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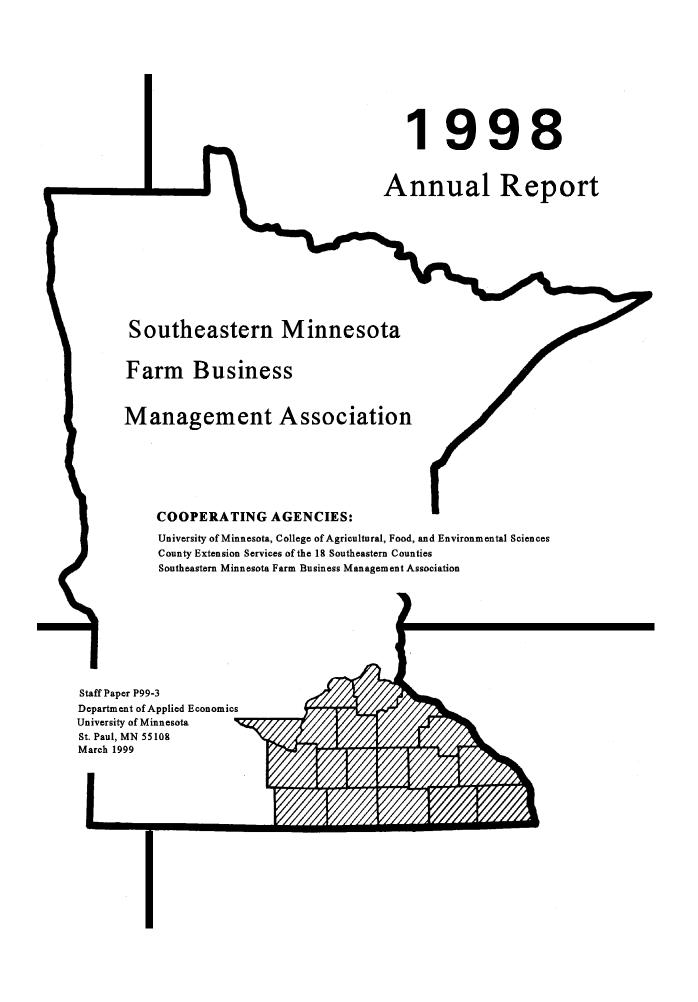
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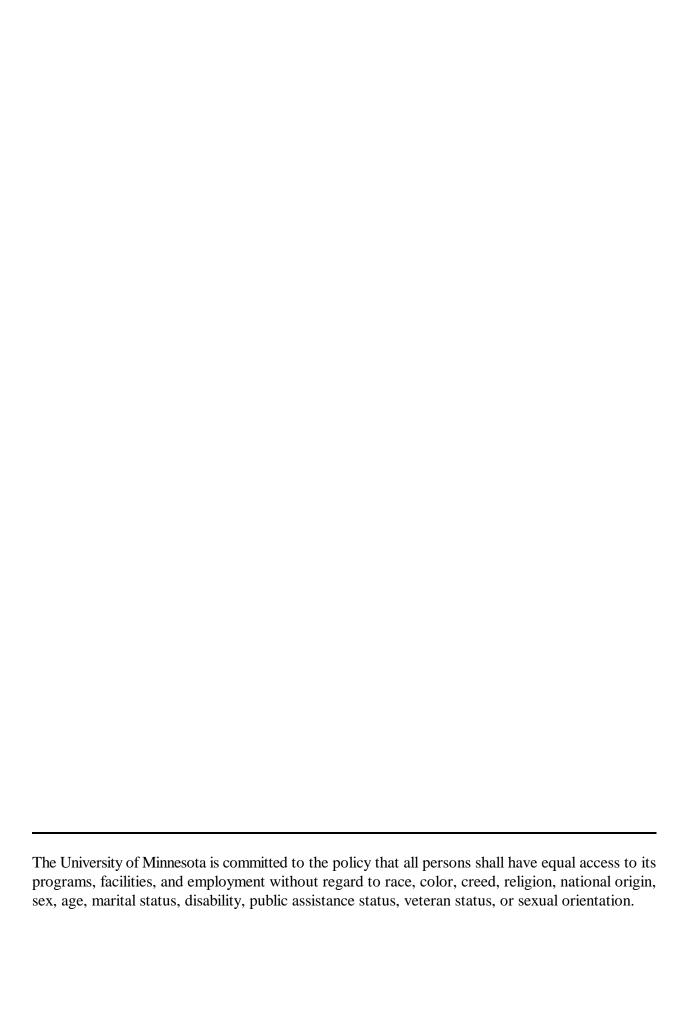
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#### **EXECUTIVE SUMMARY**

### 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 1990s 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).

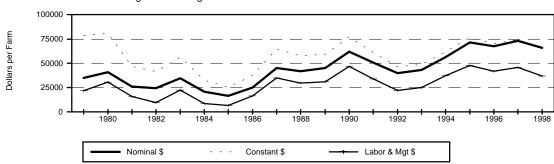


Figure 1. Average Net Farm Income

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

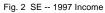
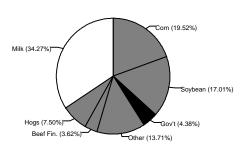
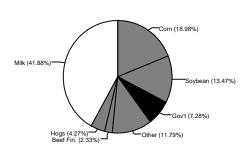


Fig. 2 SE -- 1998 Income

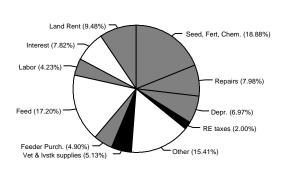


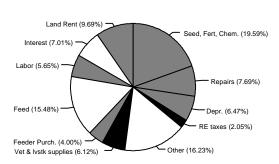


Average total cash expenses were \$239,611 in 1998. This is an increase of 6.3% from the 1997 average. As a percentage of both cash expenses and depreciation, feed expenses were 17% in 1998, down slightly from 1997 (Figure 3). Seed, fertilizer, and crop chemicals were 21% of the total, up from 1997. 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

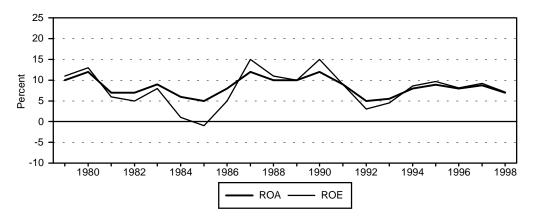
Fig. 3 SE -- 1998 Expenses



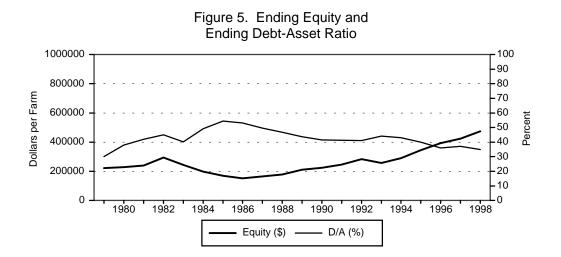


Both the rate of return on assets (ROA) and the rate of return to equity (ROE) decreased from 1997 (Figure 4). However, ROE was still higher than ROA indicating that debt capital was earning more than it was costing (Table 4, page 14).

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%.



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.

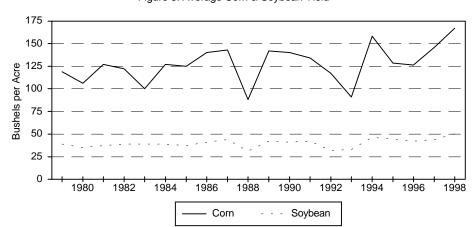


Figure 6. Average Corn & Soybean Yield

#### 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

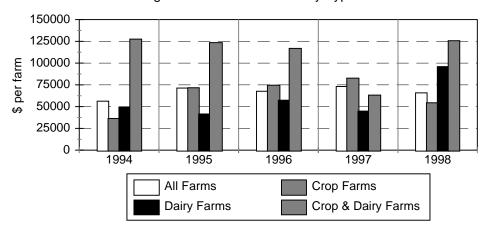
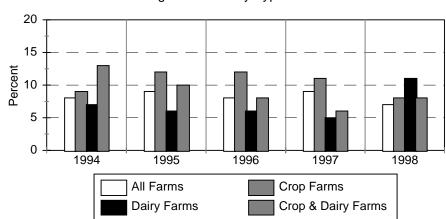
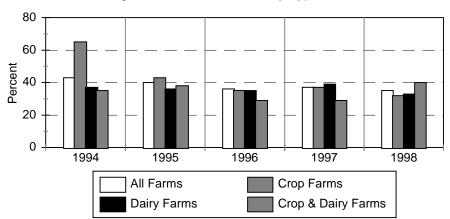


Figure 8. ROA by Type



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 whole-farm 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 Kent D. Olson, Lorin L. Westman, and Dale W. Nordquist<sup>1</sup>

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.

<sup>&</sup>lt;sup>1</sup>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.

#### SOUTHEASTERN MINNESOTA FARM BUSINESS MANAGEMENT ASSOCIATION

#### **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	
eSueur	1	0	
Nicollet	1	1	
Vaseca	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	<u>8</u>	<u>4</u>	John Sloan
ΓΟΤΑL	95	60	

#### 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 <u>are</u> 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 ÷

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) ÷ 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 ÷ 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 ÷ 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 FARM INCOME STATEMENT, 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
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 1b FARM INCOME STATEMENT, 1998 (Continued) 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
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
	337.13	2002.	1,0,2
INVENTORY CHANGES	1000	05500	51655
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 INVENTORY CHANGES, 1998 Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)

	Average Of	Average Of	Average Of
	All Farms	Low 20%	High 20%
Number of Farms	60	12	12
Net cash farm income	80745	26627	175929
CROPS AND FEED Ending inventory Beginning inventory Inventory change	129034 127063 1970		319732 268057 51675
MARKET LIVESTOCK Ending inventory Beginning inventory Inventory change	36585	21941	68858
	41440	30539	69295
	-4855	-8598	-437
ACCTS RECEIVABLE & OTHER CURRENT ASSETS Ending inventory Beginning inventory Inventory change	4471	2122	7706
	1560	2774	1385
	2911	-652	6321
PREPAID EXPENSES AND SUPPLIES Ending inventory Beginning inventory Inventory change	8025	1642	9870
	5033	535	5175
	2992	1107	4695
ACCOUNTS PAYABLE Beginning inventory Ending inventory Inventory change	2668	2946	3732
	4112	6593	6867
	-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%	_
Number of Farms	60	12	12
Net operating profit	82320	-10692	235049
BREEDING LIVESTOCK Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adj.	50579 1321 46131 7690 -1921	31324 4430 34130 3325 -1701	65067 - 60000 1664 3403
MACHINERY AND EQUIPMENT Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adj.	136689 871 122712 25906 -11058	91956 1749 86712 13696 -6704	232720 1308 206651 46013 -18635
BUILDINGS AND IMPROVEMENTS Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adj.	79453 - 74858 7223 -2629	47135 - 44932 3207 -1004	135099 - 129193 9001 -3095
OTHER CAPITAL ASSETS Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adj.	8456 - 5241 4188 -973	2733 - 2733 - -	25750 - 13123 13083 -456
Total depreciation, capital adj.	-16580	-9409	-18783
Net farm income	65739	-20101	216266

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

	Average Of	Average Of	Average Of
	All Farms	Low 20%	High 20%
Number of Farms	60	12	12
PROFITABILITY (Cost) Net farm income Labor and management earnings Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	65739	-20101	216266
	36896	-36942	147417
	7.0 %	-6.5 %	13.2 %
	7.1 %	-16.9 %	15.1 %
	19.4 %	-34.0 %	34.2 %
	36.3 %	19.1 %	38.6 %
Interest on farm net worth Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	28843	16841	68849
	18385	15376	28428
	32050	26958	43500
	52075	-31684	201194
	740497	487124	1521513
	33689	-47060	172766
	475585	278195	1147481
	268551	93103	588015
Number of Farms	60	12	12
LIQUIDITY (Cash) Net cash farm income Net nonfarm income Family living and taxes Real estate principal payments Cash available for interm. debt Average intermediate debt	80745	26627	175929
	18247	29864	564
	49298	40059	68125
	524	-	-
	49171	16432	108368
	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  Total accrual farm expense  Net accrual operating income  Net nonfarm income  Family living and taxes  Real estate principal payments  Available for intermediate debt  Average intermediate debt	320383	124262	642048
	238063	134954	406999
	82320	-10692	235049
	18247	29864	564
	49298	40059	68125
	524	-	-
	50746	-20888	167487
	70274	35548	72195
Years to turnover interm. debt Expense as a % of income Interest as a % of income	1.4 74 % 6 %	109 % 12 %	0.4 63 % 4 %

<sup>\*\*</sup> Income insufficient to meet debt servicing requirements

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	
ASSETS							
Current Farm Assets	10006	10000	5156	5501	25022	44000	
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	268 98499	87780	60833	193644	278628	
Crops under government loan	90334	83	0//60	00033	193044	2/0020	
Market livestock held for sale	33077	31142	28935	20671	37697	44691	
Other current assets	33077	31142	20933	20071	37097	44091	
Total current farm assets	149817	160846	127843	93543	272124	383249	
Intermediate Farm Assets	143017	100040	12/043	93343	2/2124	303249	
Breeding livestock	38902	39579	31612	29316	31914	35314	
Machinery and equipment	109306	120836	98135	103489	129673	149852	
Other intermediate assets	894	894	70133	103103	2857	2857	
Total intermediate farm assets	149103	161309	129747	132805	164445	188023	
Long-Term Farm Assets	117100	101303	123,11,	152005	101115	100025	
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	
77-1 77-11- (5	400500	454030	204020	205140	606111	055104	
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)

		Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms		60	12	12
(a) Beginning cash balance (farm & nonfa	ırm)	21499	8477	50309
Apparent family living expense	(+) (-) (-) (-) (=)	320356 18247 239611 41348 7928 49716	159041 29864 132414 35717 4342 16432	584489 564 408560 57204 10812 108477
Sale of farm buildings Sale of other farm assets Sale of nonfarm assets Purchase of breeding livestock Purchase of machinery & equip. Purchase of farm land Purchase of farm buildings Purchase of other farm assets	(+) (+) (+) (+) (-) (-) (-) (-) (-) (-)	1321 871 5951 - 1378 7690 25906 26603 7223 4188 5596 -67685	4430 1749 - - - 1869 3325 13696 - 3207 - 13574 -25754	1308 29757 - - 1664 46013 129016 9001 13083 5742 -173454
Principal payments	(+) (-) (-) (-) (=)	99553 2445 81381 22 642 19953	70384 - 60868 - - 9516	216404 2167 157709 109 - 60752
(e) Net change in cash balance (b+c Ending cash balance (farm & nonfarm)	,	1984 23483	194 8671	-4226 46084

# TABLE 7 FINANCIAL GUIDELINES MEASURES, 1998 Southeast Minnesota Farm Business Management Association (Farms sorted by Net Farm Income)

		ge For Farms		ge For v 20 %		ge For gh 20 %
Number of Farms		60		12		12
LIQUIDITY Current ratio Working capital	Beginning 5.71 159066	Ending 5.02 157837	Beginning 3.03 85885	Ending 1.97 46562	Beginning 14.04 361427	Ending 9.65 394923
SOLVENCY (Cost) Farm debt to asset ratio Farm equity to asset ratio Farm debt to equity ratio	Beginning 36 % 64 % 55 %	Ending 36 % 64 % 56 %	Beginning 41 % 59 % 70 %	Ending 45 % 55 % 81 %	Beginning 24 % 76 % 31 %	Ending 25 % 75 % 34 %
PROFITABILITY (Cost) Rate of return on farm assets Rate of return on farm equity Operating profit margin Net farm income	7. 19.	0 % 1 % 4 % 5739	-16. -34.		15. 34.	2 % 1 % 2 % 5266
REPAYMENT CAPACITY Term debt coverage ratio Capital replacement margin	Cash n/a n/a	Accrual n/a n/a	Cash n/a n/a	Accrual n/a n/a	Cash n/a n/a	Accrual n/a n/a
EFFICIENCY Asset turnover rate (cost) Operating expense ratio Depreciation expense ratio Interest expense ratio Net farm income ratio	68. 5. 5.	3 % 6 % 2 % 7 % 5 %	96. 7.	1 % 2 % 6 % 4 % 2 %	59. 2. 4.	6 % 0 % 9 % 4 % 7 %
	LABOR A	ANALYSIS				
	Averag All F		Averag Low 2		Averag High	
Number of Farms		59		12		12
Total unpaid labor hours Total hired labor hours Total labor hours per farm Value of farm production / hour Net farm income / unpaid hour	1 5 50	1006 .354 5360 ).76 5.61	3	3008 150 3158 9.48 5.68	1 6 84	3367 607 5974 1.32

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 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 Cash donations	4382 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 Nonfarm savings & investments	1200 3423
Total other nonfarm expenditures	15638
Total Other Homail expenditures	13030
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 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 Farms
	Beginning	Ending
NONFARM ASSETS (Cost)		
Checking & savings	3752	4484
Stocks & bonds	6116	7001
Other current assets	5339	5900
Furniture & appliances	7580	7615
Nonfarm vehicles	4870	5487
Cash value of life ins.	9988	10784
Retirement accounts	17049	19597
Other intermediate assets	5803	7470
Nonfarm real estate	34798	36023
Other long term assets	14722	15683
Total nonfarm assets	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	Average Of	Average Of
	All Farms	Low 20%	High 20%
Number of fields	49	10 9	10
Number of farms	45		9
Acres Yield per acre (bushel) Operators share of yield % Value per bushel Total product return per acre Miscellaneous income per acre Gross return per acre	170.68	70.88	304.19
	167.30	136.68	175.65
	100.00	100.00	100.00
	1.70	1.70	1.70
	284.41	232.36	298.60
	1.45	0.00	2.27
	285.86	232.36	300.87
Direct expenses per acre Seed Fertilizer Crop chemicals Crop insurance Drying fuel Irrigation energy Fuel & oil Repairs Custom hire Utilities Marketing Operating interest Miscellaneous Total direct expenses per acre Return over direct expenses per acre	34.09 46.53 34.46 4.10 7.73 0.46 8.78 23.90 5.31 0.21 0.22 3.20 0.29 169.30 116.56	32.22 43.27 38.95 6.44 8.99 0.80 12.69 31.01 8.54 0.00 0.00 0.46 197.93 34.43	34.93 37.43 30.81 5.76 6.41 1.08 7.76 15.96 0.17 0.11 0.61 2.12 143.31 157.56
Overhead expenses per acre Hired labor Machinery & bldg leases RE & pers. property taxes Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total listed expenses per acre Net return per acre	5.87	6.22	6.00
	1.35	1.20	3.25
	14.08	7.22	15.94
	3.48	4.42	4.23
	1.33	0.84	1.66
	0.01	0.16	0.00
	33.93	47.86	31.46
	18.01	17.60	11.84
	3.07	3.98	3.03
	81.15	89.50	77.41
	250.45	287.43	220.72
	35.41	-55.07	80.15
Total direct expense per bushel Total listed expense per bushel Net return per bushel Breakeven yield per acre Est. labor hours per acre	1.01	1.45	0.82
	1.50	2.10	1.26
	0.21	-0.40	0.46
	146.47	169.07	128.50
	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 lbr & 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	Average Of	Average Of
	All Farms	Low 20%	High 20%
Number of fields Number of farms	54 44	11 9	 11 9
Acres Yield per acre (bushel) Operators share of yield % Value per bushel Total product return per acre Miscellaneous income per acre Gross return per acre	136.30	88.69	134.11
	167.58	166.04	167.96
	100.00	100.00	100.00
	1.70	1.70	1.70
	284.76	282.27	285.53
	1.94	0.55	8.16
	286.70	282.82	293.69
Direct expenses per acre Seed Fertilizer Crop chemicals Crop insurance Drying fuel Irrigation energy Fuel & oil Repairs Custom hire Land rent Utilities Marketing Operating interest Miscellaneous Total direct expenses per acre Return over direct expenses per acre	34.79 51.60 35.98 5.12 7.88 0.18 8.45 20.33 6.88 92.62 0.26 0.20 3.83 0.78 268.89 17.82	36.54 50.23 39.27 8.07 13.14 1.37 8.30 31.84 13.44 103.83 0.00 0.00 6.91 1.51 314.45 -31.63	33.14 35.52 34.64 8.25 3.24 0.00 6.11 12.66 2.83 81.63 0.00 0.00 3.20 1.84 223.06 70.63
Overhead expenses per acre Hired labor Machinery & bldg leases Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total listed expenses per acre Net return per acre	5.40	4.87	2.69
	4.94	2.16	5.30
	3.20	3.63	4.38
	1.48	1.53	1.80
	0.02	0.13	0.00
	6.95	14.88	9.27
	13.45	12.01	15.62
	3.39	2.72	3.67
	38.82	41.93	42.73
	307.71	356.38	265.79
	-21.00	-73.56	27.90
Total direct expense per bushel Total listed expense per bushel Net return per bushel Breakeven yield per acre Est. labor hours per acre	1.60	1.89	1.33
	1.84	2.15	1.58
	-0.13	-0.44	0.17
	179.94	209.31	151.55
	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	Average Of	Average Of
	All Farms	Low 20%	High 20%
Number of fields	37	7	
Number of farms	35	7	
Acres Yield per acre (bushel) Operators share of yield % Value per bushel Total product return per acre Miscellaneous income per acre Gross return per acre	120.26	105.64	90.20
	50.24	42.54	59.27
	100.00	100.00	100.00
	5.40	5.40	5.40
	271.32	229.71	320.05
	1.14	0.00	0.60
	272.46	229.71	320.65
Direct expenses per acre Seed Fertilizer Crop chemicals Crop insurance Drying fuel Irrigation energy Fuel & oil Repairs Custom hire Machinery & bldg leases Marketing Operating interest Miscellaneous Total direct expenses per acre Return over direct expenses per acre	19.87 4.08 31.05 7.04 0.03 0.29 6.38 17.28 3.92 0.03 0.16 2.05 0.25 92.44 180.02	24.25 0.78 33.40 9.50 0.00 0.00 5.96 25.51 7.72 0.00 0.44 2.89 0.48 110.94 118.77	21.30 0.00 23.76 6.37 0.13 0.00 6.45 18.93 5.56 0.00 0.65 1.64 0.00 84.77 235.88
Overhead expenses per acre Hired labor Machinery & bldg leases RE & pers. property taxes Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total listed expenses per acre Net return per acre	3.55	1.88	6.43
	1.21	0.00	4.31
	14.79	15.26	12.66
	3.08	3.46	3.81
	0.90	1.07	1.19
	34.28	22.23	40.87
	14.04	24.92	8.66
	2.72	2.58	2.12
	74.57	71.40	80.05
	167.01	182.35	164.82
	105.45	47.36	155.83
Total direct expense per bushel Total listed expense per bushel Net return per bushel Breakeven yield per acre Est. labor hours per acre	1.84	2.61	1.43
	3.32	4.29	2.78
	2.10	1.11	2.63
	30.72	33.77	30.41
	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	Average Of	Average Of
	All Farms	Low 20%	High 20%
Number of fields	41	9	
Number of farms	37	7	
Acres Yield per acre (bushel) Operators share of yield % Value per bushel Total product return per acre Miscellaneous income per acre Gross return per acre	140.82	79.27	70.69
	50.34	45.93	52.82
	100.00	100.00	100.00
	5.40	5.40	5.40
	271.86	248.00	285.24
	1.94	1.85	9.41
	273.80	249.85	294.65
Direct expenses per acre Seed Fertilizer Crop chemicals Crop insurance Drying fuel Irrigation energy Fuel & oil Repairs Custom hire Land rent Marketing Operating interest Miscellaneous Total direct expenses per acre Return over direct expenses per acre	18.76 6.00 32.75 6.55 0.06 0.15 6.61 14.69 5.98 96.52 0.16 3.52 0.28 192.04 81.75	22.13 0.00 36.89 8.67 0.00 0.00 8.01 33.84 2.92 98.68 0.00 3.59 0.02 214.74 35.11	20.11 0.00 25.18 3.75 0.01 0.00 7.93 19.43 2.67 85.99 0.00 0.20 0.00 165.26 129.38
Overhead expenses per acre Hired labor Machinery & bldg leases Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total listed expenses per acre Net return per acre	4.17 4.99 3.00 0.97 5.57 10.18 3.53 32.41 224.46 49.34	0.90 0.00 3.35 1.29 6.84 9.37 4.12 25.87 240.61 9.24	0.16 0.29 1.12 0.74 2.67 5.84 1.30 12.12 177.38
Total direct expense per bushel Total listed expense per bushel Net return per bushel Breakeven yield per acre Est. labor hours per acre	3.81	4.68	3.13
	4.46	5.24	3.36
	0.98	0.20	2.22
	41.21	44.22	31.11
	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 Number of farms	8
Acres Yield per acre (bushel) Operators share of yield % Value per bushel Total product return per acre Miscellaneous income per acre Gross return per acre	18.64 56.28 100.00 1.20 67.54 40.58 108.12
Direct expenses per acre  Seed Fertilizer Crop chemicals Crop insurance Irrigation energy Fuel & oil Repairs Custom hire Operating interest Miscellaneous Total direct expenses per acre Return over direct expenses per acre	11.82 1.51 1.33 0.41 0.46 7.86 24.43 7.19 3.06 2.83 60.92 47.20
Overhead expenses per acre Hired labor Machinery & bldg leases RE & pers. property taxes Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total listed expenses per acre Net return per acre	18.76 0.63 8.53 5.15 1.04 32.02 20.11 8.71 94.94 155.86 -47.74
Total direct expense per bushel Total listed expense per bushel Net return per bushel Breakeven yield per acre Est. labor hours per acre	1.08 2.77 -0.85 96.07 5.70
Net return including govt. payments Lbr & mgt charge per acre Net return over lbr & mgt	-18.68 17.46 -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 All Farms
Number of fields Number of farms	10
Acres Yield per acre (bushel) Operators share of yield % Value per bushel Total product return per acre Miscellaneous income per acre Gross return per acre	19.57 54.14 100.00 1.20 64.97 63.43 128.40
Direct expenses per acre  Seed Fertilizer Crop chemicals Crop insurance Fuel & oil Repairs Custom hire Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct expenses per acre	9.08 1.69 3.18 0.03 7.05 17.83 9.61 88.34 2.48 2.48 141.78 -13.38
Overhead expenses per acre Hired labor Machinery & bldg leases Farm insurance Utilities Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total listed expenses per acre Net return per acre	10.81 0.02 4.73 1.29 9.34 11.88 7.89 45.95 187.73 -59.33
Total direct expense per bushel Total listed expense per bushel Net return per bushel Breakeven yield per acre Est. labor hours per acre	2.62 3.47 -1.10 103.58 3.38
Net return including govt. payments Lbr & mgt charge per acre Net return over lbr & mgt	-27.88 15.27 -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	Average Of	Average Of
	All Farms	Low 20%	High 20%
Number of fields	29	6	7
Number of farms	28	6	6
Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Miscellaneous income per acre Gross return per acre	66.95	76.29	66.78
	3.94	3.04	5.24
	100.00	100.00	100.00
	80.00	80.00	80.00
	315.16	243.06	419.09
	0.00	0.00	0.00
	315.16	243.06	419.09
Direct expenses per acre Seed Fertilizer Crop chemicals Crop insurance Drying fuel Irrigation energy Fuel & oil Repairs Custom hire Hired labor Operating interest Miscellaneous Total direct expenses per acre Return over direct expenses per acre	13.17 13.63 2.14 0.02 0.01 0.39 10.27 42.64 10.82 0.01 1.96 1.18 96.24 218.91	11.22 8.55 4.38 0.00 0.00 0.00 10.89 41.79 21.90 0.00 1.19 1.61 101.52 141.54	11.60 15.57 4.25 0.00 0.00 1.88 10.85 47.29 13.69 0.00 6.01 1.30 112.45 306.64
Overhead expenses per acre Hired labor Machinery & bldg leases RE & pers. property taxes Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total listed expenses per acre Net return per acre	13.90	3.89	20.84
	0.93	1.29	2.47
	11.42	15.46	10.05
	2.78	1.94	3.71
	1.05	0.69	1.54
	0.12	0.00	0.56
	26.10	32.00	53.46
	23.40	22.70	22.25
	3.15	3.34	4.87
	82.85	81.30	119.74
	179.09	182.82	232.19
	136.07	60.24	186.89
Total direct expense per ton Total listed expense per ton Net return per ton Breakeven yield per acre Est. labor hours per acre	24.43	33.41	21.47
	45.46	60.17	44.32
	34.54	19.83	35.68
	2.24	2.29	2.90
	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 Number of farms	25 22
Acres Yield per acre (ton) Operators share of yield % Value per ton Total product return per acre Miscellaneous income per acre Gross return per acre	45.61 4.66 100.00 80.00 373.08 0.00 373.08
Direct expenses per acre Seed Fertilizer Crop chemicals Crop insurance Drying fuel Irrigation energy Fuel & oil Repairs Custom hire Land rent Operating interest Miscellaneous Total direct expenses per acre Return over direct expenses per acre	15.00 16.27 3.75 0.01 0.01 0.16 10.97 43.60 10.99 88.58 1.73 1.60 192.66 180.42
Overhead expenses per acre Hired labor Machinery & bldg leases Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses per acre Total listed expenses per acre Net return per acre	17.77 6.70 3.32 1.53 0.18 7.45 30.62 5.95 73.51 266.18 106.91
Total direct expense per ton Total listed expense per ton Net return per ton Breakeven yield per acre Est. labor hours per acre	41.31 57.08 22.92 3.33 7.03
Net return including govt. payments Lbr & mgt charge per acre Net return over lbr & mgt	131.73 30.61 101.12

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

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

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

## OATLAGE ON OWNED LAND

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

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

#### OATLAGE ON CASH RENTED LAND

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

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

#### PASTURE ON OWNED LAND

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

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

#### PEAS ON OWNED LAND

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

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

#### SWEET CORN ON CASH RENTED LAND

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

## 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 Number of farms	6
Acres Yield per acre Operators share of yield % Value per unit Total product return per acre Miscellaneous income per acre Gross return per acre	33.53 71.24 100.00 1.00 71.24 0.00 71.24
Direct expenses per acre Crop chemicals Operating interest Total direct expenses per acre Return over direct expenses per acre	0.10 1.49 1.59 69.65
Overhead expenses per acre RE & pers. property taxes Farm insurance Utilities Interest Miscellaneous Total overhead expenses per acre Total listed expenses per acre Net return per acre	8.87 1.70 0.08 22.04 1.54 34.23 35.82 35.42
Total direct expense per unit Total listed expense per unit Net return per unit Breakeven yield per acre Est. labor hours per acre	0.02 0.50 0.50 35.82 0.10
Lbr & mgt charge per acre Net return over 1br & mgt	1.31 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)

#### Dairy -- Average per Cow

	Average For All Farms		Average For Low 20%		Average For High 20%	
Number of farms		28		6		6
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (lb) Milk used in home (lb) Milk fed to animals (lb) Dairy Calves sold (hd) Transferred out (hd) Cull sales (hd) Butchered (hd) Less purchased (hd) Less purchased (hd) Inventory change (hd) Total production Other income Gross return	19986.04 2.00 38.07 0.04 0.91 0.35 0.00 -0.07 -0.35 0.01	3095.97 0.20 3.81 2.78 68.49 151.70 0.55 -74.32 -359.95 23.06 2912.27 6.48 2918.75	15758.16 1.23 6.86 0.00 0.97 0.33 0.01 -0.07 -0.35 -0.00	2372.28 0.12 0.69 0.00 72.62 118.42 1.98 -74.27 -351.11 -13.44 2127.28 7.47 2134.76	23439.62 0.00 0.00 0.00 0.93 0.27 0.00 -0.01 -0.36 0.06	3731.02 0.00 0.00 0.00 70.04 106.69 0.00 -20.41 -364.85 64.21 3586.70 3593.85
Direct expenses Barley (bu.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass & Other (lb.) Haylage, 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	0.24 101.14 12194.3306.09 143.47 6823.66 0.73 0.36 453.12 447.73 26.59 4083.63	0.48 209.67 108.23 144.69 4.78 136.97 0.81 3.63 9.06 34.12 266 505.30 31.52 97.81 203.66 104.90 32.09 84.96 6.02 29.14 5.68 1769.83	0.00 107.48 18614.22 2026.55 718.67 5683.56 0.27 0.53 0.00 0.00 2876.45	0.00 222.10 166.87 81.06 24.44 113.67 0.33 5.35 0.00 0.00 492.85 35.58 117.15 185.73 11.64 106.32 59.38 0.00 0.00 30.94 20.58	1.15 107.77 11277.88 3178.90 0.00 10280.86 0.00 0.45 0.00 0.00 4014.85	2.26 226.31 101.50 137.27 0.00 205.62 0.00 0.00 0.00 524.56 37.82 100.52 245.04 6.32 113.97 17.11 0.00 10.24 14.48 0.00
Overhead expenses Hired labor Machinery & bldg leases RE & pers. property taxes Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses Total listed expenses Net return		131.43 25.66 13.66 16.64 59.36 0.26 53.21 67.43 24.86 392.50 2162.33 756.42		147.91 0.00 14.66 21.06 69.85 0.00 51.46 24.01 17.83 346.78 2020.78 113.98		115.64 0.85 15.25 13.96 48.04 1.20 15.78 58.79 16.79 286.30 2033.81 1560.04
Est. labor hours per unit Labor & management charge Net return over lbr & mgt		54.31 242.22 514.20		75.87 434.49 -320.51		52.80 279.26 1280.78
Other Information Avg. number of Cows Milk 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.		92.8 20026 4.2 34.6 110.8 2.1 5.79 1160.41 15.49		60.8 15766 4.1 32.6 95.9 1.8 7.02 1106.67 15.05		92.3 23440 3.8 27.1 110.1 2.8 5.13 1202.02 15.92

#### 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

	Average For All Farms		Average For Low 20%		Average For High 20%	
Number of farms		27		5		5
	Quantity	Value	Quantity	Value	Quantity	Value
Replacements sold (hd) Transferred out (hd) Butchered (hd) Less purchased (hd) Less transferred in (hd) Inventory change (hd) Total production (hd) Other income Gross return	0.43 0.57 0.00 -0.15 -1.19 0.12 0.00	79.26 501.25 0.71 -138.94 -89.74 123.17 475.70 0.00 475.70	0.61 0.39 0.01 -0.06 -1.19 0.04	138.84 386.67 3.73 -48.76 -89.20 -45.79 345.50 345.50	0.24 0.76 0.00 -0.34 -1.18 0.32 0.00	119.09 643.61 0.00 -127.86 -90.87 230.94 774.90 0.00 774.90
Direct expenses Barley (bu.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass & Other (lb.) Haylage, Alfalfa (lb.) Haylage, Grass & Other (lb.) Oatlage (lb.) Oats (bu.) Pasture (aum) Rye Silage (lb.) Sorghum Silage (lb.) Stover (lb.) Milk (lb.) Protein Vit Minerals (lb.) Breeding fees Veterinary Livestock supplies Fuel & oil Repairs Custom hire Marketing Operating interest Total direct expenses Return over direct expense	0.18 24.19 5071.73 1721.18 345.19 3081.77 93.21 2.15 0.58 75.59 65.86 15.12 670.47	0.27 50.38 43.12 71.46 11.13 62.12 62.12 0.65 2.58 4.66 1.52 0.32 0.33 1.51 87.73 4.31 15.33 1.51 29.98 7.26 1.18 415.65 60.05	0.00 34.17 5898.67 2357.33 224.00 4808.00 0.00 0.00 0.51 0.00 0.00 0.00 752.27	0.00 71.75 53.09 107.74 7.28 96.16 0.00 0.00 3.83 5.09 0.00 0.00 0.00 0.00 114.25 6.04 20.38 14.11 3.32 52.56 8.07 1.56 0.53 565.75 -220.26	0.00 23.73 5630.03 1135.84 318.77 1605.46 0.00 0.00 1.80 1.43 0.00 0.00 0.00 0.00 0.00	0.00 47.27 48.45 45.99 9.91 35.36 0.00 0.00 2.16 9.27 0.00 0.00 139.20 7.38 7.68 20.50 4.01 16.80 5.11 0.97 400.18 374.72
Overhead expenses Hired labor Machinery & bldg leases RE & pers. property taxes Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Misscellaneous Total overhead expenses Total listed expenses Net return		28.65 14.88 4.32 5.01 13.36 0.06 15.59 20.92 7.43 110.22 525.87 -50.17		16.81 17.31 5.10 4.12 13.33 0.00 9.79 17.16 2.71 86.32 652.07 -306.57		37.42 16.38 3.48 4.09 9.58 0.00 13.02 16.87 6.63 107.47 507.66 267.25
Est. labor hours per unit Labor & management charge Net return over lbr & mgt		14.65 64.10 -114.27		11.59 74.67 -381.24		15.57 56.17 211.08
Other Information No. purchased or trans in Number sold or trans out Average number of head Percentage death loss Feed cost per average head Feed cost/head sold+trans Avg. purchase weight Avg. sales weight Avg. purch price / head		98 73 99 8.0 251.65 342.04 - - 936.10		94 75 111 6.8 310.26 459.18 0 795.00		89 59 92 6.8 214.13 337.63 0 378.42
Avg. sales price / head		186.25		226.37		498.49

## 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 Cow

	Average For All Farms 27		Average For Low 20%		Average For High 20%	
Number of farms	27		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (lb) Milk used in home (lb) Milk fed to animals (lb) Dairy Calves sold (hd) Transferred out (hd) Cull sales (hd) Butchered (hd) Less purchased (hd) Less transferred in (hd) Inventory change (hd) Total production Other income Gross return	19957.20 2.12 40.30 0.34 1.43 0.30 0.00 -0.16 -1.33 0.12	3095.03 0.21 4.03 63.71 475.41 149.97 1.15 -157.77 -453.20 120.00 3298.55 6.86 3305.41	14356.26 0.00 0.00 0.29 1.40 0.36 0.00 -0.10 -1.34 0.06	2164.47 0.00 0.00 74.41 464.89 147.93 0.00 -91.30 -452.57 30.25 2388.09 7.52 2345.60	Quantity 23920.32 0.00 0.00 0.41 1.48 0.31 0.01 -0.01 -1.41 0.11	3715.60 0.00 72.54 517.01 141.00 -8.26 -496.82 176.41 117.48 12.58 4130.06
Direct expenses Barley (bu.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass & Other (lb.) Haylage, Alfalfa (lb.) Haylage, Arass & Other (lb.) Oatlage (lb.) Oats (bu.) Pasture (aum) Rye Silage (lb.) Sorghum Silage (lb.) Stover (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	0.41 126.51 15730.91 4662.76 429.36 9700.96 171.03 2.50 0.85 540.77 36.65 52.94 40.30 4405.95	0.73 262.46 137.93 198.36 14.01 194.94 0.52 2.94 7.59 10.82 0.26 4.03 590.91 36.84 1220.09 127.16 31.75 89.957 29.12 7.01 2100.63 1204.78	0.00 151.54 16757.13 5089.89 1898.88 8528.09 0.00 7.54 1.80 0.00 0.00 0.00 0.00 2705.27	0.00 312.54 149.78 203.60 62.86 170.56 0.00 9.04 17.14 0.00 0.00 0.00 414.41 43.53 108.86 168.46 14.93 117.60 28.55 0.00 0.00 57.34 31.56	2.53 121.50 17562.37 6432.54 0.00 9000.48 1334.82 584.78 2.73 0.00 0.00 0.00 4505.45	4.74 255.15 158.06 256.79 0.00 180.01 26.70 3.43 21.29 0.00 0.00 0.00 0.00 584.29 63.28 130.75 227.47 10.23 133.37 30.73 0.00 18.01 25.84 0.00 19.
Overhead expenses Hired labor Machinery & bldg leases RE & pers. property taxes Farm insurance Utilities Dues & professional fees Interest Mach & bldg depreciation Miscellaneous Total overhead expenses Total listed expenses Net return		159.03 39.12 17.76 21.04 70.18 0.32 62.85 83.34 31.43 485.07 2585.70 719.70		77.34 0.00 19.61 14.30 64.86 0.00 23.66 44.78 18.40 262.95 2173.70 171.90		253.53 1.87 20.24 18.70 68.86 2.49 20.74 93.24 34.32 513.98 2648.23 1481.83
Est. labor hours per unit Labor & management charge Net return over 1br & mgt		65.44 296.25 423.45		80.15 499.04 -327.14		84.39 346.47 1135.36
Other Information Avg. number of Cows Milk 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.		91.0 20000 4.3 33.7 110.8 7.15 1429.16 15.51		46.3 14356 4.1 35.9 101.9 1.3 9.33 1339.92 15.08		62.9 23920 3.7 30.8 101.2 2.9 6.25 1494.55 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

	Average For All Farms		Average For Low 20%		Average For High 20%	
Number of farms	27		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value
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 Other income Gross return	99.79 0.20 0.00 0.01 0.00 -0.00 -0.01	15.48 0.02 0.32 2.38 0.75 -0.79 -2.27 0.60 16.49 0.03 16.53	100.00 0.00 0.00 0.01 0.00 -0.00 -0.01	15.08 0.00 0.52 3.24 1.03 -0.64 -3.15 0.21 16.29 0.05 16.34	100.00 0.00 0.00 0.01 0.00 -0.00 -0.01	15.53 0.00 0.30 2.16 0.59 -0.03 -2.08 0.74 17.21 0.05 17.27
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.) 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	0.63 78.66 23.31 2.15 48.51 0.86 0.01 0.00 2.70 0.20 22.03	1.31 0.69 0.99 0.07 0.07 0.02 0.01 0.05 0.05 0.153 1.10 0.64 0.164 0.453 0.045 0.015 0.015	1.06 116.72 35.45 13.23 59.40 0.00 0.05 0.01 0.01 0.00 18.84	2.18 1.04 1.42 0.44 1.19 0.00 0.00 0.00 0.00 0.30 0.76 1.17 0.82 0.20 0.00 0.40 0.42	0.51 73.42 26.89 0.00 37.63 5.58 0.01 0.01 0.00 0.00	1.07 0.66 1.07 0.75 0.01 0.01 0.09 0.00 0.265 0.95 0.13 0.01 0.01 0.01 0.00 0.00 0.35 0.00 0.35 0.00 0.00 0.00
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		0.80 0.20 0.09 0.11 0.35 0.31 0.42 0.16 2.43 12.93 3.60		0.54 0.00 0.14 0.10 0.45 0.16 0.31 0.13 1.83 15.14		1.06 0.01 0.08 0.08 0.29 0.09 0.39 0.14 2.15 11.07 6.19
Est. labor hours per unit Labor & management charge Net return over lbr & mgt		0.33 1.48 2.12		0.56 3.48 -2.28		0.35 1.45 4.75
Other Information Avg. number of Cows Milk 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.		91.0 20000 4.3 33.7 110.8 7.15 1429.16 15.51		46.3 14356 4.1 35.9 101.9 1.3 9.33 1339.92 15.08		62.9 23920 3.7 30.8 101.2 2.9 6.25 1494.55 15.53

## Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

## Hogs, Farrow To Finish -- Average per Litter

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

## Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

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

Avera	age	For
All	Fai	cms
		—

Number of farms		6
	Quantity	Value
Raised Hogs sold (lb) Cull sales (lb) Butchered (lb) Less purchased (lb) Inventory change (lb) Total production (lb) Other income Gross return	97.13 5.04 0.12 -0.48 -1.81 100.00	32.01 1.19 0.02 -0.39 -10.37 22.47 0.00 22.47
Direct expenses  Corn (bu.) Oats (bu.) Complete Ration (lb.) Protein Vit Minerals (lb.) Veterinary Livestock supplies Fuel & oil Repairs Custom hire Marketing Operating interest Total direct expenses Return over direct expense	6.15 0.07 3.74 79.49	12.91 0.08 0.99 13.53 0.89 0.64 0.42 1.52 0.25 0.13 0.68 32.04 -9.57
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		0.22 0.08 0.62 0.60 1.15 2.09 1.44 0.50 6.69 38.72 -16.26
Est. labor hours per unit Labor & management charge Net return over lbr & mgt		0.90 9.35 -25.60
Other Information Average number of sows Litters farrowed Litters per sow Litters per crate Pigs born per litter Pigs weaned per litter Pigs weaned per sow Number sold per litter Lbs of feed / lb of gain Feed cost / cwt. of gain Feed cost per litter Avg wgt/Raised Hog sold Avg price / cwt		65.8 113 1.72 5.22 10.23 8.17 14.03 8.16 3.79 27.51 579.79 251 32.96

## Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

## Beef Cow-Calf -- Average per Cow

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

## Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

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

	Average For All Farms	
Number of farms		3
	Quantity	Value
Finish Beef sold (lb) Transferred out (lb) Butchered (lb) Less purchased (lb) Less transferred in (lb) Inventory change (lb) Total production (lb) Other income Gross return	1039.77 35.44 4.67 -348.22 -113.15 12.99 631.50	588.77 21.01 2.73 -240.84 -75.50 -13.61 282.56 0.00 282.56
Direct expenses Barley (bu.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass & Other (lb.) Haylage, Alfalfa (lb.) Oatlage (lb.) Oats (bu.) Stover (lb.) Protein Vit Minerals (lb.) Breeding fees Veterinary Livestock supplies Fuel & oil Repairs Marketing Operating interest Total direct expenses Return over direct expense	0.71 67.84 4003.33 311.40 380.62 1077.26 210.40 0.84 210.40 273.05	1.27 138.29 34.24 12.44 12.49 21.55 1.47 0.87 1.05 36.94 1.20 5.10 6.91 4.13 13.83 3.83 0.37 295.98 -13.42
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		1.50 1.68 0.72 2.15 6.21 4.96 9.64 2.19 29.06 325.05 -42.48
Est. labor hours per unit Labor & management charge Net return over lbr & mgt		6.00 50.99 -93.47
Other Information No. purchased or trans in Number sold or trans out Percentage death loss Avg. daily gain (lbs) Lbs of conc / lb of gain Lbs of feed / lb of gain Feed cost per cwt of gain Feed cost per head Average purchase weight Average sales weight Avg purch price / cwt Avg sales price / cwt		107 101 0.9 1.79 6.51 10.94 41.27 260.62 547 1280 69.16 56.63

#### Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

## Beef, Finish Beef Calves -- Average per Cwt Produced

		ge For Farms
Number of farms	8	3
	Quantity	Value
Finish Beef sold (lb) Transferred out (lb) Butchered (lb) Less purchased (lb) Less transferred in (lb) Inventory change (lb) Total production (lb) Other income Gross return	164.65 5.61 0.74 -55.14 -17.92 2.06 100.00	93.23 3.33 0.43 -38.14 -11.96 -2.16 44.74 0.00 44.74
Direct expenses Barley (bu.) Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass & Other (lb.) Haylage, Alfalfa (lb.) Oatlage (lb.) Oats (bu.) Stover (lb.) Protein Vit Minerals (lb.) Breeding fees Veterinary Livestock supplies Fuel & oil Repairs Marketing Operating interest Total direct expenses Return over direct expense	0.11 10.74 633.94 49.31 60.27 170.59 33.32 0.13 33.32 43.24	0.20 21.90 5.42 1.97 1.98 3.41 0.23 0.14 0.17 5.85 0.19 0.65 2.19 0.65 46.87 -2.12
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		0.24 0.27 0.11 0.34 0.98 0.79 1.53 0.35 4.60 51.47
Est. labor hours per unit Labor & management charge Net return over lbr & mgt		0.95 8.07 -14.80
Other Information No. purchased or trans in Number sold or trans out Percentage death loss Avg. daily gain (lbs) Lbs of conc / lb of gain Lbs of feed / lb of gain Feed cost per cwt of gain Feed cost per head Average purchase weight Average sales weight Avg purch price / cwt Avg sales price / cwt		107 101 0.9 1.79 6.51 10.94 41.27 260.62 547 1280 69.16 56.63

## Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

## Dairy Steers -- Average per Head

		ge For Farms
Number of farms		9
	Quantity	Value
Dairy Steers sold (lb) Butchered (lb) Less purchased (lb) Less transferred in (lb) Inventory change (lb) Total production (lb) Other income Gross return	1127.58 10.76 -254.30 -106.14 50.04 827.94	623.78 5.38 -172.33 -58.18 -61.13 337.52 0.00 337.52
Direct expenses  Corn (bu.)  Corn Silage (lb.)  Hay, Alfalfa (lb.)  Hay, Grass & Other (lb.)  Haylage, Alfalfa (lb.)  Oatlage (lb.)  Pasture (aum)  Protein Vit Minerals (lb.)  Veterinary  Livestock supplies  Fuel & oil  Repairs  Custom hire  Marketing  Operating interest  Total direct expenses  Return over direct expense	111.06 3049.62 214.60 161.36 1495.23 182.87 0.47 357.13	233.22 23.09 9.27 5.24 29.90 1.28 4.66 59.14 12.29 4.12 21.36 0.78 2.50 2.01 415.69 -78.17
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		19.77 3.35 4.21 4.70 11.04 6.32 9.89 7.45 66.73 482.42 -144.90
Est. labor hours per unit Labor & management charge Net return over lbr & mgt		8.17 52.72 -197.62
Other Information No. purchased or trans in Number sold or trans out Percentage death loss Avg. daily gain (lbs) Lbs of conc / lb of gain Lbs of feed / lb of gain Feed cost per cwt of gain Feed cost per head Average purchase weight Average sales weight Avg purch price / head Avg sales price / cwt		39 40 2.6 1.93 7.85 10.51 44.18 365.80 372 1165 252.29 55.32

## Livestock Enterprise Analysis, 1998 Southeast Minnesota Farm Business Management Association

## Dairy Steers -- Average per Cwt Produced

Avera	age	For
All	Fai	cms
	^	

Number of farms		9
	Quantity	Value
Dairy Steers sold (lb) Butchered (lb) Less purchased (lb) Less transferred in (lb) Inventory change (lb) Total production (lb) Other income Gross return	136.19 1.30 -30.71 -12.82 6.04 100.00	75.34 0.65 -20.81 -7.03 -7.38 40.77 0.00 40.77
Direct expenses Corn (bu.) Corn Silage (lb.) Hay, Alfalfa (lb.) Hay, Grass & Other (lb.) Haylage, Alfalfa (lb.) Oatlage (lb.) Pasture (aum) Protein Vit Minerals (lb.) Veterinary Livestock supplies Fuel & oil Repairs Custom hire Marketing Operating interest Total direct expenses Return over direct expense	13.41 368.34 25.92 19.49 180.60 22.09 0.06 43.14	28.17 2.79 1.12 0.63 3.61 0.15 0.50 7.14 1.57 0.74 0.50 2.58 0.09 0.30 0.24 50.21
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		2.39 0.40 0.51 0.57 1.33 0.76 1.19 0.90 8.06 58.27 -17.50
Est. labor hours per unit Labor & management charge Net return over lbr & mgt		0.99 6.37 -23.87
Other Information No. purchased or trans in Number sold or trans out Percentage death loss Avg. daily gain (lbs) Lbs of conc / lb of gain Lbs of feed / lb of gain Feed cost per cwt of gain Feed cost per head Average purchase weight Avg purch price / head Avg sales price / cwt		39 40 2.6 1.93 7.85 10.51 44.18 365.80 372 1165 252.29 55.32

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

Item	Beginning Inventory Price	Average Feed Price/Year	Harvest Price	Ending Inventory 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

Pasture Rates	Tillable Pasture or Green Crop		Nontillable or Pe	ermanent Pasture
Daimanna hall haafaan	Per Month	Per Day	Per Month	Per Day
Dairy cow, bull, beef cow, feeder cattle & horses	\$10.00	\$.333	\$7.00	\$.233
Young cattle	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/bu.

Homegrown seed - oats: \$2.50/bu.

#### 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.

CPI-U
<u>1982-84=100</u>
72.6
82.4
90.9
96.5
99.6
103.9
107.6
109.6
113.6
118.3
124.0
130.7
136.2
140.3
144.5
148.2
152.4
156.9
160.6
163.1

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

Row	Items	1979	1980	1981	1982	1983	1984	1985	1986	1987
1	Number of Farms	83	86	63	54	53	57	59	61	62
	Farm Income Statement									
2	Gross Cash Farm Income	141,032	161,148	160,457	202,185	178,365	187,562	197,842	190,124	190,481
3	Total Cash Farm Expense	92,351	111,196	112,444	150,932	116,369	144,048	151,162	141,090	136,802
4	Inventory Change	*	*	*	*	7,628	9,584	415	1,833	9,817
5	Depr. & Cap. Adj.	*	*	*	*	(35,150)	(32,373)	(30,386)	(25,685)	(18,298)
6	Net Farm Income	35,061	40,853	26,117	24,553	34,473	20,724	16,709	25,180	45,197
7	Net Farm Income (Constant \$)	78,767	80,863	46,861	41,498	56,451	32,532	25,327	37,471	64,891
	Profitability and Liquidity Analysis									
8	Labor and Management Earnin Rate of return on:	21,781	30,560	15,765	9,531	22,365	8,630	6,630	16,418	34,905
9	Average Assets (%)	10	12	7	7	9	6	5	8	12
10	Average Equity (%)	11	13	6	5	8	1	-1	5	15
11	Operating Profit Margin (%)	31	34	25	26	20	13	10	16	22
12	Asset Turnover Rate (%)	34	35	28	26	46	45	50	50	54
13	Value of Farm Production	101,555	124,860	113,376	138,358	170,219	181,517	190,882	173,619	194,420
14	Farm Interest Paid	8,414	13,555	14,271	21,759	17,680	19,863	22,207	21,168	16,542
15	Cash Expense as a % of Incom	65	69	70	75	65	77	76	74	72
	Interest Paid as a % of:	00	00			00		, ,		
16	Gross Cash Income	6	8	9	11	10	11	11	11	9
17	Total Cash Expenses	9	12	13	14	15	14	15	15	12
18	Yrs. to T/O Non R.E. Debt	*	*	*	*	0.5	0.5	1.9	3.6	4.1
	Comparative Financial Statement (C	net Rasis)								
19	No. of Sole Proprietors	46	28	35	42	49	41	40	46	49
20	Total Ending Assets	317,417	364,094	411,875	533,714	407,995	391,624	370,853	320,601	326,849
		95,237	,	173,263	240,207	163,744	192,733	201,572	170,318	162,013
21 22	Total Ending Liabilities	222,180	137,132	238,612	,	244,251	192,733	169,281	150,283	,
	Ending Net Worth	25	226,962 28	230,012	293,507 41	32	42	50	45	164,836 38
23 24	Ending Farm C+I Debt to Asset Ending Total Debt to Asset %	30	38	42	45	40	42	50 54	53	50
27	Enailing Total Debt to 7.53et 70	00	00	72	40	40	45	04	00	00
	Acreage Information									
25	Total Acres Owned	212	248	247	257	*	264	288	264	268
26	Total Crop Acres Farmed	307	331	327	347	*	363	423	376	365
27	Crop Acres Owned	180	207	204	219	*	210	231	198	225
28	Crop Acres Cash Rented	*	*	*	*	*	140	180	157	123
29	Crop Acres Share Rented	*	*	*	*	*	13	12	21	18
	Crop Yields									
30	Corn per acre	119	106	127	122	100	127	125	140	143
31	Soybean per acre	39	35	37	39	39	39	37	41	44
	Crop Prices Received (cash sales)									
32	Corn per Bushel	*	2.58	2.71	2.41	*	2.99	2.44	2.02	1.77
33	Soybeans per Bushel	*	6.44	6.79	5.80	*	7.20	5.06	5.07	4.95
	Household Information									
34	No. Farms Reporting HseHld Ir	35	38	22	23	13	14	15	15	14
35	Average Family Size	4.0	4.0	4.0	4.0	*	3.5	3.4	3.5	3.5
36	Total Family Use of Cash	29,758	25,377	31,609	26,669	26,003	24,531	27,308	26,945	35,772
	,	,	*	*	,	20,000	,	,	,	,
37	Average Net Nonfarm Income	5,160	6,284	7,188	7,749	*	8,108	6,065	8,429	8,788

<sup>\*</sup> Not available.

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	
10 11 20 52 187,789 15,543 72	10 10 19 50 199,804 15,151 72	12 15 23 53 215,976 12,963 67	9 9 19 46 200,904 13,983 68	5 3 11 42 198,818 12,509 70	6 5 14 38 184,576 13,339 73	8 9 20 40 201,239 14,175 74	9 10 22 40 239,151 15,370 74	8 8 21 39 242,598 15,571 73	9 9 24 37 256,273 18,957 77	7 7 7 19 36 268,551 17,964 75	9 10 11 12 13 14
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 Le Sueur Nicollet Rice Scott	Goodhue Houston Olmsted Wabasha Winona	Dodge Freeborn Mower Steele Waseca
Number of farms	58	12	38	8
Income Statement Gross cash farm income Total cash farm expense Net cash farm income Inventory change Depreciation and capital adjustment Net farm income	324253	448251	291719	292795
	242045	337416	221196	198020
	82208	110835	70522	94775
	2796	18661	3856	-26039
	-17070	-29633	-13666	-14394
	67934	99862	60713	54342
Profitability (cost) Labor and management earnings Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	38146	46024	38590	24220
	7 %	7 %	8 %	5 %
	7 %	7 %	8 %	4 %
	20 %	23 %	19 %	18 %
	36 %	31 %	41 %	28 %
Liquidity Expense as a percent of income Interest as a percent of income	74 %	72 %	75 %	74 %
	6 %	5 %	6 %	8 %
Solvency (cost) Number of sole proprietors Ending farm assets Ending farm liabilities Ending total assets Ending total liabilities Ending net worth Net worth change Ending farm debt to asset ratio Beg total debt to asset ratio End total debt to asset ratio	43	7	31	5
	624565	1065513	530310	591624
	254704	436840	213464	255398
	755494	1217191	662237	687307
	265195	443183	223616	273805
	490298	774008	438621	413502
	45816	83198	41976	17282
	41 %	41 %	40 %	43 %
	36 %	37 %	35 %	42 %
	35 %	36 %	34 %	40 %
Nonfarm Information Farms reporting living expenses Total family living expense Total living, invest, & capital purch Net nonfarm income	36	5	27	4
	23164	13384	25230	-
	47709	35278	51399	-
	17739	3002	19774	30179
Crop Acres Total acres owned Total crop acres Total crop acres owned Total crop acres cash rented Total crop acres share rented	378 561 293 262 7	532 801 501 300	331 473 219 244 10	371 621 330 288 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	40,001 - 100,000	100,001 - 200,000	200,001 - 500,000	500,001 +
Number of farms	60	8	14	30	7
Income Statement Gross cash farm income Total cash farm expense Net cash farm income Inventory change Depreciation and capital adjustment Net farm income	320356	75788	143012	333996	936870
	239611	58613	99365	256100	686171
	80745	17176	43647	77896	250699
	1575	-12076	-24984	16805	9024
	-16580	-2383	-10029	-18980	-37904
	65739	2717	8634	75721	221819
Profitability (cost) Labor and management earnings Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	36896	-3331	-6755	49989	122906
	7 %	-1 %	-2 %	9 %	9 %
	7 %	-14 %	-8 %	10 %	10 %
	19 %	-5 %	-10 %	21 %	27 %
	36 %	29 %	25 %	42 %	34 %
Liquidity Expense as a percent of income Interest as a percent of income	74 %	92 %	84 %	73 %	72 %
	6 %	14 %	9 %	5 %	5 %
Solvency (cost) Number of sole proprietors Ending farm assets Ending farm liabilities Ending total assets Ending total liabilities Ending net worth Net worth change Ending farm debt to asset ratio Beg total debt to asset ratio End total debt to asset ratio	45	7	13	21	3
	603180	200024	386571	750535	-
	249711	135902	150934	278742	-
	735178	309626	505183	894957	-
	260958	181748	157760	283336	-
	474219	127878	347423	611621	-
	44697	26228	-5064	70201	-
	41 %	68 %	39 %	37 %	49 %
	37 %	64 %	30 %	32 %	50 %
	35 %	59 %	31 %	32 %	44 %
Nonfarm Information Farms reporting living expenses Total family living expense Total living, invest, & capital purch Net nonfarm income	37	6	9	19	3
	23481	20333	22729	23035	-
	47504	43247	36436	55453	-
	18247	46057	26399	8883	8012
Crop Acres Total acres owned Total crop acres Total crop acres owned Total crop acres cash rented Total crop acres share rented	367 560 285 268 7	198 207 70 136	271 294 194 91 9	325 598 247 348 3	976 1392 905 459 27

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

	Average For All Farms	Crop	Dairy	Crop and Dairy	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		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 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 %	4 %	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	_