FARM INCOME STATEMENT, 1998 (Continued)

## Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)

|  | Average Of <br> All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of Farms | 60 | 12 | 12 |
| CASH FARM EXPENSE |  |  |  |
| Seed | 15766 | 8034 | 38164 |
| Fertilizer | 17290 | 6194 | 43794 |
| Crop chemicals | 17144 | 10027 | 42007 |
| Crop insurance | 2488 | 2750 | 4220 |
| Drying fuel | 2481 | 2621 | 5377 |
| Irrigation energy | 151 | - | 327 |
| Crop marketing | 1484 | 886 | 192 |
| Crop miscellaneous | 692 | 443 | 490 |
| Feeder livestock purchase | 10243 | 11232 | 12303 |
| Purchased feed | 39667 | 18225 | 45133 |
| Breeding fees | 1870 | 1339 | 2389 |
| Veterinary | 5631 | 2527 | 5556 |
| Livestock supplies | 10044 | 2339 | 16753 |
| Grazing fees | 19 | - | - |
| Livestock marketing | 1341 | 378 | 1463 |
| Interest | 17964 | 14805 | 27278 |
| Fuel \& oil | 5678 | 4069 | 9503 |
| Repairs | 19702 | 11328 | 36549 |
| Custom hire | 9158 | 7792 | 12934 |
| Hired labor | 14477 | 2040 | 16953 |
| Land rent | 24836 | 11560 | 54649 |
| Machinery \& bldg leases | 3711 | 937 | 5041 |
| Real estate taxes | 5261 | 3894 | 11126 |
| Personal property taxes | 93 | 467 | - |
| Farm insurance | 3218 | 2701 | 4683 |
| Utilities | 4573 | 2586 | 6622 |
| Dues \& professional fees | 26 | - | - |
| Hedging account deposits | 717 | 450 | 972 |
| Miscellaneous | 3883 | 2790 | 4081 |
| Total cash expense | 239611 | 132414 | 408560 |
| Net cash farm income | 80745 | 26627 | 175929 |
| INVENTORY CHANGES |  |  |  |
| Crops and feed | 1970 | -25530 | 51675 |
| Market livestock | -4855 | -8598 | -437 |
| Accounts receivable | 2911 | -652 | 6321 |
| Prepaid expenses and supplies | 2992 | 1107 | 4695 |
| Accounts payable | -1444 | -3647 | -3134 |
| Total inventory change | 1575 | -37320 | 59119 |
| Net operating profit | 82320 | -10692 | 235049 |
| DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS |  |  |  |
| Breeding livestock | -1921 | -1701 | 3403 |
| Machinery and equipment | -11058 | -6704 | -18635 |
| Buildings and improvements | -2629 | -1004 | -3095 |
| Other farm capital | -973 | - | -456 |
| Total depr. and other capital adj | -16580 | -9409 | -18783 |
| Net farm income | 65739 | -20101 | 216266 |

## TABLE 2 <br> INVENTORY CHANGES, 1998 <br> Southeast Minnesota Farm Business Management Association <br> (Farms sorted by Net Farm Income)

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of Farms | 60 | 12 | 12 |
| Net cash farm income | 80745 | 26627 | 175929 |
| CROPS AND FEED |  |  |  |
| Ending inventory | 129034 | 61566 | 319732 |
| Beginning inventory | 127063 | 87096 | 268057 |
| Inventory change | 1970 | -25530 | 51675 |
| MARKET LIVESTOCK |  |  |  |
| Ending inventory | 36585 | 21941 | 68858 |
| Beginning inventory | 41440 | 30539 | 69295 |
| Inventory change | -4855 | -8598 | -437 |
| ACCTS RECEIVABLE \& OTHER CURRENT ASSETS |  |  |  |
| Ending inventory | 4471 | 2122 | 7706 |
| Beginning inventory | 1560 | 2774 | 1385 |
| Inventory change | 2911 | -652 | 6321 |
| PREPAID EXPENSES AND SUPPLIES |  |  |  |
| Ending inventory | 8025 | 1642 | 9870 |
| Beginning inventory | 5033 | 535 | 5175 |
| Inventory change | 2992 | 1107 | 4695 |
| ACCOUNTS PAYABLE |  |  |  |
| Beginning inventory | 2668 | 2946 | 3732 |
| Ending inventory | 4112 | 6593 | 6867 |
| Inventory change | -1444 | -3647 | -3134 |
| Total inventory change | 1575 | -37320 | 59119 |
| Net operating profit | 82320 | -10692 | 235049 |

## TABLE 3

DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1998

## Southeast Minnesota Farm Business Management Association

(Farms sorted by Net Farm Income)

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of Farms | 60 | 12 | 12 |
| Net operating profit | 82320 | -10692 | 235049 |
| BREEDING LIVESTOCK |  |  |  |
| Ending inventory | 50579 | 31324 | 65067 |
| Capital sales | 1321 | 4430 | - |
| Beginning inventory | 46131 | 34130 | 60000 |
| Capital purchases | 7690 | 3325 | 1664 |
| Depreciation, capital adj. | -1921 | -1701 | 3403 |
| MACHINERY AND EQUIPMENT |  |  |  |
| Ending inventory | 136689 | 91956 | 232720 |
| Capital sales | 871 | 1749 | 1308 |
| Beginning inventory | 122712 | 86712 | 206651 |
| Capital purchases | 25906 | 13696 | 46013 |
| Depreciation, capital adj. | -11058 | -6704 | -18635 |
| BUILDINGS AND IMPROVEMENTS |  |  |  |
| Ending inventory | 79453 | 47135 | 135099 |
| Capital sales | - | - | - |
| Beginning inventory | 74858 | 44932 | 129193 |
| Capital purchases | 7223 | 3207 | 9001 |
| Depreciation, capital adj. | -2629 | -1004 | -3095 |
| OTHER CAPITAL ASSETS |  |  |  |
| Ending inventory | 8456 | 2733 | 25750 |
| Capital sales | - | - | - |
| Beginning inventory | 5241 | 2733 | 13123 |
| Capital purchases | 4188 | - | 13083 |
| Depreciation, capital adj. | -973 | - | -456 |
| Total depreciation, capital adj. | -16580 | -9409 | -18783 |
| Net farm income | 65739 | -20101 | 216266 |

TABLE 4
PROFITABILITY AND LIQUIDITY ANALYSIS, 1998 Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)

|  | Average Of <br> All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of Farms | 60 | 12 | 12 |
| PROFITABILITY (Cost) |  |  |  |
| Net farm income | 65739 | -20101 | 216266 |
| Labor and management earnings | 36896 | -36942 | 147417 |
| Rate of return on assets | 7.0 \% | -6.5 \% | 13.2 \% |
| Rate of return on equity | 7.1 \% | $-16.9 \%$ | 15.1 \% |
| Operating profit margin | $19.4 \%$ | -34.0 \% | 34.2 \% |
| Asset turnover rate | 36.3 \% | 19.1 \% | 38.6 \% |
| Interest on farm net worth | 28843 | 16841 | 68849 |
| Farm interest expense | 18385 | 15376 | 28428 |
| Value of operator lbr and mgmt. | 32050 | 26958 | 43500 |
| Return on farm assets | 52075 | -31684 | 201194 |
| Average farm assets | 740497 | 487124 | 1521513 |
| Return on farm equity | 33689 | -47060 | 172766 |
| Average farm equity | 475585 | 278195 | 1147481 |
| Value of farm production | 268551 | 93103 | 588015 |


| Number of Farms | 60 | 12 | 12 |
| :---: | :---: | :---: | :---: |
| LIQUIDITY (Cash) |  |  |  |
| Net cash farm income | 80745 | 26627 | 175929 |
| Net nonfarm income | 18247 | 29864 | 564 |
| Family living and taxes | 49298 | 40059 | 68125 |
| Real estate principal payments | 524 | - | - |
| Cash available for interm. debt | 49171 | 16432 | 108368 |
| Average intermediate debt | 70274 | 35548 | 72195 |
| Years to turnover interm. debt | 1.4 | 2.2 | 0.7 |
| Expense as a \% of income | 75 \% | 83 \% | 70 \% |
| Interest as a \% of income | $6 \%$ | $9 \%$ | $5 \%$ |
| LIQUIDITY (Accrual) |  |  |  |
| Total accrual farm income | 320383 | 124262 | 642048 |
| Total accrual farm expense | 238063 | 134954 | 406999 |
| Net accrual operating income | 82320 | -10692 | 235049 |
| Net nonfarm income | 18247 | 29864 | 564 |
| Family living and taxes | 49298 | 40059 | 68125 |
| Real estate principal payments | 524 | - | - |
| Available for intermediate debt | 50746 | -20888 | 167487 |
| Average intermediate debt | 70274 | 35548 | 72195 |
| Years to turnover interm. debt | 1.4 | ** | 0.4 |
| Expense as a \% of income | $74 \%$ | 109 \% | 63 \% |
| Interest as a \% of income | 6 \% | 12 \% | 4 \% |

[^1]
## TABLE 5

bALANCE SHEET AT COST VALUES, 1998

## Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)

|  | Average Of All Farms |  | Average Of Low 20 \% |  | Average Of High 20 \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Farms |  | 45 |  | 10 |  | 7 |
|  | Beginning | Ending | Beginning | Ending | Beginning | Ending |
|  |  |  |  |  |  |  |
| Current Farm Assets |  |  |  |  |  |  |
| Cash and checking balance | 12736 | 19880 | 7156 | 7521 | 35933 | 44293 |
| Prepaid expenses \& supplies | 4052 | 7000 | 643 | 1971 | 2477 | 6713 |
| Growing crops | - | - | - | - | - | - |
| Accounts receivable | 894 | 3973 | 1148 | 2004 | 1114 | 8262 |
| Hedging accounts | 725 | 268 | 2181 | 543 | 1260 | 662 |
| Crops held for sale or feed | 98334 | 98499 | 87780 | 60833 | 193644 | 278628 |
| Crops under government loan | - | 83 | - | - | - | - |
| Market livestock held for sale | 33077 | 31142 | 28935 | 20671 | 37697 | 44691 |
| Other current assets | - | - | - | - | - | - |
| Total current farm assets | 149817 | 160846 | 127843 | 93543 | 272124 | 383249 |
| Intermediate Farm Assets |  |  |  |  |  |  |
| Breeding livestock | 38902 | 39579 | 31612 | 29316 | 31914 | 35314 |
| Machinery and equipment | 109306 | 120836 | 98135 | 103489 | 129673 | 149852 |
| Other intermediate assets | 894 | 894 | - | - | 2857 | 2857 |
| Total intermediate farm assets | 149103 | 161309 | 129747 | 132805 | 164445 | 188023 |
| Long-Term Farm Assets |  |  |  |  |  |  |
| Farm land | 196691 | 212055 | 201333 | 223743 | 325283 | 378022 |
| Buildings and improvements | 62860 | 64235 | 46158 | 48814 | 54961 | 61784 |
| Other long-term assets | 3722 | 4736 | 3280 | 3280 | 7143 | 7143 |
| Total long-term farm assets | 263273 | 281026 | 250772 | 275837 | 387387 | 446949 |
| Total Farm Assets | 562193 | 603180 | 508361 | 502185 | 823955 | 1018221 |
| Total Nonfarm Assets | 118704 | 131997 | 122498 | 142834 | 157961 | 191498 |
| Total Assets | 680897 | 735178 | 630859 | 645019 | 981916 | 1209719 |
| LIABILITIES |  |  |  |  |  |  |
| Current Farm Liabilities |  |  |  |  |  |  |
| Accrued interest | 631 | 1201 | 1438 | 2123 | 2000 | 3972 |
| Accounts payable | 1819 | 3671 | 1897 | 5789 | 4399 | 7799 |
| Current notes | 36624 | 39971 | 47266 | 49660 | 38276 | 53747 |
| Government crop loans | - | - | - | - | - | - |
| Principal due on term debt | - | 576 | - | - | - | - |
| Total current farm liabilities | 39074 | 45418 | 50601 | 57572 | 44674 | 65519 |
| Intermediate Farm Liabilities | 63075 | 68162 | 35050 | 47385 | 97851 | 110373 |
| Long-term Farm Liabilities | 137227 | 136130 | 156502 | 151239 | 145065 | 176562 |
| Total Farm Liabilities | 239376 | 249711 | 242153 | 256196 | 287591 | 352454 |
| Total Nonfarm Liabilities | 11999 | 11247 | 3874 | 3675 | 8214 | 2141 |
| Total Liabilities | 251375 | 260958 | 246027 | 259871 | 295805 | 354595 |
| Net Worth (farm and nonfarm) | 429522 | 474219 | 384832 | 385148 | 686111 | 855124 |
| Net Worth Change |  | 44697 |  | 316 |  | 169013 |
| RATIO ANALYSIS |  |  |  |  |  |  |
| Current Farm Liabilities / Assets | 26 \% | 28 \% | 40 \% | 62 \% | 16 \% | 17 \% |
| Curr. \& Interm Farm Liab / Assets | $34 \%$ | 35 \% | 33 \% | 46 \% | 33 \% | 31 \% |
| Long Term Farm Liab. / Assets | 52 \% | 48 \% | 62 \% | 55 \% | 37 \% | 40 \% |
| Total Liabilities / Assets | 37 \% | 35 \% | 39 \% | 40 \% | 30 \% | 29 \% |

TABLE 6
STATEMENT OF CASH FLOWS, 1998

## Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)



TABLE 7
FINANCIAL GUIDELINES MEASURES, 1998

## Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)

|  | Average For All Farms |  | Average For Low 20 \% |  | Average For High 20 \% |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Farms | 60 |  | 12 |  | 12 |  |  |
| LIQUIDITY | Beginning | Ending | Beginning | Ending | Beginning |  | Ending |
| Current ratio | 5.71 | 5.02 | 3.03 | 1.97 | 14.04 |  | 9.65 |
| Working capital | 159066 | 157837 | 85885 | 46562 | 361427 |  | 394923 |
| SOLVENCY (Cost) | Beginning | Ending | Beginning | Ending | Beginning |  | Ending |
| Farm debt to asset ratio | 36 \% | 36 \% | 41 \% | 45 \% | 24 \% |  | 25 \% |
| Farm equity to asset ratio | 64 \% | 64 \% | 59 \% | 55 \% | 76 |  | 75 \% |
| Farm debt to equity ratio | 55 \% | 56 \% | 70 \% | 81 \% | 31 |  | $34 \%$ |
| PROFITABILITY (Cost) |  |  |  |  |  |  |  |
| Rate of return on farm assets |  | \% |  | \% |  | 13.2 | \% |
| Rate of return on farm equity |  | \% |  | \% |  | 15.1 | \% |
| Operating profit margin |  | \% |  |  |  | 34.2 | \% |
| Net farm income |  |  |  |  |  | 21626 |  |
| REPAYMENT CAPACITY | Cash | Accrual | Cash | Accrual | Cash |  | Accrual |
| Term debt coverage ratio | n/a | n/a | n/a | $\mathrm{n} / \mathrm{a}$ | n/a |  | n/a |
| Capital replacement margin | n/a | n/a | n/a | n/a | n/a |  | n/a |
| EFFICIENCY |  |  |  |  |  |  |  |
| Asset turnover rate (cost) | 36.3 \% |  | 19.1 \% |  | 38.6 \% |  |  |
| Operating expense ratio | 68.65.2 |  | 96.2 \% |  | 59.0 \% |  |  |
| Depreciation expense ratio |  |  |  |  | 2.94.4 |  |  |
| Interest expense ratio | 5.7 \% |  | 12.4 \% |  |  |  |  |
| Net farm income ratio | 20.5 \% |  | -16.2 \% |  | 33.7 \% |  |  |

Number of Farms
Total unpaid labor hours
Total hired labor hours
Total labor hours per farm
Value of farm production / hour
Net farm income / unpaid hour

Average For
Low 20 \%
12

3008
150
3158
29.48
29.48
-6.68

4006
1354
5360
50.76
16.61

Average For


5367
1607
6974
84.32
40.30

TABLE 8
CROP PRODUCTION AND MARKETING SUMMARY, 1998 Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of Farms | 60 | 12 | 12 |
| ACREAGE SUMMARY |  |  |  |
| Total Acres Owned | 367 | 314 | 636 |
| Total Crop Acres | 560 | 348 | 1201 |
| Crop Acres Owned | 285 | 195 | 655 |
| Crop Acres Cash Rented | 268 | 144 | 529 |
| Crop Acres Share Rented | 7 | 8 | 16 |
| Total Pasture Acres | 12 | 24 | 3 |
| AVERAGE PRICE RECEIVED (Cash Sales Only) |  |  |  |
| Corn per bu. | 2.15 | 2.06 | 2.23 |
| Soybeans per bu. | 5.72 | 5.94 | 5.82 |
| Oats per bu. | 1.05 | - | - |
| Wheat, Spring per bu. | 3.18 | - | - |
| Sweet Corn per ton | 45.62 | - | - |
| Hay, Alfalfa per ton | 76.08 | - | - |
| AVERAGE YIELD PER ACRE |  |  |  |
| Corn (bu.) | 167.19 | 161.41 | 170.25 |
| Soybeans (bu.) | 50.31 | 48.74 | 51.54 |
| Corn Silage (ton) | 20.58 | - | 19.76 |
| Hay, alfalfa (ton) | 4.19 | 2.73 | 4.15 |
| Hay, mixed (ton) | 4.39 | - | - |
| CRP (\$) | 74.62 | - | - |

TABLE 9
HOUSEHOLD AND PERSONAL EXPENSES, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

|  | Average For All Farms |
| :---: | :---: |
| Number of Sole Proprietors | 15 |
| Average family size | 3.7 |
| FAMILY LIVING EXPENSES |  |
| Food and meals expense | 5610 |
| Medical care and health insurance | 4382 |
| Cash donations | 2580 |
| Household supplies | 3426 |
| Clothing | 1229 |
| Personal care | 1230 |
| Child / Dependent care | 896 |
| Gifts | 1846 |
| Education | 1899 |
| Recreation | 1778 |
| Utilities (household share) | 1862 |
| Nonfarm vehicle operating expense | 2346 |
| Household real estate taxes | 418 |
| Dwelling rent | - |
| Household repairs | 1967 |
| Nonfarm interest | 1168 |
| Life insurance payments | 1806 |
| Total cash family living expense | 34442 |
| Family living from the farm | 51 |
| Total family living | 34494 |
| OTHER NONFARM EXPENDITURES |  |
| Income taxes | 9625 |
| Furnishing \& appliance purchases | - |
| Nonfarm vehicle purchases | 1277 |
| Nonfarm real estate purchases | 113 |
| Other nonfarm capital purchases | 1200 |
| Nonfarm savings \& investments | 3423 |
| Total other nonfarm expenditures | 15638 |
| Total cash family living, |  |
| investment \& nonfarm capital purch | 50081 |
| PARTNERSHIPS |  |
| Number of partnerships | 12 |
| Number of operators per partnership | 2.0 |
| Average owner withdrawals per farm | 65540 |
| Average withdrawals per operator | 32770 |

TABLE 10
OPERATOR INFORMATION \& NONFARM SUMMARY, 1998 Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of Farms | 60 | 12 | 12 |
| OPERATOR INFORMATION |  |  |  |
| Average number of operators | 1.3 | 1.2 | 1.6 |
| Average age of operators | 47.6 | 55.0 | 45.4 |
| Average number of years farming | 25.0 | 33.7 | 21.6 |
| NONFARM INCOME |  |  |  |
| Nonfarm wages \& salary | 13538 | 26106 | 5798 |
| Nonfarm business income | 3067 | 363 | 894 |
| Nonfarm rental income | 639 | 550 | 636 |
| Nonfarm interest income | 1273 | 876 | 2637 |
| Nonfarm cash dividends | 269 | 783 | - |
| Tax refunds | 522 | 860 | 166 |
| Gifts and inheritances | 2445 | - | 2167 |
| Other nonfarm income | -1062 | 327 | -9566 |
| Total nonfarm income | 20692 | 29864 | 2730 |


| Average For All <br> Beginning | Farms <br> Ending |  |
| ---: | ---: | ---: |
| 3752 |  | 4484 |
| 6116 |  | 7001 |
| 5339 |  | 5900 |
| 7580 |  | 7615 |
| 4870 |  | 5487 |
| 9988 |  | 10784 |
| 17049 | 19597 |  |
| 5803 | 7470 |  |
| 34798 | 36023 |  |
| 14722 | 15683 |  |
| 110017 | 120046 |  |

## EXPLANATORY NOTES FOR CROPS TABLES

The "Crop Enterprise Analysis" tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. All costs are actual costs; no opportunity costs are included. The "Net Return per Acre" is the "Gross Return per Acre" minus the direct and overhead costs. The last section of each crop table contains economic efficiency measures and the net return per acre including government payments and a charge for unpaid labor and management.

There are potentially three tables for each group depending on the farmer's tenure on the land: owned land, cash rented land, and share rented land. It is possible for an individual farm to have data in all three tables if all three land tenure categories are represented in that farm business. Farms are classified into low $20 \%$ or high $20 \%$ on the basis of returns to overhead costs. The classification is done separately for each table.

To estimate the return to crops in the government programs, the return to overhead and the net return including setaside income (and expenses) is estimated and included in the appropriate tables. This is done by allocating the deficiency payments and the expenses reported in the set aside enterprise to the program crop and then dividing by the total of the production and set aside acres.

The "net return over labor and management" is calculated by allocating the farmer's charge for unpaid labor and management and subtracting it from the "net return per acre (including setaside)."

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

TABLE 11-1
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Farms sorted according to Return to Overhead per Acre)

CORN ON OWNED LAND

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of fields | 49 | 10 | 10 |
| Number of farms | 45 | 9 | 9 |
| Acres | 170.68 | 70.88 | 304.19 |
| Yield per acre (bushel) | 167.30 | 136.68 | 175.65 |
| Operators share of yield \% | 100.00 | 100.00 | 100.00 |
| Value per bushel | 1.70 | 1.70 | 1.70 |
| Total product return per acre | 284.41 | 232.36 | 298.60 |
| Miscellaneous income per acre | 1.45 | 0.00 | 2.27 |
| Gross return per acre | 285.86 | 232.36 | 300.87 |
| Direct expenses per acre |  |  |  |
| Seed | 34.09 | 32.22 | 34.93 |
| Fertilizer | 46.53 | 43.27 | 37.43 |
| Crop chemicals | 34.46 | 38.95 | 30.81 |
| Crop insurance | 4.10 | 6.44 | 5.76 |
| Drying fuel | 7.73 | 8.99 | 6.41 |
| Irrigation energy | 0.46 | 0.80 | 1.08 |
| Fuel \& oil | 8.78 | 12.69 | 7.76 |
| Repairs | 23.90 | 31.01 | 15.96 |
| Custom hire | 5.31 | 8.54 | 0.17 |
| Utilities | 0.21 | 0.00 | 0.11 |
| Marketing | 0.22 | 0.00 | 0.61 |
| Operating interest | 3.20 | 14.56 | 2.12 |
| Miscellaneous | 0.29 | 0.46 | 0.16 |
| Total direct expenses per acre | 169.30 | 197.93 | 143.31 |
| Return over direct expenses per acre | 116.56 | 34.43 | 157.56 |
| Overhead expenses per acre |  |  |  |
| Hired labor | 5.87 | 6.22 | 6.00 |
| Machinery \& bldg leases | 1.35 | 1.20 | 3.25 |
| RE \& pers. property taxes | 14.08 | 7.22 | 15.94 |
| Farm insurance | 3.48 | 4.42 | 4.23 |
| Utilities | 1.33 | 0.84 | 1.66 |
| Dues \& professional fees | 0.01 | 0.16 | 0.00 |
| Interest | 33.93 | 47.86 | 31.46 |
| Mach \& bldg depreciation | 18.01 | 17.60 | 11.84 |
| Miscellaneous | 3.07 | 3.98 | 3.03 |
| Total overhead expenses per acre | 81.15 | 89.50 | 77.41 |
| Total listed expenses per acre | 250.45 | 287.43 | 220.72 |
| Net return per acre | 35.41 | -55.07 | 80.15 |
| Total direct expense per bushel | 1.01 | 1.45 | 0.82 |
| Total listed expense per bushel | 1.50 | 2.10 | 1.26 |
| Net return per bushel | 0.21 | -0.40 | 0.46 |
| Breakeven yield per acre | 146.47 | 169.07 | 128.50 |
| Est. labor hours per acre | 3.11 | 4.73 | 2.22 |
| Net return including govt. payments | 86.52 | -15.21 | 128.02 |
| Lbr \& mgt charge per acre | 26.84 | 43.46 | 16.58 |
| Net return over libr \& mgt | 59.68 | -58.68 | 111.44 |

TABLE 11-2
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Farms sorted according to Return to Overhead per Acre)

CORN ON CASH RENTED LAND

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of fields | 54 | 11 | 11 |
| Number of farms | 44 | 9 | 9 |
| Acres | 136.30 | 88.69 | 134.11 |
| Yield per acre (bushel) | 167.58 | 166.04 | 167.96 |
| Operators share of yield \% | 100.00 | 100.00 | 100.00 |
| Value per bushel | 1.70 | 1.70 | 1.70 |
| Total product return per acre | 284.76 | 282.27 | 285.53 |
| Miscellaneous income per acre | 1.94 | 0.55 | 8.16 |
| Gross return per acre | 286.70 | 282.82 | 293.69 |
| Direct expenses per acre |  |  |  |
| Seed | 34.79 | 36.54 | 33.14 |
| Fertilizer | 51.60 | 50.23 | 35.52 |
| Crop chemicals | 35.98 | 39.27 | 34.64 |
| Crop insurance | 5.12 | 8.07 | 8.25 |
| Drying fuel | 7.88 | 13.14 | 3.24 |
| Irrigation energy | 0.18 | 1.37 | 0.00 |
| Fuel \& oil | 8.45 | 8.30 | 6.11 |
| Repairs | 20.33 | 31.84 | 12.66 |
| Custom hire | 6.88 | 13.44 | 2.83 |
| Land rent | 92.62 | 103.83 | 81.63 |
| Utilities | 0.26 | 0.00 | 0.00 |
| Marketing | 0.20 | 0.00 | 0.00 |
| Operating interest | 3.83 | 6.91 | 3.20 |
| Miscellaneous | 0.78 | 1.51 | 1.84 |
| Total direct expenses per acre | 268.89 | 314.45 | 223.06 |
| Return over direct expenses per acre | 17.82 | -31.63 | 70.63 |
| Overhead expenses per acre |  |  |  |
| Hired labor | 5.40 | 4.87 | 2.69 |
| Machinery \& bldg leases | 4.94 | 2.16 | 5.30 |
| Farm insurance | 3.20 | 3.63 | 4.38 |
| Utilities | 1.48 | 1.53 | 1.80 |
| Dues \& professional fees | 0.02 | 0.13 | 0.00 |
| Interest | 6.95 | 14.88 | 9.27 |
| Mach \& bldg depreciation | 13.45 | 12.01 | 15.62 |
| Miscellaneous | 3.39 | 2.72 | 3.67 |
| Total overhead expenses per acre | 38.82 | 41.93 | 42.73 |
| Total listed expenses per acre | 307.71 | 356.38 | 265.79 |
| Net return per acre | -21.00 | -73.56 | 27.90 |
| Total direct expense per bushel | 1.60 | 1.89 | 1.33 |
| Total listed expense per bushel | 1.84 | 2.15 | 1.58 |
| Net return per bushel | -0.13 | -0.44 | 0.17 |
| Breakeven yield per acre | 179.94 | 209.31 | 151.55 |
| Est. labor hours per acre | 3.06 | 3.18 | 3.30 |
| Net return including govt. payments | 33.87 | -17.69 | 69.93 |
| Lbr \& mgt charge per acre | 25.16 | 22.09 | 27.93 |
| Net return over lbr \& mgt | 8.71 | -39.78 | 42.01 |

TABLE 11-3
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Farms sorted according to Return to Overhead per Acre)

## SOYBEANS ON OWNED LAND

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of fields | 37 | 7 | 7 |
| Number of farms | 35 | 7 | 7 |
| Acres | 120.26 | 105.64 | 90.20 |
| Yield per acre (bushel) | 50.24 | 42.54 | 59.27 |
| Operators share of yield \% | 100.00 | 100.00 | 100.00 |
| Value per bushel | 5.40 | 5.40 | 5.40 |
| Total product return per acre | 271.32 | 229.71 | 320.05 |
| Miscellaneous income per acre | 1.14 | 0.00 | 0.60 |
| Gross return per acre | 272.46 | 229.71 | 320.65 |
| Direct expenses per acre |  |  |  |
| Seed | 19.87 | 24.25 | 21.30 |
| Fertilizer | 4.08 | 0.78 | 0.00 |
| Crop chemicals | 31.05 | 33.40 | 23.76 |
| Crop insurance | 7.04 | 9.50 | 6.37 |
| Drying fuel | 0.03 | 0.00 | 0.13 |
| Irrigation energy | 0.29 | 0.00 | 0.00 |
| Fuel \& oil | 6.38 | 5.96 | 6.45 |
| Repairs | 17.28 | 25.51 | 18.93 |
| Custom hire | 3.92 | 7.72 | 5.56 |
| Machinery \& bldg leases | 0.03 | 0.00 | 0.00 |
| Marketing | 0.16 | 0.44 | 0.65 |
| Operating interest | 2.05 | 2.89 | 1.64 |
| Miscellaneous | 0.25 | 0.48 | 0.00 |
| Total direct expenses per acre | 92.44 | 110.94 | 84.77 |
| Return over direct expenses per acre | 180.02 | 118.77 | 235.88 |
| Overhead expenses per acre |  |  |  |
| Hired labor | 3.55 | 1.88 | 6.43 |
| Machinery \& bldg leases | 1.21 | 0.00 | 4.31 |
| $R E$ \& pers. property taxes | 14.79 | 15.26 | 12.66 |
| Farm insurance | 3.08 | 3.46 | 3.81 |
| Utilities | 0.90 | 1.07 | 1.19 |
| Interest | 34.28 | 22.23 | 40.87 |
| Mach \& bldg depreciation | 14.04 | 24.92 | 8.66 |
| Miscellaneous | 2.72 | 2.58 | 2.12 |
| Total overhead expenses per acre | 74.57 | 71.40 | 80.05 |
| Total listed expenses per acre | 167.01 | 182.35 | 164.82 |
| Net return per acre | 105.45 | 47.36 | 155.83 |
| Total direct expense per bushel | 1.84 | 2.61 | 1.43 |
| Total listed expense per bushel | 3.32 | 4.29 | 2.78 |
| Net return per bushel | 2.10 | 1.11 | 2.63 |
| Breakeven yield per acre | 30.72 | 33.77 | 30.41 |
| Est. labor hours per acre | 2.10 | 2.92 | 2.65 |
| Net return including govt. payments | 156.44 | 85.67 | 208.65 |
| Lbr \& mgt charge per acre | 21.71 | 43.67 | 18.46 |
| Net return over lbr \& mgt | 134.74 | 42.00 | 190.19 |

TABLE 11-4
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Farms sorted according to Return to Overhead per Acre)

SOYBEANS ON CASH RENTED LAND

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of fields | 41 | 9 | 7 |
| Number of farms | 37 | 7 | 7 |
| Acres | 140.82 | 79.27 | 70.69 |
| Yield per acre (bushel) | 50.34 | 45.93 | 52.82 |
| Operators share of yield \% | 100.00 | 100.00 | 100.00 |
| Value per bushel | 5.40 | 5.40 | 5.40 |
| Total product return per acre | 271.86 | 248.00 | 285.24 |
| Miscellaneous income per acre | 1.94 | 1.85 | 9.41 |
| Gross return per acre | 273.80 | 249.85 | 294.65 |
| Direct expenses per acre |  |  |  |
| Seed | 18.76 | 22.13 | 20.11 |
| Fertilizer | 6.00 | 0.00 | 0.00 |
| Crop chemicals | 32.75 | 36.89 | 25.18 |
| Crop insurance | 6.55 | 8.67 | 3.75 |
| Drying fuel | 0.06 | 0.00 | 0.01 |
| Irrigation energy | 0.15 | 0.00 | 0.00 |
| Fuel \& oil | 6.61 | 8.01 | 7.93 |
| Repairs | 14.69 | 33.84 | 19.43 |
| Custom hire | 5.98 | 2.92 | 2.67 |
| Land rent | 96.52 | 98.68 | 85.99 |
| Marketing | 0.16 | 0.00 | 0.00 |
| Operating interest | 3.52 | 3.59 | 0.20 |
| Miscellaneous | 0.28 | 0.02 | 0.00 |
| Total direct expenses per acre | 192.04 | 214.74 | 165.26 |
| Return over direct expenses per acre | 81.75 | 35.11 | 129.38 |
| Overhead expenses per acre |  |  |  |
| Hired labor | 4.17 | 0.90 | 0.16 |
| Machinery \& bldg leases | 4.99 | 0.00 | 0.29 |
| Farm insurance | 3.00 | 3.35 | 1.12 |
| Utilities | 0.97 | 1.29 | 0.74 |
| Interest | 5.57 | 6.84 | 2.67 |
| Mach \& bldg depreciation | 10.18 | 9.37 | 5.84 |
| Miscellaneous | 3.53 | 4.12 | 1.30 |
| Total overhead expenses per acre | 32.41 | 25.87 | 12.12 |
| Total listed expenses per acre | 224.46 | 240.61 | 177.38 |
| Net return per acre | 49.34 | 9.24 | 117.27 |
| Total direct expense per bushel | 3.81 | 4.68 | 3.13 |
| Total listed expense per bushel | 4.46 | 5.24 | 3.36 |
| Net return per bushel | 0.98 | 0.20 | 2.22 |
| Breakeven yield per acre | 41.21 | 44.22 | 31.11 |
| Est. labor hours per acre | 2.13 | 2.36 | 1.42 |
| Net return including govt. payments | 100.82 | 62.04 | 188.27 |
| Lbr \& mgt charge per acre | 19.39 | 28.45 | 16.67 |
| Net return over lbr \& mgt | 81.44 | 33.60 | 171.60 |

TABLE 11-5
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

OATS ON OWNED LAND

|  | Average For All Farms |
| :---: | :---: |
| Number of fields | 8 |
| Number of farms | 8 |
| Acres | 18.64 |
| Yield per acre (bushel) | 56.28 |
| Operators share of yield \% | 100.00 |
| Value per bushel | 1.20 |
| Total product return per acre | 67.54 |
| Miscellaneous income per acre | 40.58 |
| Gross return per acre | 108.12 |
| Direct expenses per acre |  |
| Seed | 11.82 |
| Fertilizer | 1.51 |
| Crop chemicals | 1.33 |
| Crop insurance | 0.41 |
| Irrigation energy | 0.46 |
| Fuel \& oil | 7.86 |
| Repairs | 24.43 |
| Custom hire | 7.19 |
| Operating interest | 3.06 |
| Miscellaneous | 2.83 |
| Total direct expenses per acre | 60.92 |
| Return over direct expenses per acre | 47.20 |
| Overhead expenses per acre |  |
| Hired labor | 18.76 |
| Machinery \& bldg leases | 0.63 |
| RE \& pers. property taxes | 8.53 |
| Farm insurance | 5.15 |
| Utilities | 1.04 |
| Interest | 32.02 |
| Mach \& bldg depreciation | 20.11 |
| Miscellaneous | 8.71 |
| Total overhead expenses per acre | 94.94 |
| Total listed expenses per acre | 155.86 |
| Net return per acre | -47.74 |
| Total direct expense per bushel | 1.08 |
| Total listed expense per bushel | 2.77 |
| Net return per bushel | -0.85 |
| Breakeven yield per acre | 96.07 |
| Est. labor hours per acre | 5.70 |
| Net return including govt. payments | -18.68 |
| Lbr \& mgt charge per acre | 17.46 |
| Net return over libr \& mgt | -36.14 |

TABLE 11-6
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

## OATS ON CASH RENTED LAND

|  | Average For <br> All Farms |
| :---: | :---: |
| Number of fields | 10 |
| Number of farms | 9 |
| Acres | 19.57 |
| Yield per acre (bushel) | 54.14 |
| Operators share of yield \% | 100.00 |
| Value per bushel | 1.20 |
| Total product return per acre | 64.97 |
| Miscellaneous income per acre | 63.43 |
| Gross return per acre | 128.40 |
| Direct expenses per acre |  |
| Seed | 9.08 |
| Fertilizer | 1.69 |
| Crop chemicals | 3.18 |
| Crop insurance | 0.03 |
| Fuel \& oil | 7.05 |
| Repairs | 17.83 |
| Custom hire | 9.61 |
| Land rent | 88.34 |
| Operating interest | 2.48 |
| Miscellaneous | 2.48 |
| Total direct expenses per acre | 141.78 |
| Return over direct expenses per acre | -13.38 |
| Overhead expenses per acre |  |
| Hired labor | 10.81 |
| Machinery \& bldg leases | 0.02 |
| Farm insurance | 4.73 |
| Utilities | 1.29 |
| Interest | 9.34 |
| Mach \& bldg depreciation | 11.88 |
| Miscellaneous | 7.89 |
| Total overhead expenses per acre | 45.95 |
| Total listed expenses per acre | 187.73 |
| Net return per acre | -59.33 |
| Total direct expense per bushel | 2.62 |
| Total listed expense per bushel | 3.47 |
| Net return per bushel | -1.10 |
| Breakeven yield per acre | 103.58 |
| Est. labor hours per acre | 3.38 |
| Net return including govt. payments | -27.88 |
| Lbr \& mgt charge per acre | 15.27 |
| Net return over lbr \& mgt | -43.15 |

TABLE 11-7
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Farms sorted according to Return to Overhead per Acre)

ALFALFA HAY ON OWNED LAND

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of fields | 29 | 6 | 7 |
| Number of farms | 28 | 6 | 6 |
| Acres | 66.95 | 76.29 | 66.78 |
| Yield per acre (ton) | 3.94 | 3.04 | 5.24 |
| Operators share of yield \% | 100.00 | 100.00 | 100.00 |
| Value per ton | 80.00 | 80.00 | 80.00 |
| Total product return per acre | 315.16 | 243.06 | 419.09 |
| Miscellaneous income per acre | 0.00 | 0.00 | 0.00 |
| Gross return per acre | 315.16 | 243.06 | 419.09 |
| Direct expenses per acre |  |  |  |
| Seed | 13.17 | 11.22 | 11.60 |
| Fertilizer | 13.63 | 8.55 | 15.57 |
| Crop chemicals | 2.14 | 4.38 | 4.25 |
| Crop insurance | 0.02 | 0.00 | 0.00 |
| Drying fuel | 0.01 | 0.00 | 0.00 |
| Irrigation energy | 0.39 | 0.00 | 1.88 |
| Fuel \& oil | 10.27 | 10.89 | 10.85 |
| Repairs | 42.64 | 41.79 | 47.29 |
| Custom hire | 10.82 | 21.90 | 13.69 |
| Hired labor | 0.01 | 0.00 | 0.00 |
| Operating interest | 1.96 | 1.19 | 6.01 |
| Miscellaneous | 1.18 | 1.61 | 1.30 |
| Total direct expenses per acre | 96.24 | 101.52 | 112.45 |
| Return over direct expenses per acre | 218.91 | 141.54 | 306.64 |
| Overhead expenses per acre |  |  |  |
| Hired labor | 13.90 | 3.89 | 20.84 |
| Machinery \& bldg leases | 0.93 | 1.29 | 2.47 |
| RE \& pers. property taxes | 11.42 | 15.46 | 10.05 |
| Farm insurance | 2.78 | 1.94 | 3.71 |
| Utilities | 1.05 | 0.69 | 1.54 |
| Dues \& professional fees | 0.12 | 0.00 | 0.56 |
| Interest | 26.10 | 32.00 | 53.46 |
| Mach \& bldg depreciation | 23.40 | 22.70 | 22.25 |
| Miscellaneous | 3.15 | 3.34 | 4.87 |
| Total overhead expenses per acre | 82.85 | 81.30 | 119.74 |
| Total listed expenses per acre | 179.09 | 182.82 | 232.19 |
| Net return per acre | 136.07 | 60.24 | 186.89 |
| Total direct expense per ton | 24.43 | 33.41 | 21.47 |
| Total listed expense per ton | 45.46 | 60.17 | 44.32 |
| Net return per ton | 34.54 | 19.83 | 35.68 |
| Breakeven yield per acre | 2.24 | 2.29 | 2.90 |
| Est. labor hours per acre | 5.13 | 4.76 | 6.57 |
| Net return including govt. payments | 163.45 | 84.22 | 215.68 |
| Lbr \& mgt charge per acre | 32.88 | 32.04 | 29.10 |
| Net return over lbr \& mgt | 130.58 | 52.18 | 186.58 |

TABLE 11-8
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association
(Average of all farms reporting)

## ALFALFA HAY ON CASH RENTED LAND

|  | Average For All Farms |
| :---: | :---: |
| Number of fields | 25 |
| Number of farms | 22 |
| Acres | 45.61 |
| Yield per acre (ton) | 4.66 |
| Operators share of yield \% | 100.00 |
| Value per ton | 80.00 |
| Total product return per acre | 373.08 |
| Miscellaneous income per acre | 0.00 |
| Gross return per acre | 373.08 |
| Direct expenses per acre |  |
| Seed | 15.00 |
| Fertilizer | 16.27 |
| Crop chemicals | 3.75 |
| Crop insurance | 0.01 |
| Drying fuel | 0.01 |
| Irrigation energy | 0.16 |
| Fuel \& oil | 10.97 |
| Repairs | 43.60 |
| Custom hire | 10.99 |
| Land rent | 88.58 |
| Operating interest | 1.73 |
| Miscellaneous | 1.60 |
| Total direct expenses per acre | 192.66 |
| Return over direct expenses per acre | 180.42 |
| Overhead expenses per acre |  |
| Hired labor | 17.77 |
| Machinery \& bldg leases | 6.70 |
| Farm insurance | 3.32 |
| Utilities | 1.53 |
| Dues \& professional fees | 0.18 |
| Interest | 7.45 |
| Mach \& bldg depreciation | 30.62 |
| Miscellaneous | 5.95 |
| Total overhead expenses per acre | 73.51 |
| Total listed expenses per acre | 266.18 |
| Net return per acre | 106.91 |
| Total direct expense per ton | 41.31 |
| Total listed expense per ton | 57.08 |
| Net return per ton | 22.92 |
| Breakeven yield per acre | 3.33 |
| Est. labor hours per acre | 7.03 |
| Net return including govt. payments | 131.73 |
| Lbr \& mgt charge per acre | 30.61 |
| Net return over lbr \& mgt | 101.12 |

TABLE 11-9
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Farms sorted according to Return to Overhead per Acre)

CORN SILAGE ON OWNED LAND

|  | Average Of All Farms | Average Of Low 20\% | Average Of High 20\% |
| :---: | :---: | :---: | :---: |
| Number of fields | 28 | 6 | 5 |
| Number of farms | 27 | 5 | 5 |
| Acres | 33.22 | 56.80 | 28.52 |
| Yield per acre (ton) | 20.47 | 20.42 | 22.90 |
| Operators share of yield \% | 100.00 | 100.00 | 100.00 |
| Value per ton | 15.99 | 16.00 | 16.00 |
| Total product return per acre | 327.35 | 326.76 | 366.34 |
| Miscellaneous income per acre | 0.00 | 0.00 | 0.00 |
| Gross return per acre | 327.35 | 326.76 | 366.34 |
| Direct expenses per acre |  |  |  |
| Seed | 30.61 | 28.20 | 27.41 |
| Fertilizer | 34.85 | 26.47 | 23.63 |
| Crop chemicals | 38.31 | 40.05 | 38.06 |
| Crop insurance | 1.19 | 0.00 | 1.04 |
| Drying fuel | 0.03 | 0.00 | 0.18 |
| Irrigation energy | 0.10 | 0.00 | 0.00 |
| Fuel \& oil | 11.98 | 14.27 | 15.79 |
| Repairs | 38.49 | 48.73 | 31.55 |
| Custom hire | 35.18 | 105.59 | 2.10 |
| Operating interest | 3.83 | 4.41 | 8.04 |
| Miscellaneous | 1.70 | 4.12 | 0.67 |
| Total direct expenses per acre | 196.26 | 271.83 | 148.46 |
| Return over direct expenses per acre | 131.09 | 54.93 | 217.89 |
| Overhead expenses per acre |  |  |  |
| Hired labor | 14.33 | 20.06 | 21.56 |
| Machinery \& bldg leases | 1.78 | 5.28 | 0.00 |
| RE \& pers. property taxes | 12.83 | 10.94 | 16.47 |
| Farm insurance | 4.49 | 4.63 | 9.01 |
| Utilities | 1.78 | 2.25 | 3.77 |
| Dues \& professional fees | 0.10 | 0.00 | 0.52 |
| Interest | 40.11 | 45.46 | 37.51 |
| Mach \& bldg depreciation | 24.35 | 25.59 | 34.98 |
| Miscellaneous | 6.57 | 7.63 | 15.08 |
| Total overhead expenses per acre | 106.34 | 121.84 | 138.92 |
| Total listed expenses per acre | 302.60 | 393.67 | 287.37 |
| Net return per acre | 24.75 | -66.91 | 78.97 |
| Total direct expense per ton | 9.59 | 13.31 | 6.48 |
| Total listed expense per ton | 14.78 | 19.28 | 12.55 |
| Net return per ton | 1.21 | -3.28 | 3.45 |
| Breakeven yield per acre | 18.92 | 24.60 | 17.96 |
| Est. labor hours per acre | 5.07 | 5.19 | 9.75 |
| Net return including govt. payments | 90.37 | -2.68 | 125.82 |
| Lbr \& mgt charge per acre | 24.80 | 22.20 | 41.80 |
| Net return over libr \& mgt | 65.57 | -24.88 | 84.02 |

TABLE 11-10
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

CORN SILAGE ON CASH RENTED LAND

|  | Average For All Farms |
| :---: | :---: |
| Number of fields | 15 |
| Number of farms | 14 |
| Acres | 17.41 |
| Yield per acre (ton) | 20.94 |
| Operators share of yield \% | 100.00 |
| Value per ton | 16.00 |
| Total product return per acre | 335.04 |
| Miscellaneous income per acre | 0.00 |
| Gross return per acre | 335.04 |
| Direct expenses per acre |  |
| Seed | 27.61 |
| Fertilizer | 35.47 |
| Crop chemicals | 38.70 |
| Crop insurance | 2.26 |
| Fuel \& oil | 13.37 |
| Repairs | 34.06 |
| Custom hire | 8.03 |
| Land rent | 86.79 |
| Operating interest | 2.46 |
| Miscellaneous | 4.09 |
| Total direct expenses per acre | 252.85 |
| Return over direct expenses per acre | 82.19 |
| Overhead expenses per acre |  |
| Hired labor | 14.85 |
| Machinery \& bldg leases | 2.46 |
| Farm insurance | 3.66 |
| Utilities | 2.17 |
| Interest | 14.06 |
| Mach \& bldg depreciation | 19.31 |
| Miscellaneous | 7.23 |
| Total overhead expenses per acre | 63.74 |
| Total listed expenses per acre | 316.59 |
| Net return per acre | 18.45 |
| Total direct expense per ton | 12.08 |
| Total listed expense per ton | 15.12 |
| Net return per ton | 0.88 |
| Breakeven yield per acre | 19.79 |
| Est. labor hours per acre | 5.79 |
| Net return including govt. payments | 77.36 |
| Lbr \& mgt charge per acre | 26.37 |
| Net return over libr \& mgt | 50.99 |

TABLE 11-11
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

## OATLAGE ON OWNED LAND

|  | Average For <br> All Farms |
| :---: | :---: |
| Number of fields | 5 |
| Number of farms | 5 |
| Acres | 28.60 |
| Yield per acre (ton) | 7.46 |
| Operators share of yield \% | 100.00 |
| Value per ton | 13.62 |
| Total product return per acre | 101.59 |
| Miscellaneous income per acre | 6.12 |
| Gross return per acre | 107.71 |
| Direct expenses per acre |  |
| Seed | 4.56 |
| Fertilizer | 11.62 |
| Crop insurance | 0.28 |
| Fuel \& oil | 6.60 |
| Repairs | 20.58 |
| Total direct expenses per acre | 43.63 |
| Return over direct expenses per acre | 64.08 |
| Overhead expenses per acre |  |
| Hired labor | 2.01 |
| RE \& pers. property taxes | 13.37 |
| Farm insurance | 3.03 |
| Utilities | 0.33 |
| Interest | 7.55 |
| Mach \& bldg depreciation | 13.35 |
| Miscellaneous | 0.71 |
| Total overhead expenses per acre | 40.35 |
| Total listed expenses per acre | 83.99 |
| Net return per acre | 23.72 |
| Total direct expense per ton | 5.85 |
| Total listed expense per ton | 11.26 |
| Net return per ton | 3.18 |
| Breakeven yield per acre | 5.72 |
| Est. labor hours per acre | 2.17 |
| Net return including govt. payments | 60.12 |
| Lbr \& mgt charge per acre | 18.01 |
| Net return over lbr \& mgt | 42.11 |

TABLE 11-12
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

## OATLAGE ON CASH RENTED LAND

|  | Average For <br> All Farms |
| :---: | :---: |
| Number of fields | 7 |
| Number of farms | 7 |
| Acres | 19.34 |
| Yield per acre (ton) | 7.29 |
| Operators share of yield \% | 100.00 |
| Value per ton | 13.64 |
| Total product return per acre | 99.37 |
| Miscellaneous income per acre | 6.16 |
| Gross return per acre | 105.53 |
| Direct expenses per acre |  |
| Seed | 5.79 |
| Fertilizer | 3.16 |
| Crop insurance | 0.08 |
| Fuel \& oil | 6.62 |
| Repairs | 15.90 |
| Land rent | 74.59 |
| Total direct expenses per acre | 106.15 |
| Return over direct expenses per acre | -0.61 |
| Overhead expenses per acre |  |
| Hired labor | 3.25 |
| Farm insurance | 2.00 |
| Utilities | 0.28 |
| Interest | 1.59 |
| Mach \& bldg depreciation | 10.57 |
| Miscellaneous | 1.75 |
| Total overhead expenses per acre | 19.44 |
| Total listed expenses per acre | 125.59 |
| Net return per acre | -20.06 |
| Total direct expense per ton | 14.57 |
| Total listed expense per ton | 17.23 |
| Net return per ton | -2.75 |
| Breakeven yield per acre | 8.76 |
| Est. labor hours per acre | 1.95 |
| Net return including govt. payments | 9.55 |
| Lbr \& mgt charge per acre | 28.98 |
| Net return over lbr \& mgt | -19.43 |

TABLE 11-13
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

PASTURE ON OWNED LAND

|  | Average For <br> All Farms |
| :---: | :---: |
| Number of fields | 10 |
| Number of farms | 8 |
| Acres | 53.25 |
| Yield per acre | 4.51 |
| Operators share of yield \% | 100.00 |
| Value per unit | 10.00 |
| Total product return per acre | 45.14 |
| Miscellaneous income per acre | 0.00 |
| Gross return per acre | 45.14 |
| Direct expenses per acre |  |
| Seed | 0.63 |
| Fuel \& oil | 1.36 |
| Repairs | 3.91 |
| Operating interest | 0.43 |
| Total direct expenses per acre | 6.33 |
| Return over direct expenses per acre | 38.81 |
| Overhead expenses per acre |  |
| Hired labor | 1.10 |
| RE \& pers. property taxes | 9.33 |
| Farm insurance | 1.36 |
| Utilities | 0.27 |
| Dues \& professional fees | 0.04 |
| Interest | 6.41 |
| Mach \& bldg depreciation | 3.53 |
| Miscellaneous | 2.25 |
| Total overhead expenses per acre | 24.28 |
| Total listed expenses per acre | 30.61 |
| Net return per acre | 14.53 |
| Total direct expense per unit | 1.40 |
| Total listed expense per unit | 6.78 |
| Net return per unit | 3.22 |
| Breakeven yield per acre | 3.06 |
| Est. labor hours per acre | 0.67 |
| Net return including govt. payments | 15.96 |
| Lbr \& mgt charge per acre | 6.12 |
| Net return over lbr \& mgt | 9.84 |

TABLE 11-14
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

PEAS ON OWNED LAND

|  | Average For <br> All Farms |
| :--- | ---: |
|  |  |
| Number of fields | 5 |
| Number of farms | 5 |
| Acres | 40.80 |
| Gross return per acre | 300.75 |
|  |  |
| Direct expenses per acre | 39.51 |
| Seed | 18.93 |
| Fertilizer | 10.20 |
| Crop chemicals | 3.13 |
| Crop insurance | 2.97 |
| Fuel \& oil | 12.89 |
| Repairs | 10.84 |
| Custom hire | 3.55 |
| Operating interest | 102.03 |
| Total direct expenses per acre | 198.72 |
| Return over direct expenses per acre |  |
| Overhead expenses per acre | 4.75 |
| Hired labor | 0.65 |
| Machinery \& bldg leases | 13.52 |
| RE \& pers. property taxes | 2.13 |
| Farm insurance | 0.45 |
| Utilities | 47.93 |
| Interest | 7.75 |
| Mach \& bldg depreciation | 2.63 |
| Miscellaneous | 79.80 |
| Total overhead expenses per acre | 181.83 |
| Total listed expenses per acre | 118.92 |
| Net return per acre | 0.07 |
| Total direct expense per lb | 0.12 |
| Total listed expense per lb | 0.08 |
| Net return per lb | 929.98 |
| Breakeven yield per acre | 1.35 |
| Est. labor hours per acre | 149.48 |
| Net return including govt. payments | 7.76 |
| Lbr \& mgt charge per acre | 141.72 |
| Net return over lbr \& mgt |  |
|  |  |
|  |  |
|  |  |

TABLE 11-15
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

## SWEET CORN ON CASH RENTED LAND

|  | Average For <br> All Farms |
| :---: | :---: |
| Number of fields | 5 |
| Number of farms | 5 |
| Acres | 29.20 |
| Yield per acre (ton) | 66.02 |
| Operators share of yield \% | 100.00 |
| Value per ton | 5.14 |
| Total product return per acre | 339.04 |
| Miscellaneous income per acre | 0.00 |
| Gross return per acre | 339.04 |
| Direct expenses per acre |  |
| Seed | 17.48 |
| Fertilizer | 51.10 |
| Crop chemicals | 39.07 |
| Crop insurance | 8.45 |
| Fuel \& oil | 6.99 |
| Repairs | 26.12 |
| Custom hire | 24.12 |
| Land rent | 82.52 |
| Operating interest | 5.79 |
| Total direct expenses per acre | 261.64 |
| Return over direct expenses per acre | 77.40 |
| Overhead expenses per acre |  |
| Hired labor | 1.17 |
| Farm insurance | 2.67 |
| Utilities | 0.76 |
| Interest | 14.12 |
| Mach \& bldg depreciation | 6.71 |
| Miscellaneous | 3.09 |
| Total overhead expenses per acre | 28.52 |
| Total listed expenses per acre | 290.17 |
| Net return per acre | 48.88 |
| Total direct expense per ton | 3.96 |
| Total listed expense per ton | 4.39 |
| Net return per ton | 0.74 |
| Breakeven yield per acre | 56.51 |
| Est. labor hours per acre | 2.41 |
| Net return including govt. payments | 80.44 |
| Lbr \& mgt charge per acre | 21.70 |
| Net return over lbr \& mgt | 58.74 |

TABLE 11-16
Crop Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Average of all farms reporting)

## CRP ON OWNED LAND

|  | Average For All Farms |
| :---: | :---: |
| Number of fields | 6 |
| Number of farms | 6 |
| Acres | 33.53 |
| Yield per acre | 71.24 |
| Operators share of yield \% | 100.00 |
| Value per unit | 1.00 |
| Total product return per acre | 71.24 |
| Miscellaneous income per acre | 0.00 |
| Gross return per acre | 71.24 |
| Direct expenses per acre |  |
| Crop chemicals | 0.10 |
| Operating interest | 1.49 |
| Total direct expenses per acre | 1.59 |
| Return over direct expenses per acre | 69.65 |
| Overhead expenses per acre |  |
| RE \& pers. property taxes | 8.87 |
| Farm insurance | 1.70 |
| Utilities | 0.08 |
| Interest | 22.04 |
| Miscellaneous | 1.54 |
| Total overhead expenses per acre | 34.23 |
| Total listed expenses per acre | 35.82 |
| Net return per acre | 35.42 |
| Total direct expense per unit | 0.02 |
| Total listed expense per unit | 0.50 |
| Net return per unit | 0.50 |
| Breakeven yield per acre | 35.82 |
| Est. labor hours per acre | 0.10 |
| Lbr \& mgt charge per acre | 1.31 |
| Net return over lbr \& mgt | 34.11 |

## EXPLANATORY NOTES FOR LIVESTOCK TABLES

The "Livestock Enterprise Analysis" tables show the average physical production, gross returns, direct costs, overhead costs, and net returns per budget unit. All costs are actual costs; no opportunity costs are included. The "Net Return" to the enterprise is the "Gross Return" minus the direct and overhead costs. The last section of each livestock table contains both economic and technical efficiency measures.

The "Dairy" table 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. "Dairy Steers" includes only steers for feeding. 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."

The "Beef, Finish Beef Calves" tables include the FINPACK codes for beef steer and heifer calf finishing; there was no yearling feeding.
"Lbs. feed per lb. of gain" is the lbs. 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 pounds are calculated by these factors: alfalfa haylage, 0.5 ; corn silage, 0.33 ; oatlage, 0.5 ; and 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.

TABLE 12-1
Livestock Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Farms sorted according to Return to Overhead per head)

Number of farms

Milk sold (lb)
Milk sold (lb) (lb)
Milk fed to animals (lb)
Dairy Calves sold (h)
Transferred out (hd)
Cull sales (hd)
Butchered (hd)
Less purchased (hd)
Less transferred in (hd)
Inventory change (hd)
Total production
Other income
Gross return
Direct expenses
Barley (bu.)
Corn (bu.)
Corn Silage (lb.)
Hay, Grass \& Other (lb.)
Hay, Grass \& Alfalfa (lb.)
Oats (bu.)
Pasture (aum)
Rye Silage (lb.)
Complete Ration (lb.)
Milk (lb.)
Protein Vit Minerals (lb.)
Breeding fees
Veterinary
Livestock supplies
Fuel \& oil
Repairs
Custom hire
Hired labor
Machinery \& bldg leases Marketing
Operating interest
Total direct expenses
Return over direct expense
Overhead expenses
Hired labor
Machinery \& bldg leases
ME \& pers. property taxes
Farm insurance
Utilities
Dues \& professional fees
Interest
Mach \& bldg depreciation Miscellaneous
Total overhead expenses
Total listed expenses
Net return
Est. labor hours per unit
Labor \& management charge
Net return over lbr \& mgt
Other Information
Avg. number of Cows
Milk produced per Cow
Percent butterfat
Culling percentage
Percent of barn capacity
Lbs. milk/lb grain \& conc.
Feed cost per cwt of milk.
Feed cost per Cow
Avg. milk price per cwt.

Dairy -- Average per Cow


TABLE 12-2
Livestock Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association (Farms sorted according to Return to Overhead per head)

## Dairy Replacement Heifers -- Average per Head Sold or Transferred




TABLE 12-3
Livestock Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association
(Farms sorted according to Return to Overhead per head)

| Dairy and Replacemen <br> Average For All Farms |  |  | ers -- A | rage per | Cow |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Average For Low 20\% |  | Average For High 20\% |  |
| Number of farms | 27 |  | 5 |  | 5 |  |
|  | Quantity | Value | Quantity | Value | Quantity | Value |
| Milk sold (lb) | 19957.20 | 3095.03 | 14356. 26 | 2164.47 | 23920.32 | 3715.60 |
| Milk used in home (lb) | 2.12 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 |
| Milk fed to animals (1b) | 40.30 | 4.03 | 0.00 | 0.00 | 0.00 | 0.00 |
| Dairy Calves sold (hd) | 0.34 | 63.71 | 0.29 | 74.41 | 0.41 | 72.54 |
| Transferred out (hd) | 1.43 | 475.41 | 1.40 | 464.89 | 1.48 | 517.01 |
| Cull sales (hd) | 0.34 0.00 | 149.97 1.15 | 0.36 0.00 | 147.93 0.00 | 0.31 0.01 | 141.00 0.00 |
| Less purchased (hd) | -0.16 | -157.77 | -0.10 | -91.30 | -0.01 | -8.26 |
| Less transferred in (hd) | -1.33 | -453.20 | -1.34 | -452.57 | -1.41 | -496.82 |
| Inventory change (hd) | 0.12 | 120.00 | 0.06 | 30.25 | 0.11 | 176.41 |
| Total production |  | 3298.55 |  | 2338.09 |  | 4117.48 |
| Other income |  | 6.86 |  | 7.52 |  | 12.58 |
| Gross return |  | 3305.41 |  | 2345.60 |  | 4130.06 |
| Direct expenses |  |  |  |  |  |  |
| Barley (bu.) | 0.41 | 0.73 | 0.00 | 0.00 | 2.53 | 4.74 |
| Corn (bu.) | 126.51 | 262.46 | 151.54 | 312.54 | 121.50 1752 | 255.15 |
| Corn Silage Alfalfa (lb.) | 15662.96 | 198.36 | 5089.89 | 203.60 | 6432.54 | 256.79 |
| Hay, Grass \& Other (lb.) | 429.36 | 14.01 | 1898.88 | 62.86 | 0.00 | 0.00 |
| Haylage, Alfalfa (lb.) | 9700.96 | 194.94 | 8528.09 | 170.56 | 9000.48 | 180.01 |
| Haylage, Grass \& Other (lb.) | 171.03 | 3.42 | 0.00 | 0.00 | 1334.82 | 26.70 |
| Oatlage (lb.) | 74.93 | 0.52 | 0.00 | 0.00 | 584.78 | 4.09 |
| Oats (bu.) | 2.50 | 2.94 | 7.54 | 9.04 | 2.86 | 3.43 |
| Pasture (aum) | 0.85 | 7.59 | 1.80 | 17.14 | 2.73 | 21.29 |
| Rye Silage (lb.) | 540.77 | 10.82 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sorghum Silage (lb.) | 36.65 | 0.26 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stover (lb.) | 52.94 | 0.26 | 0.00 | 0.00 | 0.00 | 0.00 |
| Milk (lb.) | 40.30 | 4.03 | 0.00 | 0.00 | 0.00 | 0.00 |
| Protein Vit Minerals (lb.) | 4405.95 | 590.91 | 2705.27 | 414.41 | 4505.45 | 584.29 |
| Breeding fees |  | 36.84 |  | 43.53 |  | 63.28 |
| Veterinary |  | 106.19 |  | 108.86 |  | 130.75 |
| Livestock supplies |  | 220.09 |  | 168.46 |  | 227.47 |
| Fuel \& oil |  | 17.00 |  | 14.93 |  | 10.23 |
| Repairs Custom hire |  | 127.16 31.75 |  | 117.60 28.55 |  | 133.37 30.73 |
| Hired labor |  | 89.95 |  | 2 0.00 |  | 0.00 |
| Machinery \& bldg leases |  | 6.37 |  | 0.00 |  | 18.01 |
| Marketing |  | 29.12 |  | 57.34 |  | 25.84 |
| Operating interest |  | 2100. ${ }^{7} .01$ |  | 31.56 1910.75 |  | 2134.00 |
| Total direct expenses Return over direct expense |  | 2100.63 1204.78 |  | 1910.75 434.85 |  | 2134.24 1995.81 |
| Overhead expenses |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Machinery \& bldg leases |  | 39.12 |  | 0.00 |  | 1.87 |
| RE \& pers. property taxes |  | 17.76 |  | 19.61 |  | 20.24 |
| Farm insurance |  | 21.04 |  | 14.30 |  | 18.70 |
| Utilities |  | 70.18 |  | 64.86 |  | 68.86 |
| Dues \& professional fees |  | 0.32 62.85 |  | 0.00 23.66 |  | 2.49 20.74 |
| Mach \& bldg depreciation |  | 83.34 |  | 44.78 |  | 93.24 |
| Miscellaneous |  | 31.43 |  | 18.40 |  | 34.32 |
| Total overhead expenses |  | 485.07 |  | 262.95 |  | 513.98 |
| Total listed expenses |  | 2585.70 |  | 2173.70 |  | 2648.23 |
| Net return |  | 719.70 |  | 171.90 |  | 1481.83 |
| Est. labor hours per unit |  | 65.44 |  | 80.15 |  | 84.39 |
| Labor \& management charge |  | 296.25 |  | 499.04 |  | 346.47 |
| Net return over lbr \& mgt |  | 423.45 |  | -327.14 |  | 1135.36 |
| Other Information |  |  |  |  |  |  |
| Avg, number of Cows |  | 91.0 |  | 46.3 |  | 62.9 |
| Milk produced per Cow |  | 20000 |  | 14356 |  | 23920 |
| Percent butterfat in milk |  | 4.3 |  | 4.1 |  | 3.7 |
| Culling percentage |  | 33.7 |  | 35.9 |  | 30.8 |
| Percent of barn capacity |  | 110.8 1.8 |  | 101.9 1.3 |  | 101.2 |
| Feed cost per cwt of milk. |  | 7.15 |  | 9.33 |  | 6.25 |
| Feed cost per Cow |  | 1429.16 |  | 1339.92 |  | 1494.55 |
| Avg. milk price per cwt. |  | 15.51 |  | 15.08 |  | 15.53 |

# TABLE 12-4 

Livestock Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association
(Farms sorted according to Return to Overhead per head)

## Dairy and Replacement Heifers -- Average per Cwt of Milk

Number of farms

Milk sold (lb)
Milk fed to animals (lb)
Dairy Calves sold (hd)
Transferred out (hd)
Cull sales (hd)
Less purchased (hd)
Less transferred in (hd)
Inventory change (hd)
Total production
Gross return
Direct expenses
Corn (bu.)
Corn Silage (lb.)
Hay, Alfalfa (lb.)
Hay, Grass \& Other (lb.)
Haylage, Alfalfa (lb.)
Haylage, Grass \& Other (lb.)
Oats (bu.)
Pasture (aum
Rye silage (lb.)
Protein Vit Minerals (lb.)
Proeding fees
Vreeding fee
Livestock supplies
Fuel \& oil
Repairs
Custom hire
Hired labor
Machinery \& bldg leases Marketing
Operating interest
Total direct expenses
Return over direct expense
Overhead expenses
Hired labor
Machinery \& bldg leases
RE \& pers. property taxes
Farm insurance
Utilities
Interest
Mach \& bldg depreciation Miscellaneous
Total overhead expenses
Total listed expenses
Net return
Est. labor hours per unit
Labor \& management charge
Net return over lbr \& mgt
Other Information
Avg. number of Cows
Milik produced per Cow
Percent butterfat in milk
Culling percentage
Percent of barn capacity
Lbs. milk/lb grain \& conc.
Feed cost per cwt of milk
Feed cost per Cow
Avg. milk price per cwt.

| Average For All Farms |  | Average For Low 20\% |  | Average For High 20\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27 |  | 5 |  | 5 |  |
| Quantity | Value | Quantity | Value | Quantity | Value |
| 99.79 | 15.48 | 100.00 | 15.08 | 100.00 | 15.53 |
| 0.20 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0.00 | 0.32 | 0.00 | 0.52 | 0.00 | 0.30 |
| 0.01 | 2.38 | 0.01 | 3.24 | 0.01 | 2.16 |
| 0.00 | 0.75 | 0.00 | 1.03 | 0.00 | 0.59 |
| -0.00 | -0.79 | -0.00 | -0.64 | -0.00 | -0.03 |
| -0.01 | -2.27 | -0.01 | -3.15 | -0.01 | -2.08 |
| 0.00 | 0.60 | 0.00 | 0.21 | 0.00 | 0.74 |
|  | 16.49 |  | 16.29 |  | 17.21 |
|  | 0.03 |  | 0.05 |  | 0.05 |
|  | 16.53 |  | 16.34 |  | 17.27 |
| 0.63 | 1.31 | 1.06 | 2.18 | 0.51 | 1.07 |
| 78.66 | 0.69 | 116.72 | 1.04 | 73.42 | 0.66 |
| 23.31 | 0.99 | 35.45 | 1.42 | 26.89 | 1.07 |
| 2.15 | 0.07 | 13.23 | 0.44 | 0.00 | 0.00 |
| 48.51 | 0.97 | 59.40 | 1.19 | 37.63 | 0.75 |
| 0.86 | 0.02 | 0.00 | 0.00 | 5.58 | 0.11 |
| 0.01 | 0.01 | 0.05 | 0.06 | 0.01 | 0.01 |
| 0.00 | 0.04 | 0.01 | 0.12 | 0.01 | 0.09 |
| 2.70 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0.20 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22.03 | 2.95 | 18.84 | 2.89 | 18.84 | 2.44 |
|  | 0.18 |  | 0.30 |  | 0.26 |
|  | 0.53 |  | 0.76 |  | 0.55 |
|  | 1.10 |  | 1.17 |  | 0.95 |
|  | 0.08 |  | 0.10 |  | 0.04 |
|  | 0.64 |  | 0.82 |  | 0.56 |
|  | 0.16 |  | 0.20 |  | 0.13 |
|  | 0.45 |  | 0.00 |  | 0.00 |
|  | 0.03 |  | 0.00 |  | 0.08 |
|  | 0.15 |  | 0.40 |  | 0.11 |
|  | 0.04 |  | 0.22 |  | 0.00 |
|  | 10.50 |  | 13.31 |  | 8.92 |
|  | 6.02 - 8.03 84 |  | 3.03 |  | 8.34 |
| 0.80 |  |  | 0.54 |  | 1.06 |
| 0.20 |  |  | 0.00 |  | 0.01 |
| 0.09 |  |  | 0.14 |  | 0.08 |
| 0.11 |  |  | 0.10 |  | 0.08 |
| 0.35 |  |  | 0.45 |  | 0.29 |
| 0.31 |  |  | 0.16 |  | 0.09 |
| 0.42 |  |  | 0.31 |  | 0.39 |
| 0.16 |  |  | 0.13 |  | 0.14 |
| 2.43 |  |  | 1.83 |  | 2.15 |
| 12.93 |  |  | 15.14 |  | 11.07 |
| 3.60 |  |  | 1.20 |  | 6.19 |
|  |  |  | 0.56 |  | 0.35 |
| 0.331.48 |  |  | 3.48 |  | 1.45 |
| 2.12 |  |  | -2.28 |  | 4.75 |
| 91.0 |  |  | 46.3 |  | 62.9 |
| 20000 |  |  | 14356 |  | 23920 |
| $\begin{array}{r} 4.3 \\ 33.7 \end{array}$ |  |  | 4.1 35 |  | 3.7 30.8 |
|  |  |  | 35.9 101.9 |  | 30.8 101.2 |
| 1.8 |  |  | 101.9 1.3 |  | 101.2 2.9 |
| 7.15 |  |  | 9.33 |  | 6.25 |
| 1429.1615.51 |  |  | 1339.92 |  | 1494.55 |
|  |  |  | 15.08 |  | 15.53 |

TABLE 12-5
Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

Hogs, Farrow To Finish -- Average per Litter

| Number of farms | Average For All Farms |  |
| :---: | :---: | :---: |
|  |  |  |
|  | Quantity | Value |
| Raised Hogs sold (lb) | 2047.01 | 674.71 |
| Cull sales (lb) | 106.19 | 25.09 |
| Butchered (lb) | 2.57 | 0.43 |
| Less purchased (lb) | -10.10 | -8.22 |
| Inventory change (lb) | -38.15 | -218.53 |
| Total production (lb) | 2107.51 | 473.47 |
| Other income |  | 0.00 |
| Gross return |  | 473.47 |
| Direct expenses |  |  |
| Corn (bu.) | 129.55 | 272.05 |
| Oats (bu.) | 1.46 | 1.76 |
| Complete Ration (lb.) | 78.91 | 20.86 |
| Protein Vit Minerals (lb.) | 1675.24 | 285.13 |
| Veterinary |  | 18.74 |
| Livestock supplies |  | 13.43 |
| Fuel \& oil |  | 8.87 |
| Repairs |  | 32.00 |
| Custom hire |  | 5.23 |
| Marketing |  | 2.74 |
| Operating interest |  | 14.39 |
| Total direct expenses |  | 675.20 |
| Return over direct expense |  | -201.72 |
| Overhead expenses |  |  |
| Hired labor |  | 4.61 |
| Machinery \& bldg leases |  | 1.77 |
| RE \& pers. property taxes |  | 12.97 |
| Farm insurance |  | 12.66 |
| Utilities |  | 24.15 |
| Interest |  | 43.98 |
| Mach \& bldg depreciation |  | 30.33 |
| Miscellaneous |  | 10.46 |
| Total overhead expenses |  | 140.93 |
| Total listed expenses |  | 816.13 |
| Net return |  | -342.65 |
| Est. labor hours per unit |  | 19.01 |
| Labor \& management charge |  | 196.97 |
| Net return over lbr \& mgt |  | -539.62 |
| Other Information |  |  |
| Average number of sows |  | 65.8 |
| Litters farrowed |  | 113 |
| Litters per sow |  | 1.72 |
| Litters per crate |  | 5.22 |
| Pigs born per litter |  | 10.23 |
| Pigs weaned per litter |  | 8.17 |
| Pigs weaned per sow |  | 14.03 |
| Number sold per litter |  | 8.16 |
| Lbs of feed / lb of gain |  | 3.79 |
| Feed cost / cwt. of gain |  | 27.51 |
| Feed cost per litter |  | 579.79 |
| Avg wgt/Raised Hog sold |  | 251 |
| Avg price / cwt |  | 32.96 |

TABLE 12-6
Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

## Hogs, Farrow To Finish -- Average per Cwt Produced

| Number of farms | Average For All Farms |  |
| :---: | :---: | :---: |
|  |  |  |
|  | Quantity | Value |
| Raised Hogs sold (lb) | 97.13 | 32.01 |
| Cull sales (lb) | 5.04 | 1.19 |
| Butchered (lb) | 0.12 | 0.02 |
| Less purchased (lb) | -0.48 | -0.39 |
| Inventory change (lb) | -1.81 | -10.37 |
| Total production (lb) | 100.00 | 22.47 |
| Other income |  | 0.00 |
| Gross return |  | 22.47 |
| Direct expenses |  |  |
| Corn (bu.) | 6.15 | 12.91 |
| Oats (bu.) | 0.07 | 0.08 |
| Complete Ration (lb.) | 3.74 | 0.99 |
| Protein Vit Minerals (lb.) | 79.49 | 13.53 |
| Veterinary |  | 0.89 |
| Livestock supplies |  | 0.64 |
| Fuel \& oil |  | 0.42 |
| Repairs |  | 1.52 |
| Custom hire |  | 0.25 |
| Marketing |  | 0.13 |
| Operating interest |  | 0.68 |
| Total direct expenses |  | 32.04 |
| Return over direct expense |  | -9.57 |
| Overhead expenses |  |  |
| Hired labor |  | 0.22 |
| Machinery \& bldg leases |  | 0.08 |
| RE \& pers. property taxes |  | 0.62 |
| Farm insurance |  | 0.60 |
| Utilities |  | 1.15 |
| Interest |  | 2.09 |
| Mach \& bldg depreciation |  | 1.44 |
| Miscellaneous |  | 0.50 |
| Total overhead expenses |  | 6.69 |
| Total listed expenses |  | 38.72 |
| Net return |  | -16.26 |
| Est. labor hours per unit |  | 0.90 |
| Labor \& management charge |  | 9.35 |
| Net return over lbr \& mgt |  | -25.60 |
| Other Information |  |  |
| Average number of sows |  | 65.8 |
| Litters farrowed |  | 113 |
| Litters per sow |  | 1.72 |
| Litters per crate |  | 5.22 |
| Pigs born per litter |  | 10.23 |
| Pigs weaned per litter |  | 8.17 |
| Pigs weaned per sow |  | 14.03 |
| Number sold per litter |  | 8.16 |
| Lbs of feed / lb of gain |  | 3.79 |
| Feed cost / cwt. of gain |  | 27.51 |
| Feed cost per litter Avg wgt/Raised Hog sold |  | 579.79 |
| Avg wgt/Raised Hog sold Avg price / cwt |  | ${ }^{251}$ |
| Avg price / cwt |  | 32.96 |

TABLE 12-7
Livestock Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association
Beef Cow-Calf -- Average per Cow

| Number of farms | Average For <br> All Farms |  |
| :---: | :---: | :---: |
|  |  |  |
|  | Quantity | Value |
| Beef Calves sold (lb) | 49.61 | 33.76 |
| Transferred out (lb) | 362.26 | 264.02 |
| Cull sales (lb) | 132.07 | 52.25 |
| Less purchased (lb) | -8.65 | -9.77 |
| Less transferred in (lb) | -137.18 | -80.36 |
| Inventory change (lb) | -15.90 | -40.56 |
| Total production (lb) | 382.20 | 219.33 |
| Other income |  | 0.00 |
| Gross return |  | 219.33 |
| Direct expenses |  |  |
| Corn (bu.) | 1.50 | 3.16 |
| Corn Silage (lb.) | 5473.68 | 49.26 |
| Hay, Alfalfa (lb.) | 776.32 | 31.05 |
| Hay, Grass \& Other (lb.) | 1563.91 | 49.87 |
| Haylage, Alfalfa (lb.) | 1026.32 | 27.14 |
| Oatlage (lb.) | 563.91 | 3.95 |
| Pasture (aum) | 4.38 | 43.83 |
| Stover (lb.) | 526.32 | 2.63 |
| Protein Vit Minerals (lb.) | 43.23 | 8.95 |
| Breeding fees |  | 0.84 |
| Veterinary |  | 5.56 |
| Livestock supplies |  | 3.83 |
| Fuel \& oil |  | 2.98 |
| Repairs |  | 14.94 |
| Custom hire |  | 3.27 |
| Marketing |  | 0.32 |
| Total direct expenses |  | 251.58 |
| Return over direct expense |  | -32.25 |
| Overhead expenses |  |  |
| Hired labor |  | 0.47 |
| RE \& pers. property taxes |  | 2.16 |
| Farm insurance |  | 3.30 |
| Utilities |  | 7.73 |
| Interest |  | 4.53 |
| Mach \& bldg depreciation |  | 13.05 |
| Miscellaneous |  | 6.55 |
| Total overhead expenses |  | 37.78 |
| Total listed expenses |  | 289.37 |
| Net return |  | -70.03 |
| Est. labor hours per unit |  | 9.59 |
| Labor \& management charge |  | 111.69 |
| Net return over lbr \& mgt |  | $-181.72$ |
| Other Information |  |  |
| Number of cows |  | 44.3 |
| Pregnancy percentage |  | 91.6 |
| Pregnancy loss percentage |  | 3.8 |
| Culling percentage |  | 10.9 |
| Calving percentage |  | 88.1 |
| Weaning percentage |  | 76.2 |
| Calves sold per cow |  | 0.82 |
| Calf death loss percent |  | 7.0 |
| Average weaning weight |  | 509 |
| Lbs weaned/exposed female |  | 388 |
| Feed cost per cow |  | 219.85 |
| Avg wgt/Beef Calf sold |  | 574 |
| Avg price / cwt |  | 68.05 |

TABLE 12-8
Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

## Beef, Finish Beef Calves -- Average per Head

| Number of farms | Average For <br> All Farms |  |
| :---: | :---: | :---: |
|  |  |  |
|  | Quantity | Value |
| Finish Beef sold (lb) | 1039.77 | 588.77 |
| Transferred out (lb) | 35.44 | 21.01 |
| Butchered (lb) | 4.67 | 2.73 |
| Less purchased (lb) | -348.22 | -240.84 |
| Less transferred in (lb) | -113.15 | -75.50 |
| Inventory change (lb) | 12.99 | -13.61 |
| Total production (lb) | 631.50 | 282.56 |
| Other income |  | 0.00 |
| Gross return |  | 282.56 |
| Direct expenses |  |  |
| Barley (bu.) | 0.71 | 1.27 |
| Corn (bu.) | 67.84 | 138.29 |
| Corn Silage (lb.) | 4003.33 | 34.24 |
| Hay, Alfalfa (lb.) | 311.40 | 12.44 |
| Hay, Grass \& Other (lb.) | 380.62 | 12.49 |
| Haylage, Alfalfa (lb.) | 1077.26 | 21.55 |
| Oatlage (lb.) | 210.40 | 1.47 |
| Oats (bu.) | 0.84 | 0.87 |
| Stover (lb.) | 210.40 | 1.05 |
| Protein Vit Minerals (lb.) | 273.05 | 36.94 |
| Breeding fees |  | 1.20 |
| Veterinary |  | 5.10 |
| Livestock supplies |  | 6.91 |
| Fuel \& oil |  | 4.13 |
| Repairs |  | 13.83 |
| Marketing |  | 3.83 |
| Operating interest |  | 0.37 |
| Total direct expenses |  | 295.98 |
| Return over direct expense |  | -13.42 |
| Overhead expenses |  |  |
| Hired labor |  | 1.50 |
| Machinery \& bldg leases |  | 1.68 |
| RE \& pers. property taxes |  | 0.72 |
| Farm insurance |  | 2.15 |
| Utilities |  | 6.21 |
| Interest |  | 4.96 |
| Mach \& bldg depreciation |  | 9.64 |
| Miscellaneous |  | 2.19 |
| Total overhead expenses |  | 29.06 |
| Total listed expenses |  | 325.05 |
| Net return |  | -42.48 |
| Est. labor hours per unit |  | 6.00 |
| Labor \& management charge |  | 50.99 |
| Net return over lbr \& mgt |  | -93.47 |
| Other Information |  |  |
| No. purchased or trans in |  | 107 |
| Number sold or trans out |  | 101 |
| Percentage death loss |  | 0.9 |
| Avg. daily gain (lbs) |  | 1.79 |
| Lbs of conc / lb of gain |  | 6.51 |
| Lbs of feed / lb of gain |  | 10.94 |
| Feed cost per cwt of gain |  | 41.27 |
| Feed cost per head |  | 260.62 |
| Average purchase weight |  | 547 |
| Average sales weight |  | 1280 |
| Avg purch price / cwt |  | 69.16 |
| Avg sales price / cwt |  | 56.63 |

TABLE 12-9
Livestock Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association
Beef, Finish Beef Calves -- Average per Cwt Produced

| Number of farms | Average For All Farms |  |
| :---: | :---: | :---: |
|  |  |  |
|  | Quantity | Value |
| Finish Beef sold (lb) | 164.65 | 93.23 |
| Transferred out (lb) | 5.61 | 3.33 |
| Butchered (lb) | 0.74 | 0.43 |
| Less purchased (lb) | -55.14 | -38.14 |
| Less transferred in (lb) | -17.92 | -11.96 |
| Inventory change (lb) | 2.06 | -2.16 |
| Total production (lb) | 100.00 | 44.74 |
| Other income |  | 0.00 |
| Gross return |  | 44.74 |
| Direct expenses |  |  |
| Barley (bu.) | 0.11 | 0.20 |
| Corn (bu.) | 10.74 | 21.90 |
| Corn Silage (lb.) | 633.94 | 5.42 |
| Hay, Alfalfa (lb.) | 49.31 | 1.97 |
| Hay, Grass \& Other (lb.) | 60.27 | 1.98 |
| Haylage, Alfalfa (lb.) | 170.59 | 3.41 |
| Oatlage (lb.) | 33.32 | 0.23 |
| Oats (bu.) | 0.13 | 0.14 |
| Stover (lb.) | 33.32 | 0.17 |
| Protein Vit Minerals (lb.) | 43.24 | 5.85 |
| Breeding fees |  | 0.19 |
| Veterinary |  | 0.81 |
| Livestock supplies |  | 1.09 |
| Fuel \& oil |  | 0.65 |
| Repairs |  | 2.19 |
| Marketing |  | 0.61 |
| Operating interest |  | 0.06 |
| Total direct expenses |  | 46.87 |
| Return over direct expense |  | -2.12 |
| Overhead expenses |  |  |
| Hired labor |  | 0.24 |
| Machinery \& bldg leases |  | 0.27 |
| RE \& pers. property taxes |  | 0.11 |
| Farm insurance |  | 0.34 |
| Utilities |  | 0.98 |
| Interest |  | 0.79 |
| Mach \& bldg depreciation |  | 1.53 |
| Miscellaneous |  | 0.35 |
| Total overhead expenses |  | 4.60 |
| Total listed expenses |  | 51.47 |
| Net return |  | -6.73 |
| Est. labor hours per unit |  | 0.95 |
| Labor \& management charge |  | 8.07 |
| Net return over lbr \& mgt |  | -14.80 |
| Other Information |  |  |
| No. purchased or trans in |  | 107 |
| Number sold or trans out |  | 101 |
| Percentage death loss |  | 0.9 |
| Avg. daily gain (lbs) |  | 1.79 |
| Lbs of conc / lb of gain |  | 6.51 |
| Lbs of feed / lb of gain |  | 10.94 |
| Feed cost per cwt of gain |  | 41.27 |
| Feed cost per head |  | 260.62 |
| Average purchase weight |  | 547 |
| Average sales weight |  | 1280 |
| Avg purch price / cwt |  | 69.16 |
| Avg sales price / cwt |  | 56.63 |

TABLE 12-10
Livestock Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association

## Dairy Steers -- Average per Head

| Number of farms | Average For All Farms |  |
| :---: | :---: | :---: |
|  |  |  |
|  | Quantity | Value |
| Dairy Steers sold (lb) | 1127.58 | 623.78 |
| Butchered (lb) | 10.76 | 5.38 |
| Less purchased (lb) | -254.30 | -172.33 |
| Less transferred in (lb) | -106.14 | -58.18 |
| Inventory change (lb) | 50.04 | -61.13 |
| Total production (lb) | 827.94 | 337.52 |
| Other income |  | 0.00 |
| Gross return |  | 337.52 |
| Direct expenses |  |  |
| Corn (bu.) | 111.06 | 233.22 |
| Corn Silage (lb.) | 3049.62 | 23.09 |
| Hay, Alfalfa (lb.) | 214.60 | 9.27 |
| Hay, Grass \& Other (lb.) | 161.36 | 5.24 |
| Haylage, Alfalfa (lb.) | 1495.23 | 29.90 |
| Oatlage (lb.) | 182.87 | 1.28 |
| Pasture (aum) | 0.47 | 4.66 |
| Protein Vit Minerals (lb.) | 357.13 | 59.14 |
| Veterinary |  | 12.99 |
| Livestock supplies |  | 6.12 |
| Fuel \& oil |  | 4.12 |
| Repairs |  | 21.36 |
| Custom hire |  | 0.78 |
| Marketing |  | 2.50 |
| Operating interest |  | 2.01 |
| Total direct expenses |  | 415.69 |
| Return over direct expense |  | -78.17 |
| Overhead expenses |  |  |
| Hired labor |  | 19.77 |
| Machinery \& bldg leases |  | 3.35 |
| RE \& pers. property taxes |  | 4.21 |
| Farm insurance |  | 4.70 |
| Utilities |  | 11.04 |
| Interest |  | 6.32 |
| Mach \& bldg depreciation |  | 9.89 |
| Miscellaneous |  | 7.45 |
| Total overhead expenses |  | 66.73 |
| Total listed expenses |  | 482.42 |
| Net return |  | -144.90 |
| Est. labor hours per unit |  | 8.17 |
| Labor \& management charge |  | 52.72 |
| Net return over lbr \& mgt |  | -197.62 |
| Other Information |  |  |
| No. purchased or trans in |  | 39 |
| Number sold or trans out |  | 40 |
| Percentage death loss |  | 2.6 |
| Avg. daily gain (lbs) |  | 1.93 |
| Lbs of conc / lb of gain |  | 7.85 |
| Lbs of feed / lb of gain |  | 10.51 |
| Feed cost per cwt of gain |  | 44.18 |
| Feed cost per head |  | 365.80 |
| Average purchase weight |  | 372 |
| Average sales weight |  | 1165 |
| Avg purch price / head |  | 252.29 |
| Avg sales price / cwt |  | 55.32 |

TABLE 12-11
Livestock Enterprise Analysis, 1998
Southeast Minnesota Farm Business Management Association

## Dairy Steers -- Average per Cwt Produced

| Dairy Steers -- Average per Cwt Produced |  |  |
| :---: | :---: | :---: |
| Number of farms | Average For All Farms |  |
|  |  |  |
|  | Quantity | Value |
| Dairy Steers sold (lb) | 136.19 | 75.34 |
| Butchered (lb) | 1.30 | 0.65 |
| Less purchased (lb) | -30.71 | -20.81 |
| Less transferred in (lb) | -12.82 | -7.03 |
| Inventory change (lb) | 6.04 | -7.38 |
| Total production (lb) | 100.00 | 40.77 |
| Other income |  | 0.00 |
| Gross return |  | 40.77 |
| Direct expenses |  |  |
| Corn (bu.) | 13.41 | 28.17 |
| Corn Silage (lb.) | 368.34 | 2.79 |
| Hay, Alfalfa (lb.) | 25.92 | 1.12 |
| Hay, Grass \& Other (lb.) | 19.49 | 0.63 |
| Haylage, Alfalfa (lb.) | 180.60 | 3.61 |
| Oatlage (lb.) | 22.09 | 0.15 |
| Pasture (aum) | 0.06 | 0.56 |
| Protein Vit Minerals (lb.) | 43.14 | 7.14 |
| Veterinary |  | 1.57 |
| Livestock supplies |  | 0.74 |
| Fuel \& oil |  | 0.50 |
| Repairs |  | 2.58 |
| Custom hire |  | 0.09 |
| Marketing |  | 0.30 |
| Operating interest |  | 0.24 |
| Total direct expenses |  | 50.21 |
| Return over direct expense |  | -9.44 |
| Overhead expenses |  |  |
| Hired labor |  | 2.39 |
| Machinery \& bldg leases |  | 0.40 |
| RE \& pers. property taxes |  | 0.51 |
| Farm insurance |  | 0.57 |
| Utilities |  | 1.33 |
| Interest |  | 0.76 |
| Mach \& bldg depreciation |  | 1.19 |
| Miscellaneous |  | 0.90 |
| Total overhead expenses |  | 8.06 |
| Total listed expenses |  | 58.27 |
| Net return |  | -17.50 |
| Est. labor hours per unit |  | 0.99 |
| Labor \& management charge |  | 6.37 |
| Net return over lbr \& mgt |  | -23.87 |
| Other Information |  |  |
| No. purchased or trans in |  | 39 |
| Number sold or trans out |  | 40 |
| Percentage death loss |  | 2.6 |
| Avg. daily gain (lbs) |  | 1.93 |
| Lbs of conc / lb of gain |  | 7.85 |
| Lbs of feed / lb of gain |  | 10.51 |
| Feed cost per cwt of gain |  | 44.18 |
| Feed cost per head |  | 365.80 |
| Average purchase weight |  | 372 |
| Average sales weight |  | 1165 |
| Avg purch price / head |  | 252.29 |
| Avg sales price / cwt |  | 55.32 |

Table 13
PRICES USED IN ANALYSIS - 1998
Southeast Farm Business Management Association

| Item | Beginning <br> Inventory Price | Average Feed <br> Price/Year | Harvest Price | Ending Inventory <br> Price |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
| Corn | $\$ 2.40$ | $\$ 2.10$ | $\$ 1.70$ | $\$ 1.80$ |  |
| Oats | 1.50 | 1.20 | 1.20 | 1.20 |  |
| Soybeans | 6.50 | 6.00 | 5.40 | 5.30 |  |
| Alfalfa Hay | 100.00 | 80.00 | 80.00 | 90.00 |  |
| Mixed Hay | 70.00 | 50.00 | 50.00 | 60.00 |  |
| Haylage | 50.00 | 40.00 | 40.00 | 45.00 |  |
| Corn Silage | 20.00 | 18.00 | 16.00 | 16.00 |  |
| Oat Silage | 14.00 | 14.00 | 14.00 | 14.00 |  |
| Straw/ton | 80.00 | -- | 80.00 | 80.00 |  |
| Corn Stalks | 12.00 | 12.00 | 10.00 | 10.00 |  |
| Barley | 2.00 | 2.25 | 1.50 | 1.50 |  |


|  | Tillable Pasture or <br> Green Crop |  | Nontillable or Permanent Pasture |  |
| :--- | :---: | :---: | :---: | :---: |
| Dasture Rates cow, bull, beef cow, <br> feeder cattle \& horses | Per Month | Per Day | Per Month | Per Day |
|  | $\$ 10.00$ | $\$ .333$ | $\$ 7.00$ | $\$ .233$ |
|  | 5.00 | .167 | 3.50 | .117 |

Value of operator's labor and management: $\$ 25,000$

Board for hired help: \$6.00/day
Homegrown seed - soybeans: $\$ 8.00 / \mathrm{bu}$.
Homegrown seed - oats: $\$ 2.50 / b u$.

## EXPLANATORY NOTES FOR SUMMARY TABLES

A better picture of the current profitability, liquidity and solvency conditions can be seen by comparing this year to previous years (Table 14). 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 1996 ) " 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 latest year. The CPI used in Table 14 is reported below.

The debt-to-asset percentage measures the degree to which assets are financed by external sources. The year-end total assets is divided by year-end total liabilities to obtain this measure. The Southeastern Association uses the cost basis of asset valuation.

Starting with 1983, financial analysis was done by FINPACK. This new program added new measures which had not been available previously and in some cases used slightly different formulas.

To evaluate current financial performance in other ways, the whole-farm analysis is summarized on a county basis (Table 15), on a gross income category basis (Table 16), by type of farm (Table 17), and by age of operator (Table 18). Farms are classified as a certain type (e.g., dairy) on the basis of having 70 percent or more of their gross sales from that category.

| Year | CPI-U <br> $\mathbf{1 9 8 2 - 8 4}=\mathbf{1 0 0}$ |
| :---: | :---: |
| 1979 | 72.6 |
| 1980 | 82.4 |
| 1981 | 90.9 |
| 1982 | 96.5 |
| 1983 | 99.6 |
| 1984 | 103.9 |
| 1985 | 107.6 |
| 1986 | 109.6 |
| 1987 | 113.6 |
| 1988 | 118.3 |
| 1989 | 124.0 |
| 1990 | 130.7 |
| 1991 | 136.2 |
| 1992 | 140.3 |
| 1993 | 144.5 |
| 1994 | 148.2 |
| 1995 | 152.4 |
| 1996 | 156.9 |
| 1997 | 160.6 |
| 1998 | 163.1 |

TABLE 14
SUMMARY OF THE WHOLE FARM ANALYSIS BY YEARS
Southeastern Minnesota Farm Business Management Association (Overall averages for all farms reporting)


Table 14, continued

| 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | Row |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 63 | 58 | 65 | 65 | 63 | 65 | 64 | 62 | 61 | 64 | 60 | 1 |
| 187,712 | 203,126 | 219,696 | 212,943 | 219,457 | 236,401 | 242,784 | 269,666 | 291,050 | 294,687 | 320,356 | 2 |
| 135,159 | 146,353 | 146,315 | 144,519 | 153,908 | 172,893 | 178,968 | 198,873 | 211,486 | 225,501 | 239,611 | 3 |
| 2,922 | 3,482 | 8,706 | 1,827 | $(7,685)$ | 2,930 | 7,424 | 20,130 | 3,690 | 21,010 | 1,575 | 4 |
| $(13,646)$ | $(15,010)$ | $(20,043)$ | $(19,416)$ | $(17,897)$ | $(23,192)$ | $(15,047)$ | $(19,541)$ | $(15,676)$ | $(16,885)$ | $(16,580)$ | 5 |
| 41,829 | 45,244 | 62,044 | 50,835 | 39,967 | 43,246 | 56,192 | 71,382 | 67,579 | 73,311 | 65,739 | 6 |
| 57,670 | 59,510 | 77,424 | 60,875 | 46,462 | 48,813 | 61,842 | 76,394 | 70,249 | 74,452 | 65,739 | 7 |
| 29,793 | 31,106 | 46,923 | 34,143 | 22,049 | 25,084 | 37,384 | 47,696 | 41,777 | 45,620 | 36,896 | 8 |
| 10 | 10 | 12 | 9 | 5 | 6 | 8 | 9 | 8 | 9 | 7 | 9 |
| 11 | 10 | 15 | 9 | 3 | 5 | 9 | 10 | 8 | 9 | 7 | 10 |
| 20 | 19 | 23 | 19 | 11 | 14 | 20 | 22 | 21 | 24 | 19 | 11 |
| 52 | 50 | 53 | 46 | 42 | 38 | 40 | 40 | 39 | 37 | 36 | 12 |
| 187,789 | 199,804 | 215,976 | 200,904 | 198,818 | 184,576 | 201,239 | 239,151 | 242,598 | 256,273 | 268,551 | 13 |
| 15,543 | 15,151 | 12,963 | 13,983 | 12,509 | 13,339 | 14,175 | 15,370 | 15,571 | 18,957 | 17,964 | 14 |
| 72 | 72 | 67 | 68 | 70 | 73 | 74 | 74 | 73 | 77 | 75 | 15 |
| 8 | 7 | 6 | 7 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 16 |
| 11 | 10 | 9 | 10 | 8 | 8 | 8 | 8 | 7 | 8 | 7 | 17 |
| 3.4 | 4.5 | 1.5 | 1.5 | 2.0 | 1.5 | 1.3 | 1.2 | 1.0 | 1.4 | 1.4 | 18 |
| 48 | 44 | 51 | 48 | 46 | 47 | 46 | 44 | 45 | 47 | 45 | 19 |
| 331,420 | 376,054 | 384,259 | 417,616 | 474,752 | 455,144 | 507,456 | 571,147 | 610,645 | 673,379 | 735,178 | 20 |
| 154,430 | 164,661 | 159,333 | 172,612 | 192,695 | 198,475 | 218,738 | 227,621 | 217,061 | 251,000 | 260,958 | 21 |
| 176,990 | 211,393 | 224,926 | 245,004 | 282,057 | 256,670 | 288,718 | 343,526 | 393,584 | 422,379 | 474,219 | 22 |
| 33 | 33 | 31 | 31 | 33 | 40 | 38 | 36 | 35 | 37 | 35 | 23 |
| 47 | 44 | 41 | 41 | 41 | 44 | 43 | 40 | 36 | 37 | 35 | 24 |
| 274 | 294 | 280 | 272 | 285 | 325 | 335 | 362 | 336 | 325 | 367 | 25 |
| 348 | 372 | 350 | 401 | 417 | 432 | 430 | 496 | 504 | 513 | 560 | 26 |
| 223 | 222 | 210 | 237 | 261 | 264 | 258 | 276 | 252 | 266 | 285 | 27 |
| 105 | 128 | 124 | 159 | 152 | 162 | 163 | 214 | 244 | 241 | 268 | 28 |
| 20 | 22 | 16 | 5 | 4 | 5 | 8 | 6 | 8 | 7 | 7 | 29 |
| 88 | 142 | 140 | 134 | 117 | 91 | 158 | 129 | 126 | 146 | 167 | 30 |
| 31 | 42 | 41 | 42 | 32 | 33 | 46 | 44 | 42 | 44 | 50 | 31 |
| 2.17 | 2.36 | 2.39 | 2.28 | 2.34 | 1.97 | 2.22 | 2.37 | 3.19 | 2.54 | 2.15 | 32 |
| 6.87 | 6.88 | 5.89 | 5.33 | 5.28 | 5.98 | 5.94 | 5.72 | 7.00 | 7.11 | 5.72 | 33 |
| 12 | 11 | 16 | 16 | 16 | 19 | 30 | 21 | 18 | 17 | 15 | 34 |
| 3.5 | 3.7 | 3.4 | 3.8 | 4.0 | 3.3 | 3.0 | 2.1 | 3.6 | 3.5 | 3.7 | 35 |
| 41,392 | 44,050 | 49,370 | 46,635 | 44,940 | 32,132 | 37,652 | 41,005 | 36,438 | 60,231 | 50,081 | 36 |
| 8,396 | 9,370 | 8,403 | 8,343 | 10,377 | 12,192 | 12,435 | 14,786 | 20,634 | 26,290 | 20,692 | 37 |

Table 15
County Report, 1998
Southeast Minnesota Farm Business Management Association

|  | Average For All Farms | Dakota <br> Le Sueur <br> Nicollet <br> Rice <br> Scott | Goodhue <br> Houston <br> Olmsted <br> Wabasha Winona | Dodge Freeborn Mower Steele Waseca |
| :---: | :---: | :---: | :---: | :---: |
| Number of farms | 58 | 12 | 38 | 8 |
| Income Statement |  |  |  |  |
| Gross cash farm income | 324253 | 448251 | 291719 | 292795 |
| Total cash farm expense | 242045 | 337416 | 221196 | 198020 |
| Net cash farm income | 82208 | 110835 | 70522 | 94775 |
| Inventory change | 2796 | 18661 | 3856 | -26039 |
| Depreciation and capital adjustment | -17070 | -29633 | -13666 | -14394 |
| Net farm income | 67934 | 99862 | 60713 | 54342 |
| Profitability (cost) |  |  |  |  |
| Labor and management earnings | 38146 | 46024 | 38590 | 24220 |
| Rate of return on assets | 7 \% | 7 \% | 8 \% | 5 \% |
| Rate of return on equity | 7 \% | 7 \% | 8 \% | 4 \% |
| Operating profit margin | 20 \% | 23 \% | $19 \%$ | 18 \% |
| Asset turnover rate | $36 \%$ | 31 \% | 41 \% | 28 \% |
| Liquidity |  |  |  |  |
| Expense as a percent of income | 74 \% | 72 \% | $75 \%$ | 74 \% |
| Interest as a percent of income | $6 \%$ | $5 \%$ | $6 \%$ | $8 \%$ |
| Solvency (cost) |  |  |  |  |
| Number of sole proprietors | 43 | 7 | 31 | 5 |
| Ending farm assets | 624565 | 1065513 | 530310 | 591624 |
| Ending farm liabilities | 254704 | 436840 | 213464 | 255398 |
| Ending total assets | 755494 | 1217191 | 662237 | 687307 |
| Ending total liabilities | 265195 | 443183 | 223616 | 273805 |
| Ending net worth | 490298 | 774008 | 438621 | 413502 |
| Net worth change | 45816 | 83198 | 41976 | 17282 |
| Ending farm debt to asset ratio | 41 \% | 41 \% | 40 \% | 43 \% |
| Beg total debt to asset ratio | 36 \% | 37 \% | $35 \%$ | 42 \% |
| End total debt to asset ratio | 35 \% | 36 \% | $34 \%$ | 40 \% |
| Nonfarm Information |  |  |  |  |
| Farms reporting living expenses | 36 | 5 | 27 | 4 |
| Total family living expense | 23164 | 13384 | 25230 | - |
| Total living, invest, \& capital purch | 47709 | 35278 | 51399 | - |
| Net nonfarm income | 17739 | 3002 | 19774 | 30179 |
| Crop Acres |  |  |  |  |
| Total acres owned | 378 | 532 | 331 | 371 |
| Total crop acres | 561 | 801 | 473 | 621 |
| Total crop acres owned | 293 | 501 | 219 | 330 |
| Total crop acres cash rented | 262 | 300 | 244 | 288 |
| Total crop acres share rented | 7 | - | 10 | 3 |

Table 16
Size Of Farm Report, 1998
Southeast Minnesota Farm Business Management Association
(Farms Sorted By Gross Cash Farm Income)

|  | Average For All Farms | $\begin{array}{r} 40,001- \\ 100,000 \end{array}$ | $\begin{array}{r} 100,001- \\ 200,000 \end{array}$ | $\begin{array}{r} 200,001- \\ 500,000 \end{array}$ | 500,001 + |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of farms | 60 | 8 | 14 | 30 | 7 |
| Income Statement |  |  |  |  |  |
| Gross cash farm income | 320356 | 75788 | 143012 | 333996 | 936870 |
| Total cash farm expense | 239611 | 58613 | 99365 | 256100 | 686171 |
| Net cash farm income | 80745 | 17176 | 43647 | 77896 | 250699 |
| Inventory change | 1575 | -12076 | -24984 | 16805 | 9024 |
| Depreciation and capital adjustment | -16580 | -2383 | -10029 | -18980 | -37904 |
| Net farm income | 65739 | 2717 | 8634 | 75721 | 221819 |
| Profitability (cost) |  |  |  |  |  |
| Labor and management earnings | 36896 | -3331 | -6755 | 49989 | 122906 |
| Rate of return on assets | 7 \% | -1 \% | -2 \% | $9 \%$ | 9 \% |
| Rate of return on equity | 7 \% | -14\% | -8 \% | 10 \% | 10 \% |
| Operating profit margin | 19 \% | -5 \% | -10 \% | 21 \% | 27 \% |
| Asset turnover rate | $36 \%$ | 29 \% | 25 \% | 42 \% | 34 \% |
| Liquidity |  |  |  |  |  |
| Expense as a percent of income | 74 \% | 92 \% | 84 \% | 73 \% | 72 \% |
| Interest as a percent of income | $6 \%$ | 14 \% | $9 \%$ | $5 \%$ | $5 \%$ |
| Solvency (cost) |  |  |  |  |  |
| Number of sole proprietors | 45 | 7 | 13 | 21 | 3 |
| Ending farm assets | 603180 | 200024 | 386571 | 750535 | - |
| Ending farm liabilities | 249711 | 135902 | 150934 | 278742 | - |
| Ending total assets | 735178 | 309626 | 505183 | 894957 | - |
| Ending total liabilities | 260958 | 181748 | 157760 | 283336 | - |
| Ending net worth | 474219 | 127878 | 347423 | 611621 | - |
| Net worth change | 44697 | 26228 | -5064 | 70201 | - |
| Ending farm debt to asset ratio | 41 \% | 68 \% | 39 \% | 37 \% | 49 \% |
| Beg total debt to asset ratio | 37 \% | 64 \% | 30 \% | 32 \% | 50 \% |
| End total debt to asset ratio | 35 \% | 59 \% | 31 \% | 32 \% | $44 \%$ |
| Nonfarm Information |  |  |  |  |  |
| Farms reporting living expenses | 37 | 6 | 9 | 19 | 3 |
| Total family living expense | 23481 | 20333 | 22729 | 23035 | - |
| Total living, invest, \& capital purch | 47504 | 43247 | 36436 | 55453 | - |
| Net nonfarm income | 18247 | 46057 | 26399 | 8883 | 8012 |
| Crop Acres |  |  |  |  |  |
| Total acres owned | 367 | 198 | 271 | 325 | 976 |
| Total crop acres | 560 | 207 | 294 | 598 | 1392 |
| Total crop acres owned | 285 | 70 | 194 | 247 | 905 |
| Total crop acres cash rented | 268 | 136 | 91 | 348 | 459 |
| Total crop acres share rented | 7 | - | 9 | 3 | 27 |

Table 17
Type Of Farm Report, 1998
Southeast Minnesota Farm Business Management Association

|  | Average For All Farms | Crop | Dairy | $\begin{gathered} \text { Crop and } \\ \text { Dairy } \end{gathered}$ | Other |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of farms | 60 | 18 | 16 | 10 | 8 |
| Income Statement |  |  |  |  |  |
| Gross cash farm income | 320356 | 247111 | 427089 | 457183 | 226687 |
| Total cash farm expense | 239611 | 180531 | 318234 | 327635 | 170040 |
| Net cash farm income | 80745 | 66579 | 108855 | 129547 | 56646 |
| Inventory change | 1575 | 1391 | 7244 | 14649 | -57 |
| Depreciation and capital adjustment | -16580 | -13828 | -20083 | -18657 | -18586 |
| Net farm income | 65739 | 54142 | 96016 | 125540 | 38003 |
| Profitability (cost) |  |  |  |  |  |
| Labor and management earnings | 36896 | 29717 | 68917 | 65773 | 16720 |
| Rate of return on assets | 7 \% | 8 \% | 11 \% | 8 \% | 5 \% |
| Rate of return on equity | 7 \% | 7 \% | 14 \% | 8 \% | 4 \% |
| Operating profit margin | 19 \% | 19 \% | 24 \% | 24 \% | 15 \% |
| Asset turnover rate | 36 \% | 39 \% | 45 \% | 31 \% | 32 \% |
| Liquidity |  |  |  |  |  |
| Expense as a percent of income | 74 \% | 72 \% | 73 \% | 69 \% | 75 \% |
| Interest as a percent of income | $6 \%$ | 7 \% | $4 \%$ | 6 \% | 7 \% |
| Solvency (cost) |  |  |  |  |  |
| Number of sole proprietors | 45 | 16 | 12 | 3 | 7 |
| Ending farm assets | 603180 | 626586 | 680705 | - | 506358 |
| Ending farm liabilities | 249711 | 240408 | 259328 | - | 187289 |
| Ending total assets | 735178 | 826365 | 796619 | - | 563694 |
| Ending total liabilities | 260958 | 263947 | 261113 | - | 192310 |
| Ending net worth | 474219 | 562418 | 535506 | - | 371384 |
| Net worth change | 44697 | 41543 | 65798 | - | 12524 |
| Ending farm debt to asset ratio | 41 \% | 38 \% | 38 \% | 45 \% | 37 \% |
| Beg total debt to asset ratio | 37 \% | 33 \% | 37 \% | 40 \% | $34 \%$ |
| End total debt to asset ratio | 35 \% | 32 \% | 33 \% | 40 \% | 34 \% |
| Nonfarm Information |  |  |  |  |  |
| Farms reporting living expenses | 37 | 12 | 12 | 2 | 5 |
| Total family living expense | 23481 | 25776 | 25383 | - | 11506 |
| Total living, invest, \& capital purch | 47504 | 59592 | 44765 | - | 34410 |
| Net nonfarm income | 18247 | 16292 | 14312 | 13075 | 23800 |
| Crop Acres |  |  |  |  |  |
| Total acres owned | 367 | 355 | 258 | 673 | 333 |
| Total crop acres | 560 | 696 | 309 | 940 | 492 |
| Total crop acres owned | 285 | 258 | 191 | 640 | 202 |
| Total crop acres cash rented | 268 | 432 | 118 | 280 | 290 |
| Total crop acres share rented | 7 | 6 | - | 20 | - |

Table 18
Age Of Operator Report, 1998
Southeast Minnesota Farm Business Management Association

|  | Average For <br> All Farms | $31-40$ | $41-50$ | $51-60$ | Over 60 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of farms | 60 | 14 | 22 | 10 | 11 |
| Income Statement |  |  |  |  |  |
| Gross cash farm income | 320356 | 256334 | 355986 | 274403 | 384143 |
| Total cash farm expense | 239611 | 204587 | 262102 | 196535 | 282463 |
| Net cash farm income | 80745 | 51747 | 93884 | 77869 | 101680 |
| Inventory change | 1575 | 3177 | -1810 | 992 | -20669 |
| Depreciation and capital adjustment | -16580 | -12672 | -15748 | -23438 | -19735 |
| Net farm income | 65739 | 42253 | 76326 | 55423 | 61277 |
| Profitability (cost) |  |  |  |  |  |
| Labor and management earnings | 36896 | 28690 | 41180 | 21535 | 27168 |
| Rate of return on assets | 7 \% | 6 \% | 8 \% | 5 \% | $5 \%$ |
| Rate of return on equity | 7 \% | 6 \% | 8 \% | 4 \% | 4 \% |
| Operating profit margin | 19 \% | 12 \% | 22 \% | 17 \% | $15 \%$ |
| Asset turnover rate | 36 \% | 46 \% | 35 \% | 28 \% | 33 \% |
| Liquidity |  |  |  |  |  |
| Expense as a percent of income | $74 \%$ | 79 \% | $74 \%$ | 70 \% | 78 \% |
| Interest as a percent of income | 6 \% |  | 7 \% | 6 \% | $5 \%$ |
| Solvency (cost) |  |  |  |  |  |
| Number of sole proprietors | 45 | 12 | 15 | 8 | 7 |
| Ending farm assets | 603180 | 387645 | 559286 | 809644 | 816446 |
| Ending farm liabilities | 249711 | 170626 | 276205 | 224835 | 336972 |
| Ending total assets | 735178 | 468257 | 727275 | 983665 | 942119 |
| Ending total liabilities | 260958 | 182533 | 298308 | 227217 | 338780 |
| Ending net worth | 474219 | 285723 | 428967 | 756449 | 603339 |
| Net worth change | 44697 | 36860 | 44873 | 40254 | 44651 |
| Ending farm debt to asset ratio | 41 \% | 44 \% | 49 \% | 28 \% | 41 \% |
| Beg total debt to asset ratio | 37 \% | 42 \% | 43 \% | 23 \% | 39 \% |
| End total debt to asset ratio | 35 \% | 39 \% | 41 \% | 23 \% | 36 \% |
| Nonfarm Information |  |  |  |  |  |
| Farms reporting living expenses | 37 | 10 | 13 | 7 | 6 |
| Total family living expense | 23481 | 22090 | 28082 | 23234 | 17859 |
| Total living, invest, \& capital purch | 47504 | 36245 | 53511 | 71733 | 23594 |
| Net nonfarm income | 18247 | 11978 | 21308 | 29198 | 20906 |
| Crop Acres |  |  |  |  |  |
| Total acres owned | 367 | 210 | 412 | 486 | 424 |
| Total crop acres | 560 | 409 | 686 | 561 | 460 |
| Total crop acres owned | 285 | 105 | 372 | 365 | 304 |
| Total crop acres cash rented | 268 | 298 | 304 | 186 | 156 |
| Total crop acres share rented | 7 | 6 | 10 | 10 | - |


[^0]:    ${ }^{1}$ Olson is an Associate Professor, University of Minnesota-Twin Cities; Westman is Area Farm Management Extension Agent and Fieldman for the Association; Nordquist is Assistant Extension Economist-Farm Management, University of Minnesota-Twin Cities. Rann Loppnow, Assistant Extension Economist-Farm Management, was the programmer for FINANSUM, the analysis package used to prepare this report.

[^1]:    ** Income insufficient to meet debt servicing requirements

