



Farm Business Management

Northern Minnesota

2017 ANNUAL REPORT



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MINNESOTA STATE



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A Management Education Program through AgCentric, Northern Center of Excellence for Agriculture

A MEMBER OF THE MINNESOTA STATE SYSTEM

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2017 Annual Report – Executive Summary

The 2017 farm year can best be described as a year with wide variety in earnings and production. Some areas were able to have excellent yields for another year while the other areas had weather issues that greatly reduced expected production. Profits were up for each of Minnesota's major types of livestock operations: dairy, pork and beef. Still the median producer earned only \$23,489 from farm operations for the year. Hog producers had a big turn-around, after many lost money on pig production in 2016. For dairy and beef producers, however, profits remained at low levels by historical standards. For dairy farms, the average price received for their milk was up by over a dollar per cwt. compared to what was received in 2016, however that gain is a little misleading as prices were higher at the beginning of 2017 but softened quite a bit at the end of the year and into 2018.

Average net farm income for the 622 farms in the Northern Minnesota database was \$54,021 for 2017. This was

Financial Factors	2013	2014	2015	2016	2017
Average Net Farm Income	\$75,243	\$114,095	\$37,182	\$59,480	\$54,021
Median Net Farm Income	\$27,886	\$46,104	\$23,730	\$25,654	\$23,489

down from the \$59,480 reported in 2016. Median net farm income was

down slightly decreasing to \$23,489 in 2017, compared to \$25,654 in 2016. The declines in the yields of both corn and soybeans caused Northern Minnesota farm profits to remain low for the majority of farms and caused a negative net return for over 30% of farms. Dry conditions, hail, and wind damage impacted farms in some smaller, regionalized areas, causing additional problems in 2017.

Some key financial measures showed a slight decline compared to 2016. Working capital dropped to \$135,504 at the end of 2017 compared to \$145,543 at the end of 2016; a decrease of 6.8%. Working Capital shows the dollar amount that current assets can or cannot cover current liabilities. Working capital remains respectable for most operations, but

the concern becomes how long farms can handle the lower commodity prices with the current cost of farm inputs.

Financial Factors	2013	2014	2015	2016	2017
Working Capital	\$130,026	\$171,051	\$138,627	\$145,543	\$135,504
Working Capital as % of Gro	27.9%	25.4%	24.7%	25.1%	23.6%
Term Debt Coverage Ratio	1.31	1.75	0.88	1.22	1.18
Operating Expense Ratio	76.2%	73.1%	81.4%	77.1%	77.5%

Term Debt Coverage is a key financial measure that Ag lenders consider in loan decisions. The 2017 Northern Minnesota average was 1.18 compared to 1.22 in 2016. That average means approximately one half of the farms in this report had less than a 1.00 term debt coverage. Those farms needed to use their working capital to help make all their scheduled payments on intermediate, long-term and personal loans. Working capital was used to offset the shortage of income in those operations in 2017.

With modest profitability in 2017, the operating expense ratio came in at 77.5 %; which is in the high end of acceptable range based on the financial scorecard on the back cover of this report. 80% is the start of the red zone area for the operating expense ratio. This ratio indicates that for every dollar of farm revenue produced, it took 77.5 cents in 2017 to cover the annual operating expenses; excluding interest paid, loan payments or depreciation, and family living. When operating expenses take that large of a slice of the gross revenue, cash flow issues are created for most farms. The Northern Minnesota farms ended the 2016 year at 77.1%, compared to 81.4% in 2015.

Trend information for the 2013-2017 Financial Summary can be found on page 4 of this report. A quick look at 2017 can be found on page 5, Year at a Glance. The impact of spending on the farm economy of Northern Minnesota by the average farmer in this report can be found on page 8.

2017 Annual Report – Executive Summary

Our two major livestock enterprises in Northern Minnesota are Dairy and Beef Cow-Calf operations. On a statewide basis, the Dairy Cow enterprise generated a Net Return/cow of only \$342.83 in 2017, an increase of \$234 per cow from 2016. This is still \$112 below the 5 year average and a decrease of \$906 from the 5 year high experienced in 2014.

NOTE: This increase resulted from higher milk prices during the first half of 2017. During the second half of the year, producers

Statewide FBM Data	Dairy (Excluding Organic & Organic Transition)				
	2013	2014	2015	2016	2017
Gross Margin	\$4,400	\$5,618	\$4,187	\$3,767	\$4,123
Feed Cost / Cow	\$2,393	\$2,430	\$2,108	\$1,899	\$1,937
Dir & Ovhd Expense/Cow	\$4,113	\$4,369	\$3,897	\$3,659	\$3,780
Net Return / Cow	\$287	\$1,249	\$289	\$109	\$343
Average Milk Price	\$20.20	\$24.36	\$17.75	\$16.33	\$17.72
Cost of Prod w Lab&Mgmt/Cwt	\$19.80	\$20.00	\$17.42	\$16.65	\$17.08

experienced a much lower price and most area farms operated at a loss. Even though there has been a significant drop in price since mid-year, the early year strength in the price received for milk resulted in an increase to \$17.72 per cwt compared to \$16.33 per cwt in 2016.

Beef Cow/Calf enterprises showed a negative Net Return per cow of \$-19.01 in 2017. 2016 showed a Net

Statewide FBM Data	Beef Cow-Calf				
	2013	2014	2015	2016	2017
Gross Margin	\$778	\$1,295	\$864	\$633	\$398
Feed Cost / Cow	\$479	\$508	\$439	\$413	\$395
Dir & Ovhd Expense/Cow	\$741	\$844	\$747	\$718	\$717
Net Return / Cow	\$37	\$452	\$117	(\$84)	(\$19)
Ave Price per CWT calf sold	\$152.83	\$212.33	\$206.46	\$156.00	\$147.00

Return of -\$84 per cow, while 2015 had a \$117 Net Return. Feed costs were lower for Beef Cow/Calf producers, which helped reduce the loss in 2017.

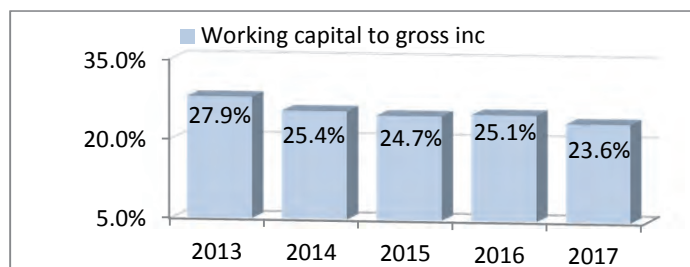
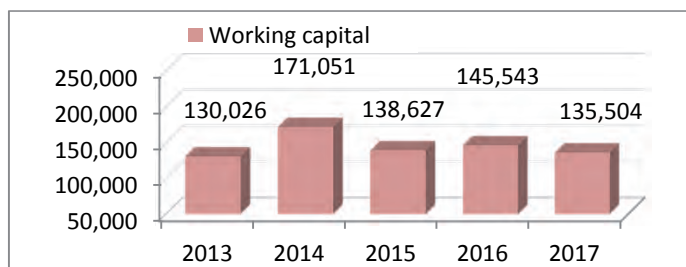
2017 was an interesting year for crop yields in Minnesota. Some isolated areas experienced weather challenges that lowered yields in those areas, but some farms produced excellent crops, especially the spring wheat crop. The average yield per acre for the northern half of Minnesota was 159 bushels for corn, 34 bushels for soybeans, and 70 bushels for wheat. Net returns decreased in both soybean and corn enterprises; while wheat enterprises showed a positive net return per acre of \$103.10, the highest in 5 years. Total direct and overhead expense for the crops listed below showed a slight increase, due in part to increased direct crop inputs.

The chart below displays the 5-year history of selected factors for these crops:

	Rented Land	Yield per Acre	Value per Unit	Gross Revenue /Acre	Dir & Ovhd Expense /Acre	Net Return /Acre	Dir & Ovhd Expense /Unit
Corn	2013	105.4	\$4.01	\$494.27	\$564.51	(\$70.24)	\$5.36
	2014	118.2	\$3.49	\$521.63	\$611.16	(\$89.53)	\$5.17
	2015	164.2	\$3.32	\$558.23	\$585.59	(\$27.36)	\$3.57
	2016	178.4	\$3.01	\$547.14	\$563.62	(\$16.48)	\$3.16
	2017	159.4	\$3.06	\$510.64	\$575.37	(\$64.73)	\$3.62
Soybeans	2013	30.6	\$12.59	\$402.48	\$310.57	\$91.91	\$10.15
	2014	32.8	\$9.78	\$342.20	\$329.59	\$12.61	\$10.04
	2015	40.1	\$8.37	\$347.59	\$320.92	\$26.67	\$8.01
	2016	46.4	\$9.24	\$434.78	\$316.46	\$118.32	\$6.83
	2017	33.9	\$9.09	\$332.97	\$329.60	\$3.36	\$9.72
Spring Wheat	2013	65.7	\$6.32	\$422.88	\$355.27	\$67.61	\$5.41
	2014	62.4	\$5.56	\$361.53	\$351.33	\$10.20	\$5.63
	2015	66.3	\$5.02	\$346.93	\$330.46	\$16.47	\$4.99
	2016	64.2	\$4.90	\$321.18	\$318.65	\$2.54	\$4.97
	2017	70.5	\$5.91	\$427.38	\$324.29	\$103.10	\$4.60

Financial Trend Summary
Northern Minnesota Farm Business Management Data

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Income Statement					
Gross Cash Farm Income	595,950	658,798	551,703	557,016	562,001
Total Cash Farm Expense	467,633	522,485	469,847	473,748	470,535
Net Cash Farm Income	128,317	136,314	81,857	83,268	91,466
Inventory change	-16,741	18,383	-5,368	20,084	7,106
Depreciation	-36,037	-40,880	-40,070	-44,472	-44,668
Net Farm Income From Operations	75,539	113,816	36,419	58,880	53,905
Gain or loss on capital sales	-296	279	763	601	116
Average Net Farm Income	75,243	114,095	37,182	59,480	54,021
Median Net Farm Income	27,886	46,104	23,730	25,654	23,489
Profitability (Cost)					
Rate of Return on Assets	4.4%	6.4%	1.4%	2.7%	2.5%
Rate of Return on Equity	4.5%	8.3%	-0.9%	1.6%	1.2%
Operating Profit Margin	12.7%	17.8%	4.7%	9.2%	8.4%
Asset Turnover Rate	34.6%	36.2%	29.8%	29.6%	30.1%
Liquidity & Repayment (end of year)					
Current Assets	320,139	379,735	362,417	395,719	372,786
Current Liabilities	190,113	208,684	223,790	250,175	237,282
Current Ratio	1.68	1.82	1.62	1.58	1.57
Working capital	130,026	171,051	138,627	145,543	135,504
Working capital to gross inc	27.9%	25.4%	24.7%	25.1%	23.6%
Term Debt Coverage Ratio	1.31	1.75	0.88	1.22	1.18
Replacement coverage ratio	1.15	1.50	0.76	1.01	0.96
Term debt to EBITDA	-	2.45	4.33	3.63	3.85
Solvency (Market)					
Number of Farms	412	566	588	615	622
Total Assets	1,685,236	2,032,113	2,003,026	1,842,910	1,837,006
Total Liabilities	785,428	883,164	895,016	803,433	794,024
Net Worth	899,809	1,148,949	1,108,011	1,039,477	1,042,982
Net Worth Change	64,982	111,833	30,645	43,243	38,476
Farm Debt to Asset Ratio	44%	44%	47%	46%	46%
Total Debt to Asset Ratio	47%	43%	45%	44%	43%
Change in total net worth %	-	11%	3%	4%	4%
Nonfarm Information					
Net Nonfarm Income	26,161	25,050	28,964	27,427	28,846
Farms Reporting Liv Expenses	51	88	76	101	76
Total Family Living Expense	43,192	51,248	48,783	47,828	50,678
Total Living, Invest, & Cap Purch	60,826	69,840	74,687	59,233	65,631
Crop Acres					
Total Crop Acres	749	697	688	713	755
Total Crop Acres Owned	278	253	248	239	257
Total Crop Acres Cash Rented	462	432	428	466	492
Total Crop Acres Share Rent	9	12	12	8	6
Machinery value per crop acre	-	607	542	622	596



<u>Year at a Glance</u>				State	Your	Your
<i>Data for the Average Farm</i>	Northern	FBM	Local	Data	Farm	Farm
	Minnesota	Data	Area		Data	Goal
	622	2164				
	<u>Farms</u>	<u>Farms</u>				
<u>Income Statement</u>						
Gross Cash Farm Income	\$562,001	\$735,140	_____	_____	_____	_____
Total Cash Operating Expense	\$470,535	\$635,906	_____	_____	_____	_____
Net Cash Farm Income	\$91,466	\$99,234	_____	_____	_____	_____
Net Operating Profit	\$98,573	\$108,805	_____	_____	_____	_____
Net Farm Income	\$54,021	\$59,543	_____	_____	_____	_____
Median Farm Income	\$23,489	\$26,556	_____	_____	_____	_____
<u>Balance Sheet (Market)</u>						
Total Assets - 12/31	\$2,231,661	\$2,955,907	_____	_____	_____	_____
Total Liabilities - 12/31	\$973,963	\$1,261,663	_____	_____	_____	_____
Net Worth - 12/31	\$1,257,698	\$1,694,244	_____	_____	_____	_____
Change in Net Worth	\$49,963	\$63,209	_____	_____	_____	_____
<u>Financial Standards Measures</u>						
Working Capital - 12/31	\$135,504	\$192,178	_____	_____	_____	_____
Debt to Asset Ratio - 12/31	46%	45%	_____	_____	_____	_____
Rate of Return on Farm Assets - Cost	2.5%	2.2%	_____	_____	_____	_____
Rate of Return on Farm Equity - Cost	1.2%	0.6%	_____	_____	_____	_____
Term Debt Coverage Ratio	1.18	1.10	_____	_____	_____	_____
Asset Turnover Rate	30.1%	32.1%	_____	_____	_____	_____
Operating Expense Ratio	77.5%	80.7%	_____	_____	_____	_____
Interest Expense Ratio	5.3%	4.8%	_____	_____	_____	_____
<u>Operator Information</u>						
Average Age of the Farmer	47.1	48.0	_____	_____	_____	_____
Average Years Farming	22.2	24.1	_____	_____	_____	_____
<u>Personal Spending & Income</u>						
Total Cash Family Living Expense	\$50,678	\$58,534	_____	_____	_____	_____
Total Non Farm Income	\$28,846	\$33,090	_____	_____	_____	_____

Net Farm Income dollars are used to pay for Family Living, Social Security and Income Tax, Retirement Accounts, Medical and Health expenses, and loan principle payments. A positive balance indicates revenue for other uses, while a negative balance indicates a need for revenue from other sources.

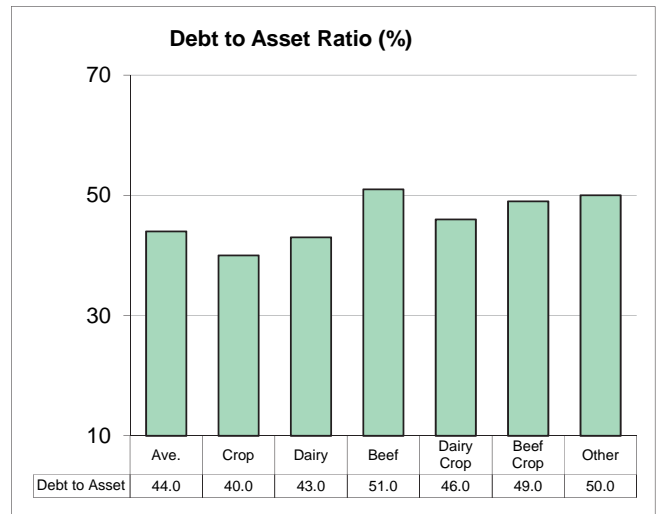
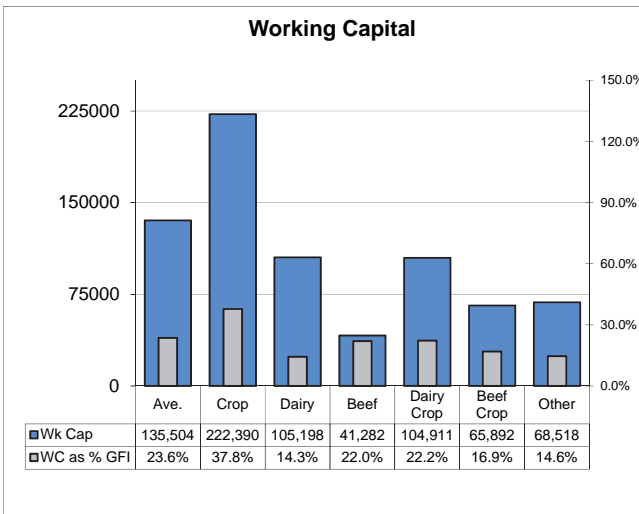
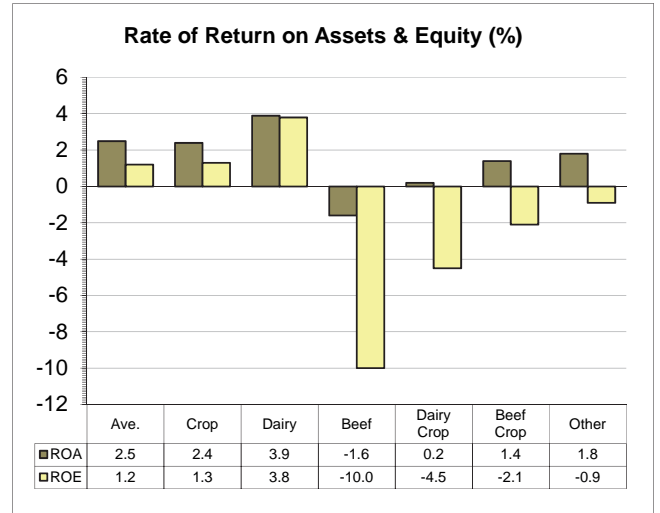
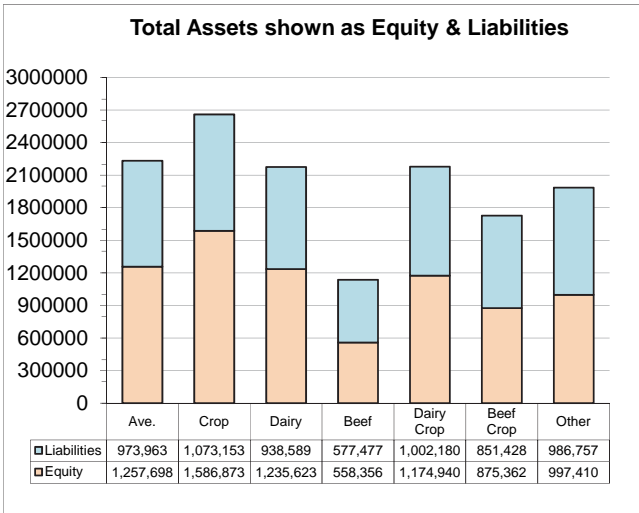
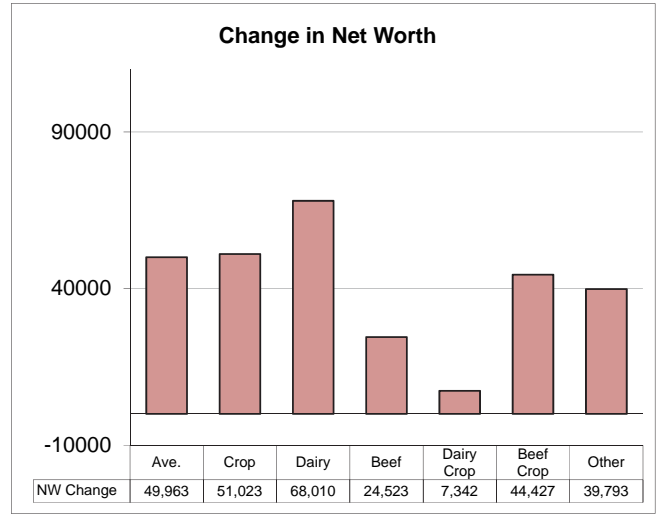
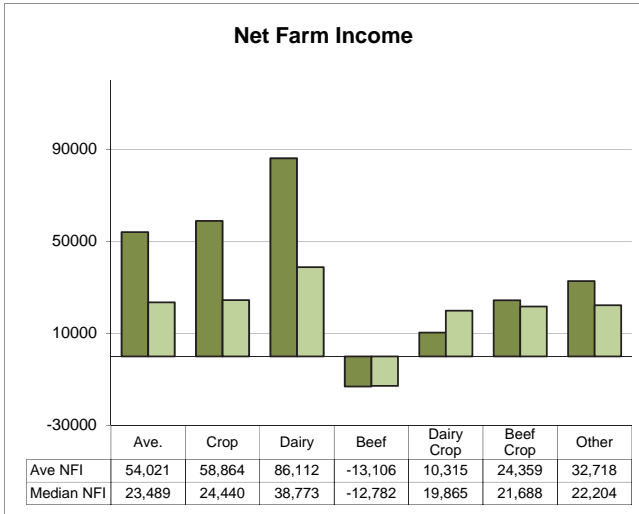
The following list shows expenses for the year:

		<u>Northern Minnesota</u>	<u>State Data</u>
Net Farm Income	(+)	\$54,021	\$59,543
Depreciation	(+)	\$44,668	\$51,002
Family Living (Excl Health/Med)	(-)	\$38,677	\$49,652
Social Security and Income Tax	(-)	\$6,717	\$9,829
Health and Medical Expense	(-)	\$7,478	\$9,891
Retirement Accounts	(-)	\$653	\$1,781
Principal Payments	(-)	\$62,121	\$63,286
Balance	(=)	-\$16,957	-\$23,894

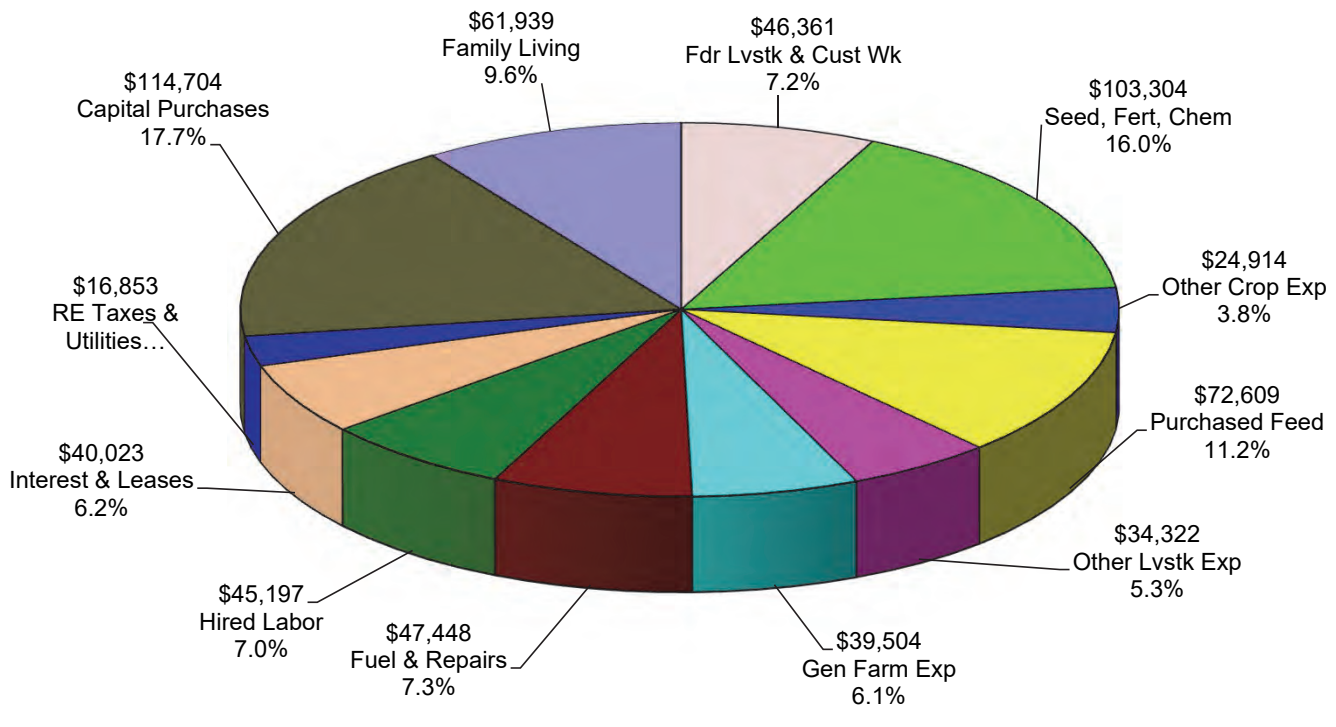
Financial Summary
Northern Minnesota Farm Business Management Data
(Farms Sorted By Farm Type)

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Dairy</u>	<u>Beef</u>	<u>Crop and Dairy</u>	<u>Crop and Beef</u>	<u>Other</u>
Number of farms	622	227	189	36	31	42	92
Income Statement							
Gross cash farm income	562,001	571,451	716,749	172,545	491,807	405,912	452,605
Total cash farm expense	470,535	473,057	597,215	189,399	410,921	339,770	375,733
Net cash farm income	91,466	98,394	119,535	-16,854	80,886	66,141	76,872
Inventory change	7,106	9,272	17,758	15,230	-27,149	-19,244	-212
Depreciation	-44,668	-48,946	-50,914	-11,680	-44,360	-23,305	-44,175
Net farm income from operations	53,905	58,720	86,379	-13,303	9,376	23,592	32,485
Gain or loss on capital sales	116	143	-267	197	938	767	234
Average net farm income	54,021	58,864	86,112	-13,106	10,315	24,359	32,718
Median net farm income	23,489	24,440	38,773	-12,782	19,865	21,688	22,204
Profitability (cost)							
Rate of return on assets	2.5 %	2.4 %	3.9 %	-1.6 %	0.2 %	1.4 %	1.8 %
Rate of return on equity	1.2 %	1.3 %	3.8 %	-10.0 %	-4.5 %	-2.1 %	-0.9 %
Operating profit margin	8.4 %	7.7 %	12.4 %	-12.2 %	0.6 %	5.7 %	6.2 %
Asset turnover rate	30.1 %	31.4 %	31.9 %	13.3 %	24.7 %	25.2 %	28.7 %
Profitability (market)							
Rate of return on assets	2.6 %	2.3 %	3.6 %	0.0 %	0.7 %	1.9 %	2.6 %
Rate of return on equity	1.9 %	1.8 %	3.8 %	-4.1 %	-2.3 %	0.0 %	1.7 %
Operating profit margin	10.5 %	9.3 %	13.3 %	-0.2 %	3.4 %	9.4 %	11.0 %
Asset turnover rate	24.5 %	24.9 %	27.2 %	10.5 %	19.2 %	19.7 %	23.5 %
Liquidity & Repayment (end of year)							
Current assets	372,786	537,984	256,947	162,029	290,863	318,465	332,180
Current liabilities	237,282	315,594	151,750	120,746	185,952	252,573	263,662
Current ratio	1.57	1.70	1.69	1.34	1.56	1.26	1.26
Working capital	135,504	222,390	105,198	41,282	104,911	65,892	68,518
Change in working capital	-307	-9,654	-4,245	14,716	-25,510	3,814	32,645
Working capital to gross inc	23.6 %	37.8 %	14.3 %	22.0 %	22.2 %	16.9 %	14.6 %
Term debt coverage ratio	1.18	1.13	1.48	0.65	0.75	0.89	1.04
Replacement coverage ratio	0.96	0.84	1.31	0.60	0.59	0.75	0.88
Term debt to EBITDA	3.85	3.27	3.47	18.70	6.84	5.54	4.44
Solvency (end of year at cost)							
Number of farms	622	227	189	36	31	42	92
Total assets	1,837,006	2,134,822	1,875,540	916,133	1,716,861	1,369,582	1,644,650
Total liabilities	794,024	834,912	784,808	507,705	843,715	713,009	827,265
Net worth	1,042,982	1,299,909	1,090,731	408,429	873,146	656,573	817,385
Net worth change	38,476	36,046	62,798	12,027	-4,313	36,842	21,946
Farm debt to asset ratio	46 %	42 %	44 %	60 %	51 %	55 %	54 %
Total debt to asset ratio	43 %	39 %	42 %	55 %	49 %	52 %	50 %
Change in earned net worth %	4 %	3 %	6 %	3 %	0 %	6 %	3 %
Solvency (end of year at market)							
Number of farms	622	227	189	36	31	42	92
Total assets	2,231,661	2,660,026	2,174,212	1,135,833	2,177,120	1,726,790	1,984,167
Total liabilities	973,963	1,073,153	938,589	577,447	1,002,180	851,428	986,757
Net worth	1,257,699	1,586,873	1,235,623	558,386	1,174,940	875,362	997,409
Total net worth change	49,963	51,023	68,010	24,523	7,342	44,427	39,793
Farm debt to asset ratio	46 %	43 %	46 %	54 %	47 %	52 %	53 %
Total debt to asset ratio	44 %	40 %	43 %	51 %	46 %	49 %	50 %
Change in total net worth %	4 %	3 %	6 %	5 %	1 %	5 %	4 %
Nonfarm Information							
Net nonfarm income	28,846	34,114	16,578	51,586	21,204	37,450	31,062
Farms reporting living expenses	76	22	27	-	5	6	16
Total family living expense	50,678	53,615	52,231	-	34,552	37,434	54,024
Total living, invest, cap. purch	65,631	69,923	65,806	-	47,451	37,170	75,790
Crop Acres							
Total crop acres	755	1,282	316	236	609	616	671
Total crop acres owned	257	402	140	154	231	210	208
Total crop acres cash rented	492	871	174	72	378	398	456
Total crop acres share rented	6	9	2	10	-	9	6
Machinery value per crop acre	596	472	1,165	571	883	538	590

Selected Factors by Type of Farm



Each farmer, on average, spent \$647,178 in the Greater Community in 2017



Average Money Spent by Each Farmer in the Greater Community: \$647,178

Average Money Spent by Each Farmer in a 40 Yr Career: \$25,887,120
Money Spent in Community by 622 Farmers: \$402,544,716

Report Overview

Farm Business Management Education has been a part of agricultural education programs in Minnesota since 1953. FBM Programs are now an integral part of the Minnesota State System, delivered through eight two-year colleges. In 2017, the Northern Minnesota Annual Report is an expansion of the 15-year partnership between Northland Community & Technical College and Central Lakes College Farm Business Management Programs; to include Alexandria Technical & Community College, Ridgewater College, and St. Cloud Technical & Community Colleges.

This report was prepared under the direction of Ron Dvergsten, Josh Tjosaas, and DelRay Lecy through AgCentric, Northern Center of Excellence for Agriculture. A special thank you goes to Keith Olander, AgCentric Director & Central Lakes College Dean, for his leadership.

The tables in this report were created using FINPACK and RankEm Central, copyrighted software of the Center for Farm Financial Management, University of Minnesota.

The financial portion of the report, found in the first 26 pages, uses a standard format for each table. Data from the analysis system is printed in a four column format, which includes: Average, Low, Middle, & High. The High, Middle, & Low ranges are calculated based on a 20% slice of the farms in the total group.

The enterprise tables begin on page 30. Each of these tables consist of: a size indicator, a total & per unit income, direct & overhead expenses, and other information. Costs which are considered operating, whether easily assigned or are allocated, are listed as Direct Expenses. Costs which are general in nature, whether fixed or variable, are listed as Overhead Expenses.

The criteria for determining the 20% categories in each area are listed below:

<u>Analysis Section</u>	<u>Criteria to determine the "20%" categories</u>
Financial	Net Farm Income
Crops	Return to Overhead
Statewide Livestock	Return to Overhead

Financial Summary
Northern Minnesota Farm Business Management Data
(Farms Sorted By Number of Years Farming)

	<u>Avg. Of All Farms</u>	<u>10 or Less</u>	<u>11 - 20</u>	<u>21 - 30</u>	<u>31 - 40</u>	<u>Over 40</u>
Number of farms	622	155	137	94	136	100
Income Statement						
Gross cash farm income	562,001	291,384	583,216	560,855	784,927	650,293
Total cash farm expense	470,535	253,130	497,563	465,896	655,429	523,389
Net cash farm income	91,466	38,253	85,652	94,959	129,498	126,904
Inventory change	7,106	18,205	17,301	-5,683	13,932	-21,324
Depreciation	-44,668	-20,754	-41,219	-50,980	-62,250	-56,614
Net farm income from operations	53,905	35,705	61,735	38,295	81,181	48,966
Gain or loss on capital sales	116	102	397	-875	1,029	-560
Average net farm income	54,021	35,808	62,132	37,420	82,210	48,406
Median net farm income	23,489	21,127	19,081	19,644	32,173	29,417
Profitability (cost)						
Rate of return on assets	2.5 %	3.0 %	3.7 %	1.4 %	2.8 %	1.6 %
Rate of return on equity	1.2 %	2.3 %	3.3 %	-0.7 %	1.8 %	-0.3 %
Operating profit margin	8.4 %	8.4 %	10.8 %	5.3 %	9.5 %	6.2 %
Asset turnover rate	30.1 %	36.0 %	34.6 %	25.9 %	29.8 %	26.5 %
Profitability (market)						
Rate of return on assets	2.6 %	4.3 %	3.5 %	1.4 %	2.7 %	1.8 %
Rate of return on equity	1.9 %	5.8 %	3.4 %	0.0 %	2.1 %	0.8 %
Operating profit margin	10.5 %	13.5 %	11.4 %	6.8 %	11.0 %	9.2 %
Asset turnover rate	24.5 %	32.1 %	30.3 %	20.4 %	24.3 %	19.5 %
Liquidity & Repayment (end of year)						
Current assets	372,786	178,387	344,865	398,284	515,993	493,625
Current liabilities	237,282	124,322	256,901	251,659	294,523	294,131
Current ratio	1.57	1.43	1.34	1.58	1.75	1.68
Working capital	135,504	54,066	87,963	146,625	221,470	199,494
Change in working capital	-307	7,553	-16,811	-15,733	7,713	13,715
Working capital to gross inc	23.6 %	17.2 %	14.4 %	26.1 %	27.6 %	31.3 %
Term debt coverage ratio	1.18	1.44	1.32	0.90	1.26	0.97
Replacement coverage ratio	0.96	1.30	1.13	0.71	1.01	0.75
Term debt to EBITDA	3.85	3.87	4.01	4.36	3.30	4.15
Solvency (end of year at cost)						
Number of farms	622	155	137	94	136	100
Total assets	1,837,006	909,773	1,687,584	2,141,797	2,483,675	2,312,952
Total liabilities	794,024	490,099	871,911	848,097	930,571	921,868
Net worth	1,042,982	419,674	815,673	1,293,700	1,553,104	1,391,084
Net worth change	38,476	39,864	46,240	21,203	53,262	21,815
Farm debt to asset ratio	46 %	57 %	54 %	43 %	40 %	43 %
Total debt to asset ratio	43 %	54 %	52 %	40 %	37 %	40 %
Change in earned net worth %	4 %	10 %	6 %	2 %	4 %	2 %
Solvency (end of year at market)						
Number of farms	622	155	137	94	136	100
Total assets	2,231,661	1,014,163	1,911,554	2,667,678	3,018,492	3,077,385
Total liabilities	973,963	541,667	1,008,407	1,071,071	1,187,538	1,215,088
Net worth	1,257,699	472,496	903,147	1,596,608	1,830,954	1,862,298
Total net worth change	49,963	53,794	49,907	25,930	71,964	36,770
Farm debt to asset ratio	46 %	56 %	55 %	43 %	42 %	42 %
Total debt to asset ratio	44 %	53 %	53 %	40 %	39 %	39 %
Change in total net worth %	4 %	13 %	6 %	2 %	4 %	2 %
Nonfarm Information						
Net nonfarm income	28,846	36,596	30,010	26,816	23,492	24,429
Farms reporting living expenses	76	15	21	17	14	9
Total family living expense	50,678	43,784	46,639	60,944	44,289	62,138
Total living, invest, cap. purch	65,631	45,686	58,096	78,426	57,850	104,393
Crop Acres						
Total crop acres	755	479	715	806	911	979
Total crop acres owned	257	82	171	297	346	486
Total crop acres cash rented	492	395	539	498	563	479
Total crop acres share rented	6	2	5	11	1	14
Machinery value per crop acre	596	393	533	687	678	641

Financial Summary
Northern Minnesota Farm Business Management Data
(Farms Sorted By Gross Farm Income)

	<u>Avg. Of All Farms</u>	<u>Less than 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>1,000,001- 2,000,000</u>	<u>Over 2,000,000</u>
Number of farms	622	105	146	160	126	67	18
Income Statement							
Gross cash farm income	562,001	54,287	172,612	364,677	725,665	1,420,747	4,093,947
Total cash farm expense	470,535	61,498	149,205	299,439	602,514	1,183,356	3,406,655
Net cash farm income	91,466	-7,210	23,407	65,238	123,151	237,391	687,292
Inventory change	7,106	8,308	5,362	527	7,133	3,948	84,303
Depreciation	-44,668	-10,069	-15,766	-31,025	-55,971	-121,264	-237,955
Net farm income from operations	53,905	-8,971	13,003	34,741	74,313	120,075	533,639
Gain or loss on capital sales	116	-36	430	173	197	505	-4,083
Average net farm income	54,021	-9,007	13,433	34,914	74,510	120,579	529,557
Median net farm income	23,489	-4,133	17,699	36,732	78,624	131,471	207,998
Profitability (cost)							
Rate of return on assets	2.5 %	-3.5 %	0.3 %	1.8 %	2.8 %	2.4 %	6.3 %
Rate of return on equity	1.2 %	-11.7 %	-4.1 %	-0.5 %	1.7 %	1.3 %	7.3 %
Operating profit margin	8.4 %	-28.7 %	1.4 %	6.7 %	9.1 %	7.7 %	15.8 %
Asset turnover rate	30.1 %	12.1 %	23.0 %	26.9 %	30.7 %	31.6 %	39.8 %
Profitability (market)							
Rate of return on assets	2.6 %	-0.8 %	1.3 %	2.1 %	3.0 %	2.0 %	5.8 %
Rate of return on equity	1.9 %	-4.2 %	-0.7 %	0.9 %	2.7 %	1.1 %	7.4 %
Operating profit margin	10.5 %	-8.3 %	7.4 %	10.0 %	11.8 %	7.7 %	15.5 %
Asset turnover rate	24.5 %	9.5 %	16.9 %	21.1 %	24.9 %	25.5 %	37.6 %
Liquidity & Repayment (end of year)							
Current assets	372,786	49,920	122,518	240,291	518,975	1,031,831	1,987,419
Current liabilities	237,282	42,643	76,623	154,417	320,222	652,555	1,286,058
Current ratio	1.57	1.17	1.60	1.56	1.62	1.58	1.55
Working capital	135,504	7,277	45,895	85,873	198,752	379,275	701,361
Change in working capital	-307	20,802	2,426	-2,767	4,848	-35,167	-30,062
Working capital to gross inc	23.6 %	11.6 %	25.5 %	23.3 %	26.9 %	26.3 %	16.5 %
Term debt coverage ratio	1.18	0.76	0.99	1.11	1.12	1.08	1.87
Replacement coverage ratio	0.96	0.66	0.82	0.89	0.89	0.89	1.58
Term debt to EBITDA	3.85	20.35	6.43	4.31	3.80	3.28	2.36
Solvency (end of year at cost)							
Number of farms	622	105	146	160	126	67	18
Total assets	1,837,006	557,018	839,085	1,365,112	2,329,346	4,203,666	9,336,846
Total liabilities	794,024	274,590	407,243	590,896	1,018,158	1,778,056	3,535,132
Net worth	1,042,982	282,429	431,842	774,216	1,311,189	2,425,610	5,801,714
Net worth change	38,476	8,140	17,934	28,261	45,731	49,975	379,269
Farm debt to asset ratio	46 %	56 %	54 %	48 %	47 %	43 %	39 %
Total debt to asset ratio	43 %	49 %	49 %	43 %	44 %	42 %	38 %
Change in earned net worth %	4 %	3 %	4 %	4 %	4 %	2 %	7 %
Solvency (end of year at market)							
Number of farms	622	105	146	160	126	67	18
Total assets	2,231,661	689,240	1,099,741	1,703,656	2,845,683	5,172,650	9,858,471
Total liabilities	973,963	306,966	481,570	712,584	1,256,170	2,302,642	4,260,898
Net worth	1,257,699	382,274	618,171	991,072	1,589,513	2,870,008	5,597,573
Total net worth change	49,963	18,079	26,215	38,585	67,950	59,617	367,860
Farm debt to asset ratio	46 %	49 %	47 %	46 %	47 %	46 %	45 %
Total debt to asset ratio	44 %	45 %	44 %	42 %	44 %	45 %	43 %
Change in total net worth %	4 %	5 %	4 %	4 %	4 %	2 %	7 %
Nonfarm Information							
Net nonfarm income	28,846	47,420	34,064	24,640	24,831	11,586	7,918
Farms reporting living expenses	76	5	19	33	16	3	-
Total family living expense	50,678	45,494	38,829	48,455	67,102	-	-
Total living, invest, cap. purch	65,631	44,091	42,195	60,407	102,678	-	-
Crop Acres							
Total crop acres	755	124	300	542	1,047	2,071	3,088
Total crop acres owned	257	75	127	204	330	667	803
Total crop acres cash rented	492	47	172	334	710	1,376	2,285
Total crop acres share rented	6	2	1	4	7	28	-
Machinery value per crop acre	596	717	569	580	577	598	657

Financial Summary
Northern Minnesota Farm Business Management Data
(Farms Sorted By Total Acres)

	<u>Less than 100</u>	<u>101 - 250</u>	<u>251 - 500</u>	<u>501 - 1,000</u>	<u>1,001 - 1,500</u>	<u>1,501 - 2,000</u>	<u>2,001 - 5,000</u>
Number of farms	100	140	121	116	51	29	61
Income Statement							
Gross cash farm income	235,718	242,668	378,331	526,389	789,539	952,118	1,705,140
Total cash farm expense	202,570	202,160	320,505	445,011	656,310	805,271	1,404,613
Net cash farm income	33,148	40,507	57,827	81,378	133,229	146,847	300,527
Inventory change	4,639	5,046	13,192	-4,956	-17,962	32,403	62,714
Depreciation	-15,462	-18,327	-33,869	-48,298	-68,998	-71,986	-126,167
Net farm income from operations	22,325	27,227	37,149	28,124	46,268	107,264	237,074
Gain or loss on capital sales	125	43	842	-263	157	-79	1,544
Average net farm income	22,450	27,269	37,991	27,862	46,425	107,185	238,617
Median net farm income	9,004	15,828	26,624	28,400	41,740	104,530	140,452
Profitability (cost)							
Rate of return on assets	1.8 %	1.9 %	1.8 %	1.2 %	1.4 %	3.5 %	4.7 %
Rate of return on equity	-0.8 %	-0.5 %	-0.3 %	-1.7 %	-0.6 %	3.5 %	5.1 %
Operating profit margin	6.6 %	7.9 %	6.6 %	4.6 %	5.2 %	10.0 %	13.2 %
Asset turnover rate	26.5 %	24.7 %	27.5 %	26.8 %	27.6 %	34.5 %	35.8 %
Profitability (market)							
Rate of return on assets	1.4 %	2.3 %	2.4 %	2.3 %	1.7 %	3.4 %	3.5 %
Rate of return on equity	-0.6 %	1.1 %	1.5 %	1.2 %	0.5 %	4.1 %	3.7 %
Operating profit margin	6.8 %	11.8 %	10.7 %	10.9 %	7.6 %	11.7 %	11.6 %
Asset turnover rate	21.2 %	19.6 %	22.1 %	20.8 %	22.3 %	29.3 %	29.8 %
Liquidity & Repayment (end of year)							
Current assets	81,769	114,325	209,643	330,791	556,861	758,959	1,360,459
Current liabilities	77,677	75,450	125,513	224,108	364,271	441,257	785,737
Current ratio	1.05	1.52	1.67	1.48	1.53	1.72	1.73
Working capital	4,091	38,874	84,129	106,683	192,590	317,702	574,722
Change in working capital	-8,860	-765	4,970	-2,884	-3,076	72,575	3,279
Working capital to gross inc	1.7 %	15.7 %	21.5 %	20.2 %	24.4 %	33.0 %	32.0 %
Term debt coverage ratio	1.30	1.18	1.25	0.88	0.82	1.48	1.65
Replacement coverage ratio	1.09	1.03	1.03	0.73	0.71	1.13	1.28
Term debt to EBITDA	4.79	4.87	4.40	5.39	4.28	2.70	2.23
Solvency (end of year at cost)							
Number of farms	100	140	121	116	51	29	61
Total assets	758,256	895,154	1,295,164	1,889,220	2,844,616	2,911,659	4,871,050
Total liabilities	376,066	429,729	571,732	874,540	1,095,845	1,132,144	1,889,858
Net worth	382,190	465,424	723,432	1,014,680	1,748,771	1,779,515	2,981,192
Net worth change	25,270	31,275	25,983	9,718	52,699	94,235	149,883
Farm debt to asset ratio	53 %	53 %	48 %	50 %	41 %	42 %	40 %
Total debt to asset ratio	50 %	48 %	44 %	46 %	39 %	39 %	39 %
Change in earned net worth %	7 %	7 %	4 %	1 %	3 %	6 %	5 %
Solvency (end of year at market)							
Number of farms	100	140	121	116	51	29	61
Total assets	924,831	1,097,346	1,586,121	2,399,033	3,480,213	3,408,268	5,807,444
Total liabilities	424,384	498,106	693,298	1,055,171	1,368,628	1,442,989	2,482,064
Net worth	500,447	599,239	892,823	1,343,863	2,111,585	1,965,280	3,325,380
Total net worth change	25,217	34,089	40,041	39,339	73,501	124,132	135,152
Farm debt to asset ratio	49 %	50 %	47 %	47 %	42 %	46 %	44 %
Total debt to asset ratio	46 %	45 %	44 %	44 %	39 %	42 %	43 %
Change in total net worth %	5 %	6 %	5 %	3 %	4 %	7 %	4 %
Nonfarm Information							
Net nonfarm income	32,888	30,753	30,306	28,985	28,768	32,665	14,533
Farms reporting living expenses	5	24	19	18	4	2	4
Total family living expense	34,125	51,297	56,851	38,671	-	-	-
Total living, invest, cap. purch	34,734	67,377	70,571	46,030	-	-	-
Crop Acres							
Total crop acres	18	178	375	705	1,226	1,679	2,852
Total crop acres owned	11	96	159	271	467	496	839
Total crop acres cash rented	7	78	217	427	753	1,183	1,979
Total crop acres share rented	0	3	-	8	5	-	34
Machinery value per crop acre	1,624	1,022	811	670	636	504	496

Farm Income Statement
Northern Minnesota Farm Business Management Data
(Farms Sorted By Net Farm Income)

	Avg. Of			
	<u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Sale of Crops				
Barley	3,910	11,104	194	6,324
Beans, Edible	6,305	4,653	-	8,259
Corn	71,548	137,852	40,110	72,133
Corn Silage	435	174	165	1,293
Hay, Alfalfa	1,380	1,914	652	2,155
Hay, Other	2,176	3,971	1,783	1,236
Fruit and Vegetable Crops	1,431	-	4,121	-
Organic Crops	1,838	2,433	210	5,946
Soybeans	83,921	93,381	46,847	171,078
Soybeans, Food	2,095	7,025	811	-
Soybeans, Seed	2,173	1,348	-	4,306
Sunflowers	1,790	4,209	-	3,048
Oats	712	167	983	1,752
Wheat, Spring	42,902	24,174	14,637	131,214
Grass Seed	5,305	2,770	1,507	17,555
Other Crop Enterprises	8,557	1,486	1,715	31,756
Miscellaneous crop income	495	78	900	567
Total Crop Sales	236,973	296,739	114,635	458,622
Sale of Livestock				
Beef Cow-Calf, Beef Calves	6,802	8,868	7,047	5,599
Beef, Backgrounding	9,473	17,897	4,118	18,486
Beef, Finishing	8,466	10,447	6,912	6,166
Other Beef Enterprises	812	1,142	202	417
Dairy, Milk	203,748	148,000	96,598	502,956
Dairy Calves	2,518	1,526	955	6,112
Dairy Heifers (for sale)	1,279	2,384	862	1,653
Dairy Feeders & Backgrounding	1,550	1,385	1,725	1,662
Dairy Finishing	13,119	14,927	8,944	12,259
Hogs, Weaning to Finish	3,173	-	-	10,985
Other Livestock Enterprises	1,380	1,496	1,824	2,688
Cull breeding livestock	11,325	11,303	6,339	19,943
Misc. livestock income	650	234	633	939
Total Livestock & Product Sales	264,295	219,609	136,159	589,865
Other farm income				
Crop government payments	6,483	4,898	1,975	17,659
CRP payments	579	975	550	902
Livestock govt payments	117	182	21	-
Other government payments	5,930	4,081	2,903	12,821
Custom work income	10,461	15,763	6,372	10,646
Patronage dividends, cash	6,231	7,178	2,911	11,626
Insurance income	10,524	16,520	4,917	23,055
Contract livestock income	5,772	425	1,361	1,909
Other farm income	14,636	9,574	8,215	26,632
Total Other Farm Income	60,733	59,596	29,225	105,250
Gross Cash Farm Income	562,001	575,944	280,019	1,153,737

Farm Income Statement
Northern Minnesota Farm Business Management Data
(Farms Sorted By Net Farm Income)

	<u>Average</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Direct Crop Expense				
Seed	39,953	52,918	21,511	68,120
Fertilizer	42,396	52,490	20,464	81,861
Crop chemicals	20,955	23,389	8,390	44,130
Crop insurance	9,706	12,927	4,433	17,771
Drying Expense	2,677	5,475	1,813	2,539
Other direct crop expenses	12,531	13,395	7,165	24,615
Total Direct Crop Expense	128,218	160,594	63,776	239,036
Direct Livestock Expense				
Feeder livestock purchase	13,087	13,471	5,569	24,263
Purchased feed	72,609	56,134	41,228	163,246
Breeding fees	2,702	1,813	1,139	6,631
Veterinary	7,239	6,674	3,404	15,684
Supplies	7,150	6,513	4,218	13,534
Contract production exp.	3,089	1,523	1,876	7,866
Livestock hauling and trucking	2,653	2,108	1,707	4,463
Livestock marketing	2,681	2,638	1,618	5,246
Bedding	4,957	3,038	1,720	12,066
Other livestock expenses	3,851	2,543	1,946	9,521
Total Direct Livestock Expense	120,018	96,455	64,425	262,520
Other Farm Expense				
Interest	30,146	44,240	17,543	41,843
Fuel & oil	20,979	23,861	11,346	37,441
Repairs	39,960	46,555	20,026	72,238
Custom hire	7,488	8,408	3,244	15,130
Hired labor	33,274	28,984	11,946	85,366
Land rent	45,197	72,429	18,013	79,453
Machinery & bldg leases	9,877	18,286	4,385	15,465
Real estate taxes	5,679	5,872	4,366	9,428
Farm insurance	9,170	10,620	5,372	15,123
Utilities	11,174	11,292	6,817	19,948
Dues & professional fees	3,268	4,207	1,854	4,837
Miscellaneous	6,087	7,527	3,387	9,688
Total Other Farm Expense	222,299	282,281	108,299	405,960
Total cash expense	470,535	539,330	236,500	907,516
Net cash farm income	91,466	36,614	43,519	246,221
Inventory Changes				
Prepays and supplies	-1,529	-8,074	-587	4,914
Accounts receivable	5,024	3,064	760	17,241
Hedging acct. & Oth Cur Assets	-41	-3,695	1,703	1,560
Crops and feed	2,982	-37,941	741	55,432
Market livestock	1,057	-9,392	2,005	9,269
Breeding livestock	586	-10,677	-738	17,916
Accounts payable	-3,658	-12,807	-2,848	-4,649
Accrued Interest & other assets	2,686	779	1,928	9,362
Total inventory change	7,107	-78,743	2,964	111,045
Net operating profit	98,573	-42,129	46,483	357,266
Depreciation				
Machinery and equipment	-32,027	-38,327	-15,632	-59,154
Titled vehicles	-3,138	-3,390	-2,559	-4,580
Buildings and improvements	-9,503	-10,005	-4,933	-17,764
Total depreciation	-44,668	-51,723	-23,124	-81,498
Net farm income from operations	53,905	-93,852	23,359	275,768
Gain or loss on capital sales	116	-1,106	519	1,221
Net farm income	54,021	-94,958	23,878	276,989

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

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Assets				
Current Farm Assets				
Cash and checking balance	25,190	26,181	17,288	61,926
Prepaid expenses & supplies	31,750	16,689	13,188	96,552
Growing crops	1,509	616	399	5,453
Accounts receivable	28,610	23,469	15,696	62,697
Hedging accounts	903	1,327	604	1,816
Crops held for sale or feed	247,704	247,032	118,298	543,495
Crops under government loan	-	-	-	-
Market livestock held for sale	34,833	43,323	24,351	49,278
Other current assets	2,284	2,256	2,388	1,902
Total current farm assets	372,786	360,894	192,214	823,120
Intermediate Farm Assets				
Breeding livestock	142,170	130,745	88,856	281,424
Machinery and equipment	377,873	416,072	189,858	711,395
Titled vehicles	30,665	32,473	21,835	47,029
Other intermediate assets	27,637	20,742	7,941	55,819
Total intermediate farm assets	578,345	600,032	308,491	1,095,667
Long Term Farm Assets				
Farm land	441,504	561,473	294,212	710,177
Buildings and improvements	224,550	217,952	117,763	444,833
Other long-term assets	41,354	64,871	22,828	66,472
Total long-term farm assets	707,408	844,297	434,803	1,221,482
Total Farm Assets	1,658,539	1,805,223	935,508	3,140,270
Total Nonfarm Assets	178,467	213,544	134,168	216,261
Total Assets	1,837,006	2,018,767	1,069,676	3,356,531
Liabilities				
Current Farm Liabilities				
Accrued interest	7,774	12,963	4,958	9,052
Accounts payable	28,665	46,195	13,429	45,408
Current notes	142,806	217,962	79,870	209,061
Government crop loans	-	-	-	-
Principal due on term debt	58,037	60,070	31,154	102,175
Total current farm liabilities	237,282	337,189	129,411	365,696
Total intermediate farm liabs	152,111	193,273	89,799	227,128
Total long term farm liabilities	374,162	531,422	233,831	523,617
Total farm liabilities	763,555	1,061,885	453,041	1,116,441
Total nonfarm liabilities	30,469	40,271	23,996	31,902
Total liabilities	794,024	1,102,155	477,037	1,148,343
Net worth (farm and nonfarm)	1,042,982	916,611	592,639	2,208,188
Net worth change	38,476	-99,564	16,435	219,300
Percent net worth change	4 %	-10 %	3 %	11 %
Ratio Analysis				
Current farm liabilities / assets	64 %	93 %	67 %	44 %
Intermediate farm liab. / assets	26 %	32 %	29 %	21 %
Long term farm liab. / assets	53 %	63 %	54 %	43 %
Total debt to asset ratio	43 %	55 %	45 %	34 %

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

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Assets				
Current Farm Assets				
Cash and checking balance	25,190	26,181	17,288	61,926
Prepaid expenses & supplies	31,750	16,689	13,188	96,552
Growing crops	1,509	616	399	5,453
Accounts receivable	28,610	23,469	15,696	62,697
Hedging accounts	903	1,327	604	1,816
Crops held for sale or feed	247,704	247,032	118,298	543,495
Crops under government loan	-	-	-	-
Market livestock held for sale	34,833	43,323	24,351	49,278
Other current assets	2,284	2,256	2,388	1,902
Total current farm assets	372,786	360,894	192,214	823,120
Intermediate Farm Assets				
Breeding livestock	142,491	130,707	90,295	281,919
Machinery and equipment	442,111	514,529	216,776	815,626
Titled vehicles	35,201	37,890	24,762	53,006
Other intermediate assets	27,902	21,306	8,085	56,275
Total intermediate farm assets	647,705	704,432	339,918	1,206,826
Long Term Farm Assets				
Farm land	714,584	837,979	586,856	1,043,534
Buildings and improvements	249,169	254,554	127,291	474,408
Other long-term assets	54,613	118,014	24,264	72,982
Total long-term farm assets	1,018,367	1,210,547	738,411	1,590,924
Total Farm Assets	2,038,857	2,275,873	1,270,543	3,620,870
Total Nonfarm Assets	192,804	225,777	145,184	238,922
Total Assets	2,231,661	2,501,650	1,415,727	3,859,792
Liabilities				
Current Farm Liabilities				
Accrued interest	7,774	12,963	4,958	9,052
Accounts payable	28,665	46,195	13,429	45,408
Current notes	142,806	217,962	79,870	209,061
Government crop loans	-	-	-	-
Principal due on term debt	58,037	60,070	31,154	102,175
Total current farm liabilities	237,282	337,189	129,411	365,696
Total intermediate farm liabs	152,111	193,273	89,799	227,128
Total long term farm liabilities	374,162	531,422	233,831	523,617
Total farm liabilities	763,555	1,061,885	453,041	1,116,441
Total nonfarm liabilities	30,469	40,271	23,996	31,902
Total liabs excluding deferreds	794,024	1,102,155	477,037	1,148,343
Total deferred liabilities	179,939	187,582	114,630	343,336
Total liabilities	973,963	1,289,738	591,667	1,491,679
Retained earnings	1,042,982	916,611	592,639	2,208,188
Market valuation equity	214,717	295,301	231,421	159,925
Net worth (farm and nonfarm)	1,257,699	1,211,912	824,061	2,368,113
Net worth excluding deferreds	1,437,638	1,399,494	938,690	2,711,449
Net worth change	49,963	-55,457	20,480	215,314
Percent net worth change	4 %	-4 %	3 %	10 %
Ratio Analysis				
Current farm liabilities / assets	64 %	93 %	67 %	44 %
Intermediate farm liab. / assets	23 %	27 %	26 %	19 %
Long term farm liab. / assets	37 %	44 %	32 %	33 %
Total debt to asset ratio	44 %	52 %	42 %	39 %
Debt to assets excl deferreds	36 %	44 %	34 %	30 %

Financial Guideline Measures

The Farm Financial Standards Task Force recommended the use of these financial measures to evaluate a farm's financial position and financial performance. These measures are grouped by: Liquidity, Solvency, Profitability, Repayment Capacity, and Efficiency.

Liquidity

Liquidity is the ability of the farm business to meet financial obligations in a timely manner, without disrupting normal business operations.

Current Ratio: The current ratio shows the value of current assets relative to current liabilities. It measures the extent current farm assets, if liquidated, would cover liabilities that are due during the next 12 months. The higher the ratio, the safer the short term position.

Working Capital: Working capital shows the dollar amount that current assets can or cannot cover current liabilities. It approximates the amount of capital available to purchase crop and livestock inputs and equipment necessary to produce farm products. The amount of working capital considered adequate must be related to the size of the farm business.

Working Capital to Gross Revenues: Measures operating capital available against the size of the business.

Solvency

Solvency is important in evaluating the risk position of the farm and family and in considering future borrowing capacity. Solvency measures the ability of the business to pay off all debts if liquidated.

Farm Debt To Asset Ratio: The farm debt to asset ratio measures the financial position or solvency of the farm or ranch by comparing the total liabilities to the total assets. It measures the portion of the farm assets that have debt against them. A higher ratio is considered an indicator of greater financial risk.

Farm Equity To Asset Ratio: The farm equity to asset ratio measures the farm equity relative to the value of the farm assets. It measures the proportion of the farm assets financed by the owner's equity whereas the debt to asset ratio measured the proportion of farm assets financed by debt.

Farm Debt To Equity Ratio: The farm debt to equity ratio measures the amount of farm debt relative to the amount of farm equity. It measures the amount of debt the farm has for every dollar of equity.

Profitability

Profitability is the measure of the value of goods produced by the business in relation to the cost of resources used in the production. Profitability calculated on a cost basis does not consider changes in market valuation of capital assets such as machinery and breeding livestock.

Rate of Return on Assets: Rate of return on assets is, in effect, the interest rate your farm earned in the past year on all money invested in the business. If assets are valued at market value, the rate of return on investment can be looked at as the "opportunity cost" of investing money in the farm instead of alternative investments. If assets are valued at cost (cost less depreciation), the rate of return represents the actual return on the average dollar invested in the business.

Rate of Return on Equity: Rate of return on equity is, in effect, the interest rate your investment in the business earned in the past year. If assets are valued at market value, this return can be compared with returns available if the assets were liquidated and invested in alternative investments. If assets are valued at cost, this represents the actual return to the amount of equity capital you have invested in the farm business.

If your return on assets is higher than your average interest rate, your return on equity will be still higher, reflecting the fact that there are residual returns to equity capital after paying all interest expense. This is positive use of financial leverage. If your return on assets is lower than your average interest rate, your return on equity will be still lower, reflecting the fact that borrowed capital did not earn enough to pay its interest cost. This is negative financial leverage. Profitability becomes a key concern when substantial debt capital is used in the business.

Financial Guideline Measures

Net Farm Income: Net farm income represents the returns to labor, management, and equity capital invested in the business. Without income from other sources, or appreciation of capital asset values, net farm income must cover family living expenses and taxes, or net worth will decrease.

Operating Profit Margin: The operating profit margin is a measure of the profit margin from the employment of assets. It measures how effectively you are employing assets relative to the value of output produced. Low prices, high operating expenses, or production problems are all possible causes of a low operating profit margin.

EBITDA: This factor stands for: Earnings Before Interest, Taxes, Depreciation and Amortization. This represents a measure of earnings available for debt repayment.

Repayment Capacity

Repayment capacity shows the borrower's ability to repay term debts (longer than one year) on time. This includes non-farm income, and is therefore not a measure of business performance alone.

Capital Debt Repayment Capacity: Measures the amount generated from farm and non-farm sources, to cover debt repayment and capital replacement.

Capital Debt Repayment Margin: The amount of money remaining after all operating expenses, taxes, family living costs, and scheduled debt payments have been made. It is the money left, after paying all expenses, which is available for purchasing/financing new machinery, equipment, land or livestock.

Replacement Margin: The replacement margin is the amount of income remaining after paying principal and interest on term loans and unfunded (cash) capital purchases.

Term Debt Coverage Ratio: The term debt coverage ratio measures the ability of the business to cover all term debt payments. A number less than 100 percent indicates that the business, plus non-farm income, is not generating sufficient cash to meet all of the debt payments, after family living expenses and taxes have been paid. A number greater than 100 indicates the business is generating sufficient cash to pay all term debt obligations with some surplus margin remaining.

Replacement Margin Coverage Ratio: This represents the ability to term debt and unfunded capital purchases. A ratio under 1.0 indicated that you did not generate enough income to cover term debt payments and unfunded capital purchases.

Efficiency

These measures reflect the relationships between expense and income items to revenue and the efficiency of the farm business with regard to the use of cash and capital assets.

Asset Turnover: Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to maintain the rate of return on assets.

Operating Expense Ratio: This ratio indicates the percent of the gross farm income, which is used to pay the operating expenses. Operating expenses do not include interest or depreciation expense.

Depreciation Expense Ratio: This ratio indicates the percent of the gross farm income, which is used to cover the depreciation expense.

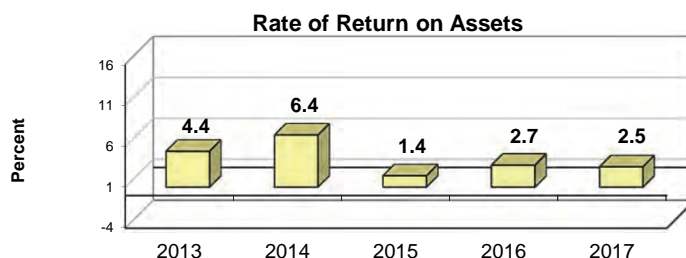
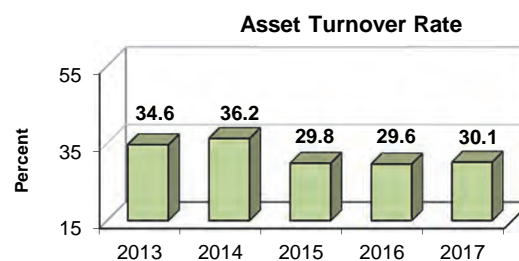
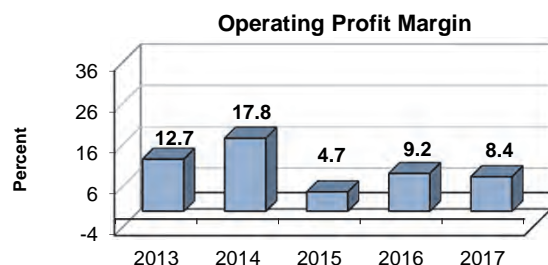
Interest Expense Ratio: This ratio indicates the percent of the gross farm income, which is used to pay farm interest expenses.

Net Farm Income Ratio: The ratio indicates the percent of the gross farm income, which remains after all expenses.

Financial Standards Measures
Northern Minnesota Farm Business Management Data
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Liquidity				
Current ratio	1.57	1.07	1.49	2.25
Working capital	135,504	23,705	62,803	457,424
Working capital to gross inc.	23.6 %	4.5 %	21.9 %	36.2 %
Solvency (market)				
Farm debt to asset ratio	46 %	55 %	45 %	40 %
Farm equity to asset ratio	54 %	45 %	55 %	60 %
Farm debt to equity ratio	0.86	1.21	0.80	0.67
Profitability (cost)				
Rate of return on farm assets	2.5 %	-5.0 %	1.3 %	8.2 %
Rate of return on farm equity	1.2 %	-17.3 %	-1.1 %	10.6 %
Operating profit margin	8.4 %	-20.0 %	5.1 %	22.9 %
Net farm income	54,021	-94,958	23,878	276,989
EBIDTA	129,287	4,189	64,010	398,668
Repayment Capacity				
Capital debt repayment capacity	95,471	-22,210	46,388	316,745
Capital debt repayment margin	14,485	-120,684	2,108	187,539
Replacement margin	-3,469	-140,752	-7,564	152,032
Term debt coverage ratio	1.18	-0.23	1.05	2.45
Replacement coverage ratio	0.96	-0.19	0.86	1.92
Efficiency				
Asset turnover rate (cost)	30.1 %	24.7 %	25.9 %	35.8 %
Operating expense ratio	77.5 %	99.2 %	77.6 %	68.5 %
Depreciation expense ratio	7.8 %	9.9 %	8.1 %	6.4 %
Interest expense ratio	5.3 %	8.9 %	6.1 %	3.3 %
Net farm income ratio	9.4 %	-18.2 %	8.3 %	21.9 %

Operating Profit Margin X Asset Turnover Rate = Rate of Return on Farm Assets



How does your Farm Stack Up?

Northern Minnesota Farm Business Management Data

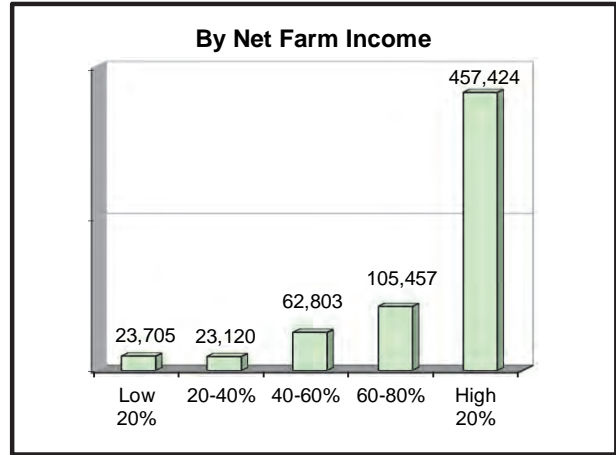
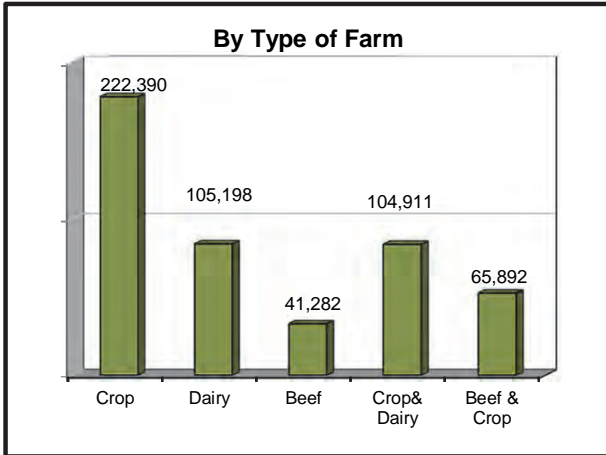
Below is a summary of the low, average, and high farms using the 21 Financial Standards Measures. The numbers listed below are intended to provide a general overview of the farm situation for the current year and over a five year period. The current year data provides a snapshot of the conditions that represent the present while the five year data provides a longer term look at these factors to enable their use in potential decision making activities.

For additional information, please see the back cover of this report. A "Financial Scorecard" is provided in color for your use.

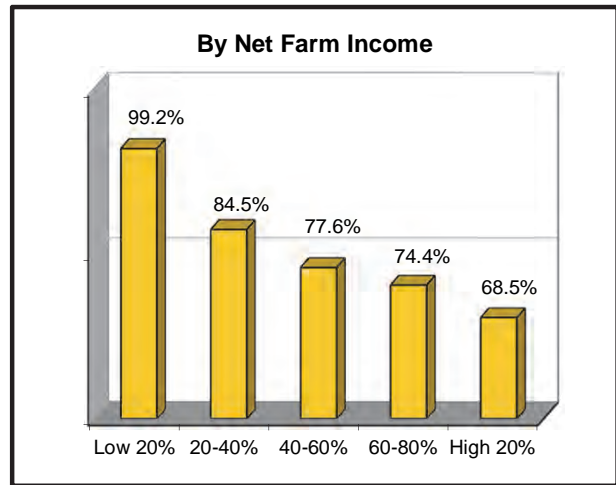
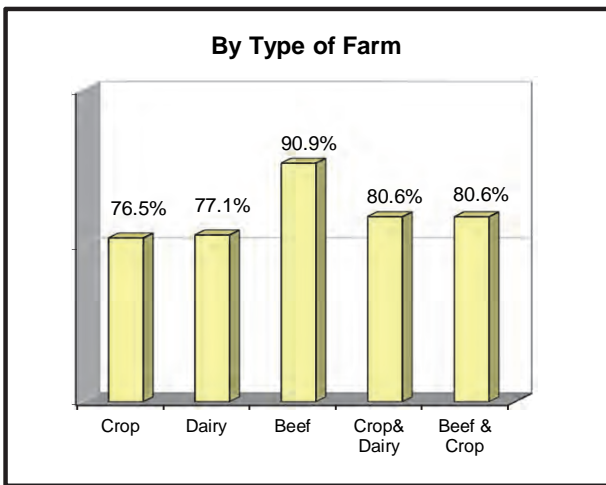
Evaluation Chart	<u>Low Farms</u>		<u>Average</u>		<u>High Farms</u>		<u>Your Farm</u>	
	2017	5 Yr Ave	2017	5 Yr Ave	2017	5 Yr Ave	2017	5 Yr Ave
<u>Liquidity</u>								
Current Ratio	1.07	1.05	1.57	1.65	2.25	2.26		
Working Capital	\$ 23,705	19,552	135,504	144,150	457,424	466,034		
Working Capital to Gross Inc.	% 4.5%	3.6%	23.6%	25.3%	36.2%	35.1%		
<u>Solvency (Market)</u>								
Farm Debt to Asset Ratio	% 55%	56%	46%	45%	40%	39%		
Farm Equity to Asset Ratio	% 45%	44%	54%	55%	60%	61%		
Farm Debt to Equity Ratio	% 1.21	1.29	0.86	0.83	0.67	0.65		
<u>Profitability (Cost)</u>								
Rate of Return on Farm Assets	% -5.0%	-5.6%	2.5%	3.5%	8.2%	8.9%		
Rate of Return on Farm Equity	% -17.3%	-19.6%	1.2%	2.9%	10.6%	11.8%		
Operating Profit Margin	% -20.0%	-23.0%	8.4%	10.6%	22.9%	23.3%		
Net Farm Income	\$ -94,958	-87,048	54,021	68,004	276,989	311,937		
EBIDTA	\$ 4,189	-490	129,287	137,277	398,668	437,611		
<u>Repayment Capacity (Accrual)</u>								
Capital Debt Repayment Cap.	\$ -22,210	-26,224	95,471	98,982	316,745	344,575		
Capital Debt Repayment Margin	\$ -120,684	-117,531	14,485	20,741	187,539	203,417		
Replacement Margin	\$ -140,752	-131,299	-3,469	6,452	152,032	173,977		
Term Debt Coverage Ratio	-0.23	-0.30	1.18	1.27	2.45	2.42		
Replacement Coverage Ratio	-0.19	-0.26	0.96	1.08	1.92	2.01		
<u>Efficiency</u>								
Asset Turnover Rate (Cost)	% 24.7%	24.3%	30.1%	32.1%	35.8%	37.8%		
Operating Expense Ratio	% 99.2%	100.2%	77.5%	77.1%	68.5%	69.1%		
Depreciation Expense Ratio	% 9.9%	9.7%	7.8%	7.0%	6.4%	6.0%		
Interest Expense Ratio	% 8.9%	8.1%	5.3%	4.8%	3.3%	3.2%		
Net Farm Income Ratio	% -18.2%	-18.2%	9.4%	11.2%	21.9%	21.8%		

Selected Financial Guideline Measures
Northern Minnesota Farm Business Management Data

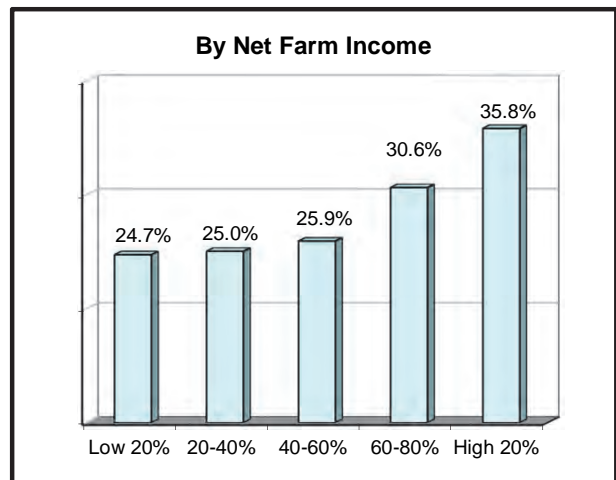
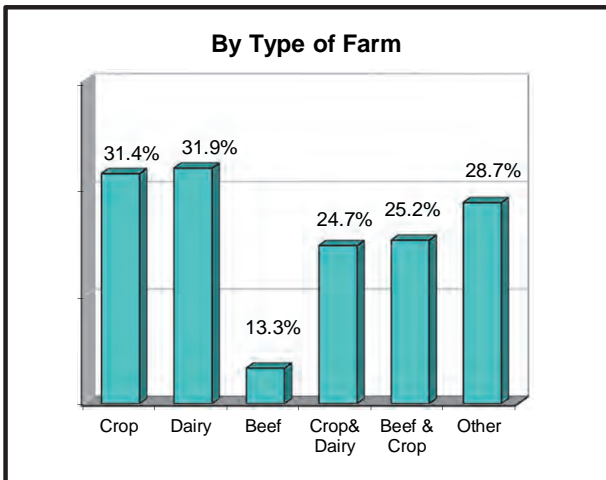
Working Capital



Operating Expense Ratio



Asset Turnover Rate

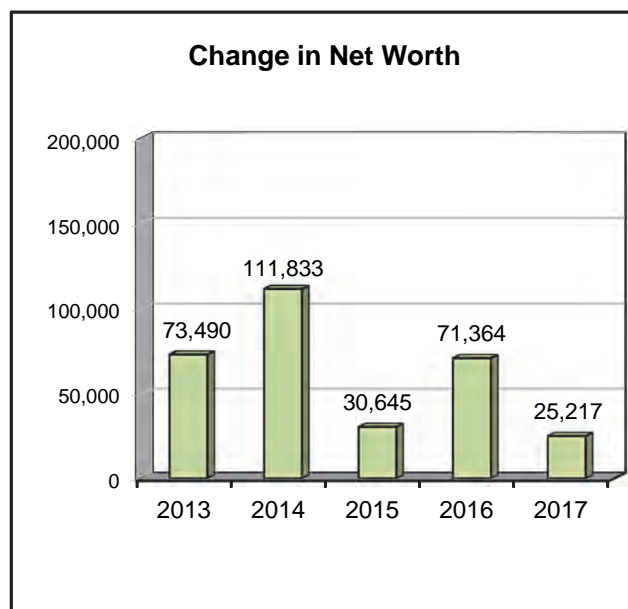
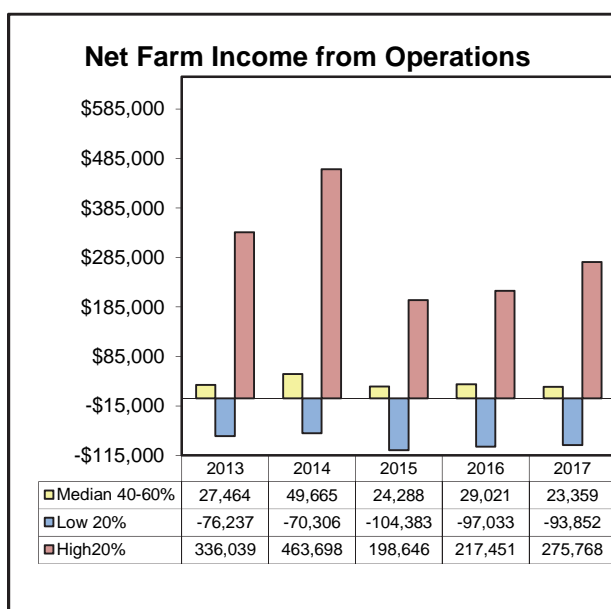


Profitability Measures
Northern Minnesota Farm Business Management Data
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Profitability (assets valued at cost)				
Net farm income from operations	53,905	-93,852	23,359	275,768
Rate of return on assets	2.5 %	-5.0 %	1.3 %	8.2 %
Rate of return on equity	1.2 %	-17.3 %	-1.1 %	10.6 %
Operating profit margin	8.4 %	-20.0 %	5.1 %	22.9 %
Asset turnover rate	30.1 %	24.7 %	25.9 %	35.8 %
Farm interest expense	30,714	46,318	17,527	41,402
Value of operator lbr and mgmt.	43,453	43,091	28,710	70,861
Return on farm assets	41,166	-90,624	12,176	246,309
Average farm assets	1,625,526	1,828,537	921,242	2,997,576
Return on farm equity	10,452	-136,943	-5,351	204,907
Average farm equity	881,457	791,816	478,505	1,926,531
Value of farm production	488,802	452,163	238,720	1,073,525
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Profitability (assets valued at market)				
Net farm income from operations	63,883	-50,407	25,845	265,426
Rate of return on assets	2.6 %	-2.1 %	1.2 %	6.8 %
Rate of return on equity	1.9 %	-8.9 %	-0.4 %	9.4 %
Operating profit margin	10.5 %	-10.4 %	6.1 %	22.0 %
Asset turnover rate	24.5 %	19.8 %	19.0 %	31.0 %
Farm interest expense	30,714	46,318	17,527	41,402
Value of operator lbr and mgmt.	43,453	43,091	28,710	70,861
Return on farm assets	51,144	-47,179	14,662	235,966
Average farm assets	1,998,864	2,284,918	1,254,674	3,467,232
Return on farm equity	20,429	-93,497	-2,864	194,564
Average farm equity	1,079,203	1,054,658	699,763	2,072,370
Value of farm production	488,802	452,163	238,720	1,073,525

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

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Liquidity				
Current ratio	1.57	1.07	1.49	2.25
Working capital	135,504	23,705	62,803	457,424
Working capital to gross inc.	23.6 %	4.5 %	21.9 %	36.2 %
Current assets	372,786	360,894	192,214	823,120
Current liabilities	237,282	337,189	129,411	365,696
Gross revenues (accrual)	575,383	521,789	286,364	1,264,494
Repayment capacity				
Net farm income from operations	53,905	-93,852	23,359	275,768
Depreciation	44,668	51,723	23,124	81,498
Personal income	28,846	42,426	26,609	14,577
Family living/owner withdrawals	-46,165	-42,899	-32,817	-74,148
Payments on personal debt	-2,754	-3,440	-2,642	-2,829
Income taxes paid	-6,900	-10,003	-5,101	-11,412
Interest on term debt	23,871	33,836	13,855	33,291
Capital debt repayment capacity	95,471	-22,210	46,388	316,745
Scheduled term debt payments	-80,986	-98,474	-44,280	-129,206
Capital debt repayment margin	14,485	-120,684	2,108	187,539
Cash replacement allowance	-17,954	-20,067	-9,672	-35,508
Replacement margin	-3,469	-140,752	-7,564	152,032
Term debt coverage ratio	1.18	-0.23	1.05	2.45
Replacement coverage ratio	0.96	-0.19	0.86	1.92





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Household and Personal Expenses
Northern Minnesota Farm Business Management Data
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	76	16	6	17
Average family size	3.4	3.1	2.8	3.9
Family Living Expenses				
Food and meals expense	9,107	8,235	7,801	13,312
Medical care	3,850	1,672	1,928	5,531
Health insurance	3,300	995	2,797	5,577
Cash donations	1,280	562	1,629	1,902
Household supplies	3,072	3,637	881	2,967
Clothing	1,887	1,586	1,652	3,454
Personal care	2,044	686	4,900	3,367
Child / Dependent care	1,049	1,347	183	1,074
Alimony and child support	34	-	-	-
Gifts	1,034	1,020	944	1,572
Education	996	893	429	1,089
Recreation	2,933	2,961	830	4,880
Utilities (household share)	2,832	3,943	829	2,856
Personal vehicle operating exp	3,471	4,188	1,623	3,246
Household real estate taxes	481	427	-	1,015
Dwelling rent	534	2	-	1,748
Household repairs	1,893	716	2,567	4,215
Personal interest	1,420	2,242	2,074	1,266
Disability / Long term care ins	328	73	44	361
Life insurance payments	2,291	880	1,914	2,349
Personal property insurance	431	602	-	535
Miscellaneous	6,109	6,524	2,170	5,887
Total cash family living expense	50,375	43,191	35,195	68,203
Family living from the farm	303	458	-	150
Total family living	50,678	43,649	35,195	68,353
Other Nonfarm Expenditures				
Income taxes	5,283	2,004	4,285	13,457
Furnishing & appliance purchases	-	-	-	-
Nonfarm vehicle purchases	4,640	-225	2,917	14,723
Nonfarm real estate purchases	2,400	-	-	5,598
Other nonfarm capital purchases	2,281	1,831	-	7,463
Nonfarm savings & investments	653	-2,218	-312	1,283
Total other nonfarm expenditures	15,256	1,391	6,890	42,524
Total cash family living investment & nonfarm capital purch	65,631	44,582	42,085	110,727

Nonfarm Summary
Northern Minnesota Farm Business Management Data
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Nonfarm Income				
Personal wages & salary	20,168	27,347	20,854	10,194
Net nonfarm business income	2,452	3,861	1,696	899
Personal rental income	249	431	270	283
Personal interest income	108	14	152	308
Personal cash dividends	87	345	-	89
Tax refunds	1,657	2,060	1,479	723
Other nonfarm income	4,124	8,368	2,158	2,080
Total nonfarm income	28,846	42,426	26,609	14,577
Gifts and inheritances	4,564	8,959	1,559	7,983
Nonfarm Assets (market)				
Checking & savings	7,602	6,767	3,886	15,189
Stocks & bonds	9,330	10,793	3,359	17,051
Other current assets	2,272	1,516	1,267	6,877
Furniture & appliances	8,598	11,118	7,092	7,619
Nonfarm vehicles	15,635	17,882	12,431	19,713
Cash value of life ins.	4,819	3,236	6,502	4,853
Retirement accounts	46,819	39,645	36,107	47,431
Other intermediate assets	7,679	22,805	3,349	4,440
Nonfarm real estate	73,214	101,374	62,043	71,022
Personal bus. investment	8,583	868	800	34,501
Other long term assets	8,253	9,772	8,347	10,226
Total nonfarm assets	192,804	225,777	145,184	238,922
Nonfarm Liabilities				
Accrued interest	44	70	13	89
Accounts payable	716	1,345	659	375
Current notes	2,478	2,095	1,601	633
Princ due on term debt	2,810	3,470	2,441	2,953
Total current liabilities	7,459	7,064	4,868	10,593
Intermediate liabilities	4,442	4,990	2,915	6,103
Long term liabilities	18,569	28,216	16,213	15,207
Total nonfarm liabilities	30,469	40,271	23,996	31,902
Nonfarm net worth	162,335	185,506	121,188	207,020
Nonfarm debt to asset ratio	16 %	18 %	17 %	13 %

Operator and Labor Information
Northern Minnesota Farm Business Management Data
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Operator Information				
Average number of operators	1.2	1.2	1.1	1.4
Average age of operators	47.1	51.1	44.9	46.8
Average number of years farming	22.2	24.9	19.9	23.0
Results Per Operator				
Working capital	114,224	20,299	57,060	322,130
Total assets (market)	1,881,191	2,142,297	1,286,276	2,718,163
Total liabilities	821,007	1,104,472	537,566	1,050,478
Net worth (market)	1,060,184	1,037,825	748,710	1,667,685
Net worth excl deferred liabs	1,211,865	1,198,462	852,858	1,909,471
Gross farm income	485,022	446,836	260,180	890,489
Total farm expense	439,583	527,206	238,956	696,286
Net farm income from operations	45,439	-80,371	21,223	194,203
Net nonfarm income	24,316	36,331	24,176	10,265
Family living & tax withdrawals	44,722	45,254	34,419	60,224
Total acres owned	274.5	262.3	234.7	404.1
Total crop acres	636.7	771.3	338.5	1,026.6
Crop acres owned	216.6	204.6	151.6	341.8
Crop acres cash rented	415.0	560.6	186.1	677.6
Crop acres share rented	5.1	6.2	0.9	7.3
Total pasture acres	35.9	24.2	30.1	73.0
Labor Analysis				
Number of farms	622	124	125	125
Total unpaid labor hours	2,563	2,527	2,070	3,356
Total hired labor hours	2,062	1,975	879	5,157
Total labor hours per farm	4,625	4,502	2,948	8,514
Unpaid hours per operator	2,161	2,164	1,880	2,364
Value of farm production / hour	105.68	100.44	80.97	126.09
Net farm income / unpaid hour	21.03	-37.14	11.29	82.16
Average hourly hired labor wage	17.32	16.16	15.09	17.69
Partnerships & LLCs				
Number of farms	80	17	13	24
Number of operators	2.0	1.8	1.9	2.4
Owner withdrawals per farm	80,293	-	-	112,813
Withdrawals per operator	40,682	-	-	50,139
Corporations				
Number of farms	18	2	-	9
Number of operators	2.1	-	-	2.4

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

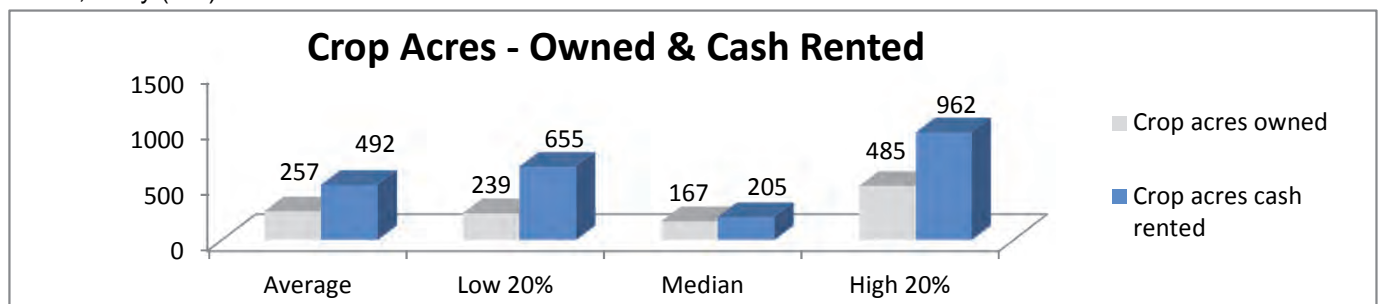
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	622	124	125	125
Acreage Summary				
Total acres owned	326	306	258	574
Total crop acres	755	901	373	1,458
Crop acres owned	257	239	167	485
Crop acres cash rented	492	655	205	962
Crop acres share rented	6	7	1	10
Total pasture acres	43	28	33	104
Percent crop acres owned	34 %	27 %	45 %	33 %
Mach invest/crop acre cost	515	477	522	495
Mach invest/crop acre market	596	574	592	566

Average Price Received (Cash Sales Only)

Soybeans per bushel	9.12	9.11	9.07	9.14
Corn per bushel	3.02	2.96	3.02	3.05
Wheat, Spring per bushel	5.41	5.50	5.70	5.40
Hay, Alfalfa per ton	87.64	120.59	71.33	81.18
Oats per bushel	2.27	1.89	2.06	2.44
Barley per bushel	4.41	-	-	4.41
Hay, Mixed per ton	74.78	77.09	-	-
Hay per ton	80.00	76.15	76.09	67.05
Corn Silage per ton	27.83	-	-	28.67
Rye per bushel	3.61	-	-	-
Sunflowers per cwt	18.26	-	-	17.22
Grass Seed, Perennial Rye per lb	0.622	-	-	0.626
Soybeans, Food per bushel	10.90	-	-	-
Beans, Navy per cwt	26.09	-	-	-

Average Yield Per Acre

Soybeans (bushel)	34.29	32.29	35.47	34.11
Corn (bushel)	160.96	162.97	164.12	157.68
Corn Silage (ton)	19.62	18.24	18.85	20.29
Hay, Alfalfa (ton)	4.29	4.41	4.01	4.76
Wheat, Spring (bushel)	70.95	64.45	64.32	73.30
Hay (ton)	2.73	2.05	2.65	3.10
Hay, Mixed (ton)	2.59	2.18	2.74	3.68
Oats (bushel)	79.63	68.45	67.00	112.38
Barley (bushel)	95.26	98.83	86.00	98.80
Rye (bushel)	35.47	-	-	35.22
Soybeans, Food (bushel)	30.74	-	-	-
Sunflowers (cwt)	14.04	-	-	15.75
Beans, Navy (cwt)	20.10	-	-	-



Individual Enterprise Analysis Tables

The individual crop and livestock tables are designed to identify the costs and returns for specific enterprises on the farm. Data from all farmers with each enterprise is merged. The minimum number of farms, in order to print a given column on the following reports, is five (5). This enables the necessary level of confidentiality for publication of this information.

Crop report costs such as fertilizer, chemicals, seed, crop drying expenses, hired labor, and custom hire are costs that are assigned to each individual crop. These costs are shown in the crop enterprise analysis as *Direct Costs*.

Other costs, called *Overhead Costs*, are divided out by formula. Overhead costs are assigned by an allocation factor to each enterprise. The allocation factor is based on historical data of labor and capital intensity.

There are a couple of subtle differences between the Owned Land and Cash Rented Land tables. Naturally, on cash rented land, the actual cost of renting the land is reported in the direct cost section. On the owned land, there are two different lines of information in the overhead cost section that would be included for calculating cost of ownership: real-estate taxes and interest on long-term debt.

The livestock reports have a format similar to the crop reports. Production information is listed at the top of each table. This will include animal or product sales, purchases, sales, transfers, and inventory change.

The *Direct Costs* include costs that are assigned to the enterprise, including items such as: feed, veterinary, breeding, marketing, hired labor, fuel & repairs, and livestock supplies. The *Overhead Costs* include formula-assigned costs, including items such as: depreciation, interest, utilities, and insurances.

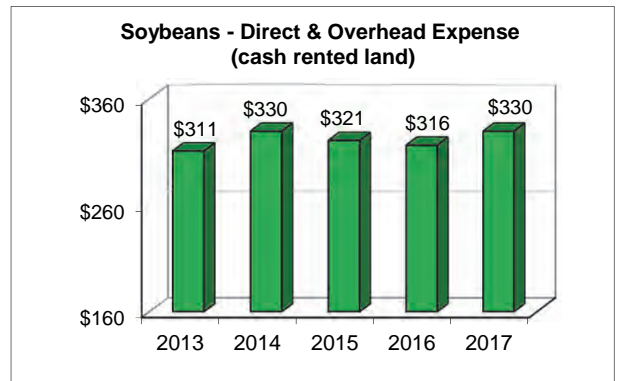
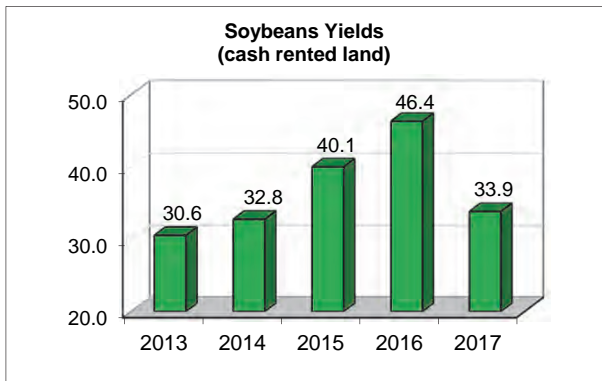
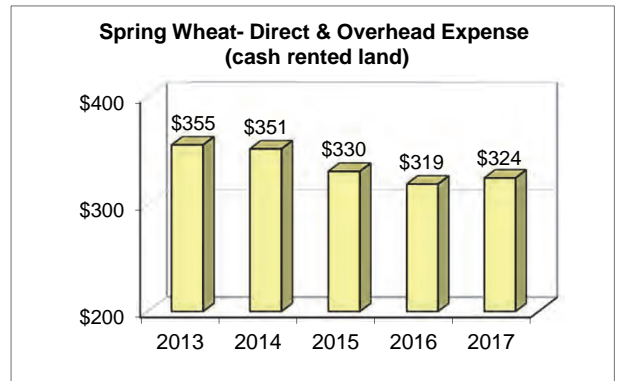
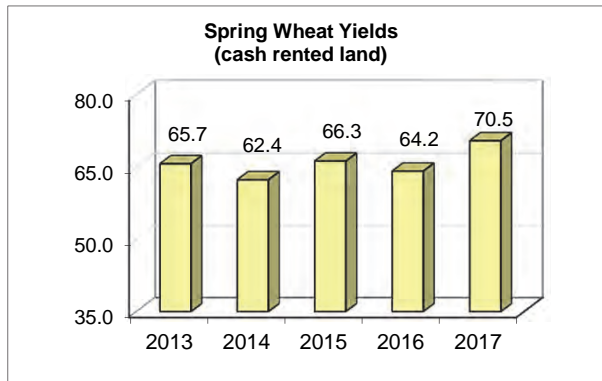
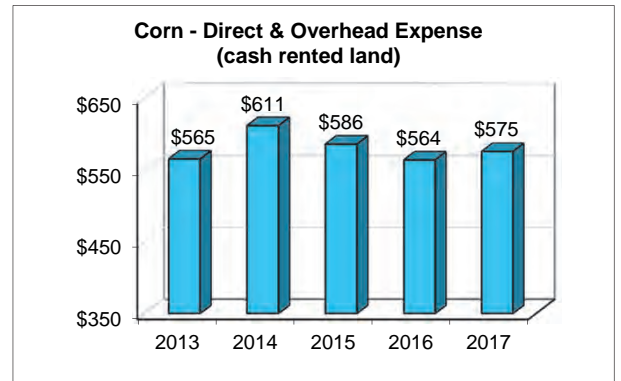
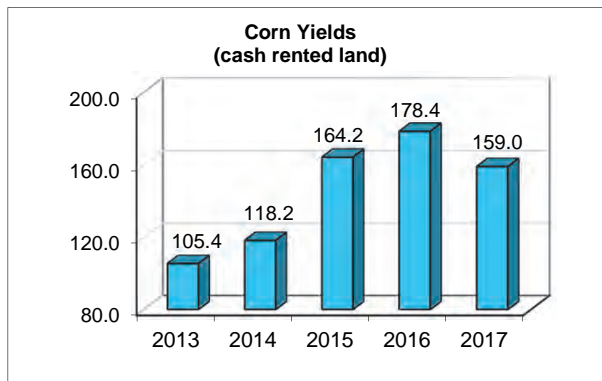
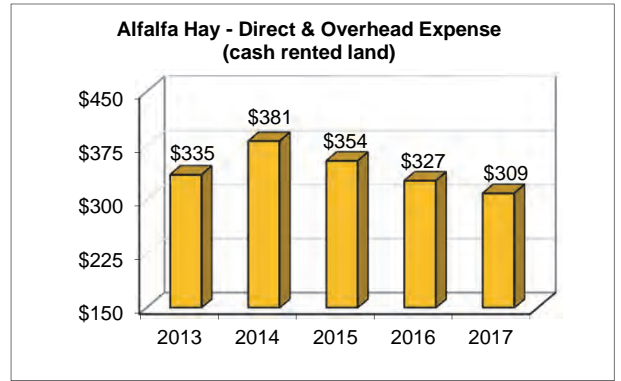
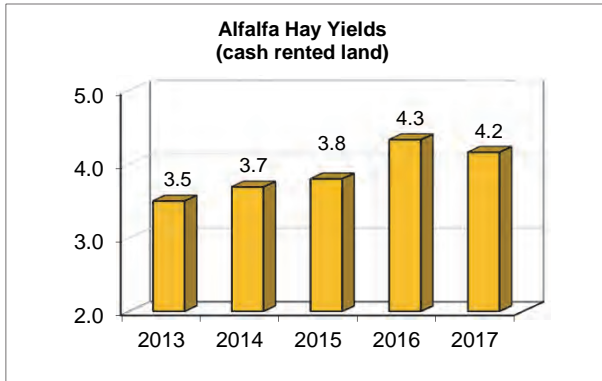
At the bottom of each livestock report, there is a list of selected factors for each enterprise. These factors are a combination of production indicators and efficiency indicators.

Towards the bottom of both the crop and livestock enterprise tables, are four (4) factors that show varying levels of Cost of Production. Those factors include a cost of production based on: direct costs, overhead & direct costs, total cost less government payments and/or other revenue, and total cost including labor & management.

Machinery Cost per Acre is a factor used to combine all costs related to machinery usage. The Machinery Cost per Acre includes: Fuel & Oil, Repairs, Custom hire, Machinery leases, Interest on machinery debt, and Machinery depreciation. A machinery cost summary for five prominent Northern Minnesota crops is listed below. Data is taken from the owned land enterprise tables.

Crop	2013	2014	2015	2016	2017
Alfalfa Hay	\$145.46	\$190.49	\$164.47	\$169.5	\$171.76
Corn	\$152.35	\$162.84	\$159.23	\$151.43	\$153.51
Corn Silage	\$178.58	\$229.01	\$209.02	\$204.12	\$214.87
Soybeans	\$85.28	\$87.39	\$81.89	\$88.15	\$83.66
Spring Wheat	\$87.97	\$86.33	\$84.02	\$84.95	\$83.56

Five Year History of Crop Yields and Cost of Production Northern Minnesota Farm Business Management Data



Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Corn on Owned Land

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	226	45	46
Acres	124.15	118.74	142.58
Yield per acre (bu.)	164.62	152.71	186.75
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.08	2.99	3.20
Other product return per acre	4.21	9.09	4.79
Total product return per acre	510.61	466.34	602.48
Hedging gains/losses per acre	0.98	-	3.85
Crop insurance per acre	8.57	14.83	3.04
Other crop income per acre	4.47	5.25	5.16
Gross return per acre	524.62	486.41	614.52
Direct Expenses			
Seed and plants	91.60	90.09	98.62
Fertilizer	96.25	85.04	91.92
Crop chemicals	26.23	23.79	24.75
Crop insurance	17.73	19.48	15.57
Drying expense	13.63	11.92	13.60
Storage	1.40	1.07	0.83
Packaging and supplies	0.99	0.58	0.69
Fuel & oil	26.25	29.13	22.08
Repairs	48.18	52.35	39.38
Custom hire	13.18	10.31	9.05
Hired labor	2.97	3.30	0.63
Machinery leases	2.56	0.45	2.10
Utilities	0.48	0.81	0.20
Hauling and trucking	2.83	1.70	4.47
Marketing	1.71	2.17	1.03
Operating interest	10.32	10.95	6.91
Miscellaneous	1.45	1.99	0.70
Total direct expenses per acre	357.76	345.12	332.52
Return over direct exp per acre	166.86	141.29	282.01
Overhead Expenses			
Hired labor	13.79	11.72	18.37
Machinery leases	2.96	0.41	4.98
Building leases	1.61	0.14	1.36
RE & pers. property taxes	19.85	18.86	25.55
Farm insurance	10.63	10.76	11.15
Utilities	6.54	7.66	8.17
Dues & professional fees	4.46	4.19	4.62
Interest	55.10	61.70	59.85
Mach & bldg depreciation	60.30	50.54	82.83
Miscellaneous	6.31	5.54	6.22
Total overhead expenses per acre	181.54	171.53	223.10
Total dir & ovhd expenses per acre	539.30	516.65	555.61
Net return per acre	-14.68	-30.24	58.91
Government payments	6.91	5.21	7.84
Net return with govt pmts	-7.76	-25.03	66.74
Labor & management charge	45.84	48.98	47.12
Net return over lbr & mgt	-53.61	-74.01	19.62
Cost of Production			
Total direct expense per bu.	2.17	2.26	1.78
Total dir & ovhd exp per bu.	3.28	3.38	2.98
Less govt & other income	3.12	3.16	2.84
With labor & management	3.40	3.48	3.10
Net value per unit	3.08	2.99	3.22
Machinery cost per acre	153.51	146.21	158.69
Est. labor hours per acre	3.63	4.19	3.47

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Corn on Cash Rent

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	281	56	57
Acres	206.49	183.22	173.72
Yield per acre (bu.)	159.02	157.39	165.00
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.06	3.08	3.10
Other product return per acre	1.85	2.70	1.71
Total product return per acre	488.50	486.99	513.37
Hedging gains/losses per acre	0.36	-0.04	2.26
Crop insurance per acre	16.71	6.64	55.03
Other crop income per acre	5.07	10.22	4.08
Gross return per acre	510.64	503.80	574.73
Direct Expenses			
Seed and plants	91.82	87.58	91.23
Fertilizer	101.94	99.89	77.03
Crop chemicals	26.52	25.10	22.29
Crop insurance	17.70	18.19	17.79
Drying expense	15.10	15.77	10.84
Storage	1.78	0.23	0.64
Packaging and supplies	0.73	0.93	1.33
Fuel & oil	24.87	24.60	22.64
Repairs	43.06	41.80	34.21
Custom hire	12.11	5.18	8.47
Hired labor	5.10	6.05	4.21
Land rent	116.87	104.78	93.78
Machinery leases	4.24	8.17	3.83
Utilities	0.65	1.15	0.77
Hauling and trucking	3.35	6.45	3.12
Marketing	1.63	0.72	2.82
Operating interest	11.32	10.82	9.17
Miscellaneous	1.46	1.62	0.63
Total direct expenses per acre	480.24	459.05	404.81
Return over direct exp per acre	30.40	44.75	169.92
Overhead Expenses			
Hired labor	10.72	6.40	10.35
Machinery leases	6.87	4.40	6.32
Building leases	3.07	0.46	0.10
Farm insurance	8.07	7.92	7.43
Utilities	4.75	5.44	5.46
Dues & professional fees	4.17	3.08	3.56
Interest	6.87	5.56	10.03
Mach & bldg depreciation	44.65	49.13	47.23
Miscellaneous	5.96	5.48	4.45
Total overhead expenses per acre	95.13	87.86	94.92
Total dir & ovhd expenses per acre	575.37	546.92	499.73
Net return per acre	-64.73	-43.11	75.00
Government payments	4.58	3.78	4.39
Net return with govt pmts	-60.14	-39.34	79.39
Labor & management charge	39.22	41.52	39.53
Net return over lbr & mgt	-99.36	-80.86	39.86
Cost of Production			
Total direct expense per bu.	3.02	2.92	2.45
Total dir & ovhd exp per bu.	3.62	3.47	3.03
Less govt & other income	3.44	3.33	2.62
With labor & management	3.69	3.59	2.86
Net value per unit	3.06	3.08	3.11
Machinery cost per acre	136.82	132.65	124.35
Est. labor hours per acre	2.90	3.53	2.97

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Soybeans on Owned Land

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	200	40	40
Acres	223.92	207.63	144.41
Yield per acre (bu.)	35.21	37.80	48.76
Operators share of yield %	100.00	100.00	100.00
Value per bu.	9.05	9.18	9.06
Other product return per acre	0.02	-	0.12
Total product return per acre	318.61	347.08	441.72
Hedging gains/losses per acre	0.22	-	1.53
Crop insurance per acre	14.71	2.94	9.65
Other crop income per acre	4.16	5.79	7.08
Gross return per acre	337.70	355.82	459.99
Direct Expenses			
Seed and plants	60.69	60.97	54.90
Fertilizer	29.43	26.96	20.12
Crop chemicals	31.14	28.14	38.87
Crop insurance	14.28	14.73	15.38
Fuel & oil	14.25	14.31	14.36
Repairs	25.10	24.55	26.56
Custom hire	6.62	7.48	3.66
Hired labor	2.60	4.85	0.72
Machinery leases	1.72	4.51	0.71
Utilities	0.60	0.27	0.33
Hauling and trucking	1.26	0.37	1.41
Marketing	0.94	1.69	0.89
Operating interest	5.13	5.71	5.08
Miscellaneous	1.51	1.79	1.51
Total direct expenses per acre	195.26	196.31	184.50
Return over direct exp per acre	142.43	159.50	275.49
Overhead Expenses			
Hired labor	6.60	11.22	6.59
Machinery leases	1.02	1.01	2.00
Building leases	0.62	0.15	0.47
RE & pers. property taxes	13.81	13.10	22.39
Farm insurance	6.59	7.38	5.56
Utilities	4.18	5.70	3.90
Dues & professional fees	1.95	1.96	2.04
Interest	32.62	29.69	47.68
Mach & bldg depreciation	34.27	37.55	40.37
Miscellaneous	2.71	2.31	3.50
Total overhead expenses per acre	104.36	110.08	134.48
Total dir & ovhd expenses per acre	299.63	306.39	318.98
Net return per acre	38.07	49.43	141.01
Government payments	12.70	13.12	4.34
Net return with govt pmts	50.77	62.54	145.34
Labor & management charge	28.35	29.92	29.03
Net return over lbr & mgt	22.42	32.62	116.31
Cost of Production			
Total direct expense per bu.	5.55	5.19	3.78
Total dir & ovhd exp per bu.	8.51	8.11	6.54
Less govt & other income	7.61	7.53	6.08
With labor & management	8.41	8.32	6.67
Net value per unit	9.05	9.18	9.09
Machinery cost per acre	83.66	90.47	86.82
Est. labor hours per acre	1.72	2.00	2.08

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Soybeans on Cash Rent

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	285	57	57
Acres	381.76	430.12	203.09
Yield per acre (bu.)	33.91	37.63	44.71
Operators share of yield %	100.00	100.00	100.00
Value per bu.	9.09	9.19	9.18
Other product return per acre	0.05	-	0.34
Total product return per acre	308.35	345.85	410.92
Hedging gains/losses per acre	0.02	-	0.13
Crop insurance per acre	20.32	3.53	14.53
Other crop income per acre	4.27	6.09	7.97
Gross return per acre	332.97	355.48	433.54
Direct Expenses			
Seed and plants	56.79	61.35	54.40
Fertilizer	24.11	30.02	16.54
Crop chemicals	30.67	32.47	29.68
Crop insurance	14.91	16.28	15.38
Fuel & oil	14.00	14.39	13.13
Repairs	23.83	27.89	24.28
Custom hire	6.03	6.18	4.21
Hired labor	3.87	2.78	0.14
Land rent	89.00	87.84	86.97
Machinery leases	3.74	1.11	2.38
Hauling and trucking	0.98	0.66	1.70
Marketing	0.89	0.69	0.48
Operating interest	5.97	4.62	5.48
Miscellaneous	1.96	1.69	2.19
Total direct expenses per acre	276.75	287.97	256.98
Return over direct exp per acre	56.22	67.51	176.56
Overhead Expenses			
Hired labor	6.10	8.12	11.46
Machinery leases	2.70	2.05	1.75
Building leases	1.11	0.98	0.60
Farm insurance	5.11	5.31	5.60
Utilities	3.39	4.40	4.14
Dues & professional fees	1.83	1.85	1.60
Interest	4.23	3.69	3.44
Mach & bldg depreciation	25.82	29.63	26.08
Miscellaneous	2.57	2.49	3.11
Total overhead expenses per acre	52.85	58.51	57.77
Total dir & ovhd expenses per acre	329.60	346.48	314.76
Net return per acre	3.36	9.00	118.78
Government payments	9.48	10.37	5.86
Net return with govt pmts	12.85	19.36	124.65
Labor & management charge	25.56	28.26	26.20
Net return over lbr & mgt	-12.71	-8.90	98.44
Cost of Production			
Total direct expense per bu.	8.16	7.65	5.75
Total dir & ovhd exp per bu.	9.72	9.21	7.04
Less govt & other income	8.71	8.68	6.39
With labor & management	9.47	9.43	6.98
Net value per unit	9.09	9.19	9.19
Machinery cost per acre	77.84	81.88	72.69
Est. labor hours per acre	1.61	1.84	1.98

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Wheat, Spring on Owned Land

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	18	18
Acres	206.98	218.63	266.73
Yield per acre (bu.)	72.32	71.46	83.64
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.90	5.66	6.00
Other product return per acre	0.78	-	0.69
Total product return per acre	427.47	404.67	502.66
Crop insurance per acre	2.74	10.74	-
Other crop income per acre	5.99	5.25	5.53
Gross return per acre	436.20	420.66	508.19
Direct Expenses			
Seed and plants	20.51	17.43	19.12
Fertilizer	75.48	70.27	64.53
Crop chemicals	30.55	33.08	28.15
Crop insurance	11.88	12.97	11.04
Drying expense	1.07	0.67	0.77
Fuel & oil	15.09	16.72	13.05
Repairs	24.53	25.61	22.02
Custom hire	8.05	5.30	9.86
Hired labor	1.49	0.11	0.52
Machinery leases	0.74	0.09	1.49
Hauling and trucking	0.53	0.36	0.08
Marketing	0.87	0.59	0.53
Operating interest	4.74	2.70	3.67
Miscellaneous	1.88	1.15	0.48
Total direct expenses per acre	197.40	187.05	175.32
Return over direct exp per acre	238.80	233.61	332.87
Overhead Expenses			
Hired labor	7.51	4.65	8.26
Machinery leases	0.87	0.02	2.05
Building leases	0.49	1.61	0.18
RE & pers. property taxes	12.39	9.50	13.28
Farm insurance	5.73	5.47	3.78
Utilities	4.35	4.54	2.94
Dues & professional fees	2.40	2.26	2.45
Interest	22.00	15.37	24.93
Mach & bldg depreciation	34.04	39.74	34.51
Miscellaneous	2.29	1.67	2.57
Total overhead expenses per acre	92.07	84.84	94.93
Total dir & ovhd expenses per acre	289.47	271.89	270.25
Net return per acre	146.74	148.77	237.94
Government payments	19.37	24.05	24.81
Net return with govt pmts	166.10	172.82	262.75
Labor & management charge	30.95	34.03	29.00
Net return over lbr & mgt	135.15	138.80	233.75
Cost of Production			
Total direct expense per bu.	2.73	2.62	2.10
Total dir & ovhd exp per bu.	4.00	3.80	3.23
Less govt & other income	3.60	3.24	2.86
With labor & management	4.03	3.72	3.21
Net value per unit	5.90	5.66	6.00
Machinery cost per acre	83.56	89.15	82.51
Est. labor hours per acre	1.66	1.57	1.56

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Wheat, Spring on Cash Rent

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	112	23	23
Acres	337.33	280.17	565.14
Yield per acre (bu.)	70.46	66.85	81.29
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.91	5.85	5.99
Other product return per acre	0.98	0.30	1.71
Total product return per acre	417.58	391.40	488.27
Hedging gains/losses per acre	-0.20	-	-
Crop insurance per acre	3.17	0.80	-
Other crop income per acre	6.83	5.28	10.76
Gross return per acre	427.38	397.49	499.03
Direct Expenses			
Seed and plants	19.07	17.77	18.96
Fertilizer	77.10	72.15	76.33
Crop chemicals	27.94	27.35	30.08
Crop insurance	10.57	8.90	10.63
Drying expense	1.14	0.85	1.66
Fuel & oil	13.80	13.44	14.12
Repairs	23.46	24.15	20.82
Custom hire	6.05	2.57	6.41
Hired labor	4.15	3.17	0.27
Land rent	78.39	76.29	76.38
Machinery leases	2.63	3.64	0.33
Marketing	1.11	0.68	1.82
Operating interest	4.40	7.93	2.36
Miscellaneous	2.18	2.72	0.78
Total direct expenses per acre	271.99	261.60	260.97
Return over direct exp per acre	155.39	135.89	238.06
Overhead Expenses			
Hired labor	8.72	5.14	14.33
Machinery leases	1.85	3.33	1.86
Building leases	1.40	2.79	0.75
Farm insurance	4.97	5.37	4.84
Utilities	3.69	3.79	3.86
Dues & professional fees	1.92	1.64	1.92
Interest	2.51	3.49	2.20
Mach & bldg depreciation	24.94	25.40	23.86
Miscellaneous	2.29	2.33	1.87
Total overhead expenses per acre	52.30	53.28	55.49
Total dir & ovhd expenses per acre	324.29	314.87	316.46
Net return per acre	103.10	82.62	182.56
Government payments	14.57	18.20	16.63
Net return with govt pmts	117.67	100.82	199.19
Labor & management charge	26.09	25.72	25.12
Net return over lbr & mgt	91.57	75.10	174.07
Cost of Production			
Total direct expense per bu.	3.86	3.91	3.21
Total dir & ovhd exp per bu.	4.60	4.71	3.89
Less govt & other income	4.24	4.34	3.54
With labor & management	4.61	4.73	3.84
Net value per unit	5.91	5.85	5.99
Machinery cost per acre	73.66	74.25	68.16
Est. labor hours per acre	1.62	1.24	1.65

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Corn Silage on Owned Land

	<u>Avg. Of</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	148	29	30
Acres	54.36	48.42	63.98
Yield per acre (ton)	19.84	19.43	23.46
Operators share of yield %	100.00	100.00	100.00
Value per ton	30.45	29.97	32.10
Total product return per acre	603.96	582.18	753.00
Crop insurance per acre	8.51	1.38	20.03
Other crop income per acre	1.40	4.09	1.82
Gross return per acre	613.87	587.65	774.85
Direct Expenses			
Seed and plants	89.56	88.75	82.57
Fertilizer	57.85	48.99	48.53
Crop chemicals	29.93	38.59	26.76
Crop insurance	14.42	7.86	15.95
Packaging and supplies	13.45	16.83	7.51
Fuel & oil	34.24	32.67	32.50
Repairs	59.24	52.62	51.60
Custom hire	56.35	66.44	31.22
Hired labor	2.58	0.79	0.99
Machinery leases	4.61	13.86	1.39
Utilities	0.49	0.56	0.05
Hauling and trucking	1.21	1.62	3.70
Operating interest	5.88	2.93	7.28
Miscellaneous	3.46	1.49	1.32
Total direct expenses per acre	373.28	373.99	311.38
Return over direct exp per acre	240.59	213.66	463.46
Overhead Expenses			
Hired labor	21.96	31.14	36.64
Machinery leases	1.61	1.42	1.48
Building leases	1.29	0.07	-
RE & pers. property taxes	13.55	11.03	15.17
Farm insurance	10.88	8.35	12.46
Utilities	7.29	4.59	9.77
Dues & professional fees	3.83	4.05	2.78
Interest	50.17	37.56	49.46
Mach & bldg depreciation	54.85	58.45	49.97
Miscellaneous	6.34	5.45	8.71
Total overhead expenses per acre	171.78	162.11	186.43
Total dir & ovhd expenses per acre	545.06	536.10	497.82
Net return per acre	68.81	51.55	277.03
Government payments	1.96	4.33	2.68
Net return with govt pmts	70.77	55.88	279.71
Labor & management charge	53.97	52.33	52.29
Net return over lbr & mgt	16.80	3.55	227.42
Cost of Production			
Total direct expense per ton	18.82	19.25	13.27
Total dir & ovhd exp per ton	27.48	27.59	21.22
Less govt & other income	26.88	27.09	20.17
With labor & management	29.60	29.78	22.40
Net value per unit	30.45	29.97	32.10
Machinery cost per acre	214.87	226.79	174.66
Est. labor hours per acre	5.07	5.46	4.07

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Corn Silage on Cash Rent

	<u>Avg. Of</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	123	24	25
Acres	78.63	77.91	68.38
Yield per acre (ton)	19.47	19.98	22.17
Operators share of yield %	100.00	100.00	100.00
Value per ton	29.96	30.81	31.58
Total product return per acre	583.42	615.38	700.08
Crop insurance per acre	10.62	10.44	21.46
Other crop income per acre	0.85	0.54	0.47
Gross return per acre	594.90	626.36	722.01
Direct Expenses			
Seed and plants	94.65	108.69	75.99
Fertilizer	72.72	68.36	75.42
Crop chemicals	30.26	36.08	23.38
Crop insurance	13.43	9.06	15.05
Packaging and supplies	8.59	8.27	2.64
Fuel & oil	36.39	30.28	32.44
Repairs	58.77	53.81	53.60
Custom hire	58.45	83.87	15.62
Hired labor	3.25	1.90	6.12
Land rent	86.74	55.50	49.13
Machinery leases	4.91	0.27	2.81
Utilities	0.53	0.56	0.17
Hauling and trucking	0.53	1.61	-
Operating interest	4.52	3.81	5.69
Miscellaneous	4.21	3.93	1.03
Total direct expenses per acre	477.97	466.01	359.09
Return over direct exp per acre	116.93	160.34	362.92
Overhead Expenses			
Hired labor	25.36	31.14	36.94
Machinery leases	7.96	2.84	2.56
Farm insurance	6.59	7.17	6.16
Utilities	5.10	3.86	5.63
Dues & professional fees	3.43	5.03	3.11
Interest	11.20	6.95	9.19
Mach & bldg depreciation	51.77	56.93	60.96
Miscellaneous	5.39	3.19	8.37
Total overhead expenses per acre	116.81	117.11	132.92
Total dir & ovhd expenses per acre	594.78	583.13	492.01
Net return per acre	0.12	43.23	230.00
Government payments	3.42	4.82	2.73
Net return with govt pmts	3.54	48.06	232.73
Labor & management charge	39.15	41.41	36.58
Net return over lbr & mgt	-35.61	6.65	196.15
Cost of Production			
Total direct expense per ton	24.55	23.33	16.20
Total dir & ovhd exp per ton	30.55	29.19	22.19
Less govt & other income	29.78	28.40	21.08
With labor & management	31.79	30.47	22.73
Net value per unit	29.96	30.81	31.58
Machinery cost per acre	223.66	227.52	172.11
Est. labor hours per acre	4.38	5.00	3.64

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Hay, Alfalfa on Owned Land

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	119	24	24
Acres	56.30	63.45	51.73
Yield per acre (ton)	4.49	4.82	6.08
Operators share of yield %	100.00	100.00	100.00
Value per ton	108.87	97.80	129.38
Total product return per acre	488.89	471.77	786.26
Crop insurance per acre	6.74	9.60	17.72
Other crop income per acre	1.18	0.78	0.36
Gross return per acre	496.82	482.15	804.34
Direct Expenses			
Seed and plants	1.60	0.40	-
Fertilizer	24.98	17.88	19.19
Crop chemicals	1.46	0.40	0.58
Crop insurance	1.38	2.20	1.18
Storage	0.97	1.55	0.17
Packaging and supplies	6.82	5.28	13.13
Fuel & oil	27.99	29.79	31.10
Repairs	54.43	61.41	50.42
Custom hire	25.72	27.21	34.81
Hired labor	1.85	1.95	1.69
Machinery leases	0.83	1.60	0.42
Utilities	0.49	0.66	0.39
Operating interest	7.04	5.79	2.21
Miscellaneous	1.83	0.47	1.76
Total direct expenses per acre	157.38	156.59	157.07
Return over direct exp per acre	339.44	325.56	647.26
Overhead Expenses			
Hired labor	16.02	21.25	18.58
Machinery leases	4.36	0.28	2.60
Building leases	0.58	0.03	0.15
RE & pers. property taxes	14.49	11.94	15.34
Farm insurance	12.44	12.95	13.37
Utilities	6.08	6.29	5.71
Dues & professional fees	3.97	5.74	4.22
Interest	53.49	47.86	52.14
Mach & bldg depreciation	54.42	44.86	65.20
Miscellaneous	5.72	4.90	4.83
Total overhead expenses per acre	171.58	156.10	182.16
Total dir & ovhd expenses per acre	328.96	312.69	339.23
Net return per acre	167.85	169.46	465.10
Government payments	3.35	1.22	0.39
Net return with govt pmts	171.21	170.69	465.50
Labor & management charge	48.90	43.19	54.44
Net return over lbr & mgt	122.31	127.49	411.06
Cost of Production			
Total direct expense per ton	35.05	32.46	25.85
Total dir & ovhd exp per ton	73.25	64.82	55.82
Less govt & other income	70.74	62.41	52.78
With labor & management	81.63	71.37	61.74
Net value per unit	108.87	97.80	129.38
Machinery cost per acre	171.76	163.65	188.98
Est. labor hours per acre	4.74	5.04	5.95

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Hay, Alfalfa on Cash Rent

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	104	21	21
Acres	65.53	53.60	75.32
Yield per acre (ton)	4.16	4.10	5.67
Operators share of yield %	100.00	100.00	100.00
Value per ton	119.78	116.25	135.72
Total product return per acre	497.93	476.31	769.50
Crop insurance per acre	4.55	-	9.20
Other crop income per acre	1.03	0.82	0.45
Gross return per acre	503.51	477.12	779.15
Direct Expenses			
Fertilizer	31.69	34.97	23.32
Crop chemicals	2.85	0.75	3.09
Crop insurance	1.30	2.68	1.23
Storage	1.71	1.68	4.02
Packaging and supplies	5.86	5.17	4.01
Fuel & oil	25.37	25.06	27.27
Repairs	51.28	47.87	52.46
Custom hire	20.86	15.09	21.75
Hired labor	3.26	2.28	4.28
Land rent	64.00	64.07	49.31
Machinery leases	1.57	2.83	0.02
Utilities	0.62	-	1.22
Hauling and trucking	0.67	1.28	0.23
Marketing	0.28	0.05	1.18
Operating interest	5.48	6.82	1.40
Miscellaneous	3.40	3.34	7.76
Total direct expenses per acre	220.20	213.95	202.55
Return over direct exp per acre	283.31	263.18	576.59
Overhead Expenses			
Hired labor	14.17	23.07	17.15
Machinery leases	3.71	1.22	1.95
Farm insurance	9.02	10.00	6.81
Utilities	4.89	4.12	3.36
Dues & professional fees	3.31	4.14	2.12
Interest	7.59	7.41	6.47
Mach & bldg depreciation	42.59	37.41	42.06
Miscellaneous	3.88	3.77	5.31
Total overhead expenses per acre	89.16	91.13	85.24
Total dir & ovhd expenses per acre	309.36	305.08	287.79
Net return per acre	194.14	172.05	491.35
Government payments	2.11	2.73	0.73
Net return with govt pmts	196.25	174.78	492.09
Labor & management charge	39.12	43.75	33.74
Net return over lbr & mgt	157.14	131.03	458.35
Cost of Production			
Total direct expense per ton	52.97	52.22	35.73
Total dir & ovhd exp per ton	74.42	74.46	50.76
Less govt & other income	72.57	73.60	48.93
With labor & management	81.98	84.27	54.88
Net value per unit	119.78	116.25	135.72
Machinery cost per acre	147.68	127.66	148.45
Est. labor hours per acre	4.19	4.44	4.41

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Hay, Mixed on Cash Rent

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	36	7	8
Acres	71.73	54.71	53.34
Yield per acre (ton)	2.39	2.90	4.67
Operators share of yield %	100.00	100.00	100.00
Value per ton	72.21	66.99	98.76
Total product return per acre	172.61	193.98	460.90
Other crop income per acre	0.04	-	-
Gross return per acre	172.65	193.98	460.90
Direct Expenses			
Fertilizer	11.52	20.04	28.93
Crop chemicals	0.19	0.61	0.60
Storage	0.87	1.20	3.48
Packaging and supplies	2.11	3.66	0.63
Fuel & oil	18.13	19.37	24.61
Repairs	30.12	32.39	30.03
Custom hire	3.71	11.50	5.57
Hired labor	1.28	-	-
Land rent	31.17	40.57	44.14
Machinery leases	0.50	2.33	-
Utilities	0.57	0.14	0.79
Operating interest	8.39	9.50	2.64
Miscellaneous	0.30	0.11	0.44
Total direct expenses per acre	108.86	141.44	141.86
Return over direct exp per acre	63.78	52.54	319.04
Overhead Expenses			
Hired labor	7.93	-	27.82
Machinery leases	5.35	0.00	8.35
Building leases	0.34	0.41	1.66
Farm insurance	5.84	5.48	5.53
Utilities	3.00	5.09	3.77
Dues & professional fees	2.40	4.45	2.99
Interest	5.44	4.94	7.93
Mach & bldg depreciation	24.43	18.29	46.05
Miscellaneous	2.94	4.65	6.76
Total overhead expenses per acre	57.67	43.31	110.86
Total dir & ovhd expenses per acre	166.53	184.75	252.72
Net return per acre	6.12	9.23	208.18
Government payments	1.01	3.70	1.55
Net return with govt pmts	7.13	12.93	209.73
Labor & management charge	31.26	49.58	30.28
Net return over lbr & mgt	-24.14	-36.65	179.45
Cost of Production			
Total direct expense per ton	45.54	48.84	30.40
Total dir & ovhd exp per ton	69.67	63.80	54.15
Less govt & other income	69.23	62.52	53.82
With labor & management	82.31	79.64	60.31
Net value per unit	72.21	66.99	98.76
Machinery cost per acre	86.68	88.43	118.99
Est. labor hours per acre	2.34	3.86	2.56

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Hay, Grass on Cash Rent

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	62	13	13
Acres	59.28	52.60	35.48
Yield per acre (ton)	2.05	2.13	3.53
Operators share of yield %	100.00	100.00	100.00
Value per ton	70.23	69.02	78.75
Other product return per acre	3.29	-	-
Total product return per acre	146.96	147.30	277.80
Other crop income per acre	0.07	0.40	-
Gross return per acre	147.03	147.70	277.80
Direct Expenses			
Seed and plants	0.16	0.88	-
Fertilizer	5.55	10.85	1.47
Packaging and supplies	2.71	3.44	2.70
Fuel & oil	13.94	12.58	15.54
Repairs	21.37	19.63	27.55
Custom hire	3.73	0.95	6.83
Hired labor	0.37	-	0.82
Land rent	32.32	39.23	50.08
Machinery leases	1.76	-	-
Operating interest	2.17	1.83	2.57
Miscellaneous	2.29	2.47	0.18
Total direct expenses per acre	86.37	91.85	107.73
Return over direct exp per acre	60.66	55.85	170.06
Overhead Expenses			
Hired labor	7.99	5.87	16.13
Machinery leases	1.76	3.13	3.11
Building leases	0.16	-	0.92
Farm insurance	3.35	3.92	3.80
Utilities	2.41	2.43	8.22
Dues & professional fees	1.23	1.52	1.82
Interest	6.87	6.81	9.14
Mach & bldg depreciation	22.96	21.16	42.55
Miscellaneous	3.20	3.14	9.15
Total overhead expenses per acre	49.94	48.00	94.83
Total dir & ovhd expenses per acre	136.31	139.85	202.56
Net return per acre	10.72	7.85	75.23
Government payments	0.08	0.05	-
Net return with govt pmts	10.81	7.90	75.23
Labor & management charge	22.35	25.99	40.02
Net return over lbr & mgt	-11.55	-18.09	35.21
Cost of Production			
Total direct expense per ton	42.22	43.04	30.54
Total dir & ovhd exp per ton	66.63	65.53	57.42
Less govt & other income	64.95	65.32	57.42
With labor & management	75.87	77.50	68.76
Net value per unit	70.23	69.02	78.75
Machinery cost per acre	70.55	62.97	100.54
Est. labor hours per acre	2.43	2.60	2.94

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)
Owned and Rented Acres Combined *

	<u>Establish</u> <u>Alfalfa Hay</u>	<u>Oatlage</u>	<u>Fescue</u> <u>Grass Seed</u>	<u>Perennial Rye</u> <u>Grass Seed</u>
Number of farms	43	28	7	8
Acres	33.26	26.93	199.71	480.79
Yield per acre	2.45	3.97	565.10	1079.14
Operators share of yield %	100.00	100.00	100.00	100.00
Value	112.05	46.30	0.61	0.59
Total product return per acre	274.51	183.83	344.97	637.09
Other crop income per acre	9.26	-	32.89	1.18
Gross return per acre	283.79	183.83	377.86	638.27
Direct Expenses				
Seed	99.22	19.61	6.60	16.76
Fertilizer	30.77	11.86	89.29	83.82
Crop chemicals	7.29	0.40	22.85	49.97
Crop insurance	3.35	0.79	10.03	13.53
Packaging and supplies	9.61	8.35	-	-
Fuel & oil	29.29	25.64	12.71	20.35
Repairs	62.03	34.20	25.59	25.06
Custom hire	13.72	18.66	8.00	12.55
Machinery Leases	3.26	-	4.09	3.58
Land Rent	44.81	24.91	74.45	33.36
Operating interest	4.76	2.68	4.97	4.43
Miscellaneous	2.06	1.56	1.25	0.09
Total direct expenses per acre	314.55	148.65	266.06	265.18
Return over direct exp per acre	-30.76	35.18	111.81	373.09
Overhead Expenses				
Hired labor	22.82	11.62	10.93	9.31
Mach and bldg leases	1.67	2.54	-	3.45
RE & pers. property taxes	5.36	6.37	3.61	3.66
Farm insurance	8.79	6.88	5.01	6.96
Utilities	4.90	5.18	4.35	3.87
Dues & professional fees	3.56	1.86	2.17	1.29
Interest	27.55	27.38	15.53	7.37
Mach & bldg depreciation	54.17	32.93	14.79	40.06
Miscellaneous	5.18	4.51	2.46	1.80
Total overhead expenses per acre	130.42	99.26	52.62	76.14
Total dir & ovhd expenses per acre	444.97	247.91	318.68	341.32
Net return per acre	-161.17	-64.08	59.19	296.95
Government payments	2.04	0.36	9.68	36.90
Net return with govt pmts	-159.13	-63.72	68.87	333.85
Labor & management charge	45.31	31.63	22.92	39.83
Net return over lbr & mgt	-204.44	-95.35	45.94	294.01
Cost of Production				
Total direct expense per bu.	128.40	37.44	0.47	0.25
Total dir & ovhd exp per bu.	181.63	62.44	0.56	0.32
Less govt & other income	177.01	62.34	0.49	0.28
With labor & management	195.50	70.31	0.53	0.32
Net value per unit	112.05	46.30	0.61	0.59
Machinery cost per acre	164.48	116.29	67.97	102.86
Est. labor hours per acre	4.98	3.08	1.72	1.71

* Combined data for rented and owned land. Actual land cost is the sum of: Land Rent, Interest, & RE taxes.

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)

Irrigated Crops *

	<u>Corn</u>	<u>Corn Silage</u>	<u>Hay, Alfalfa</u>	<u>Soybeans</u>
Number of farms	62	22	11	29
Acres	204.50	107.8	87.95	177.01
Yield per acre	188.32	24.73	5.73	43.31
Operators share of yield %	100.00	100.00	100.00	100.00
Value	3.06	31.60	102.38	9.03
Total product return per acre	576.26	781.48	586.45	391.09
Crop insurance per acre	8.19	-	-	10.37
Other crop income per acre	9.53	-	-	2.03
Gross return per acre	593.98	781.48	586.45	403.49
Direct Expenses				
Seed	89.70	102.17	-	51.53
Fertilizer	126.92	72.52	43.34	31.08
Crop chemicals	29.80	37.11	4.55	35.07
Crop insurance	15.89	12.71	-	13.45
Marketing	1.39	-	-	1.65
Storage	1.17	-	-	1.12
Irrigation energy	23.49	16.97	18.83	20.05
Packaging and supplies/Drying Corn	23.86	11.16	9.62	-
Fuel & oil	24.22	34.05	27.01	12.56
Repairs	43.49	61.15	63.41	21.49
Custom hire and Trucking	19.35	63.37	18.26	12.16
Hired labor	3.50	0.61	8.04	5.42
Land Rent	68.88	18.05	35.53	68.90
Operating interest	9.78	4.81	6.95	3.74
Miscellaneous	2.68	1.57	1.81	1.99
Total direct expenses per acre	491.88	438.89	241.23	293.93
Return over direct exp per acre	102.10	342.60	345.22	109.56
Overhead Expenses				
Hired labor	14.82	41.46	21.99	5.33
Mach and bldg leases	5.70	9.15	12.35	2.43
RE & pers. property taxes	8.63	9.16	10.65	6.16
Farm insurance	9.87	10.99	9.75	6.91
Utilities	5.90	7.08	6.67	3.25
Dues & professional fees	4.49	6.17	5.12	1.47
Interest	24.94	32.77	85.90	25.78
Mach & bldg depreciation	53.97	68.82	52.24	30.52
Miscellaneous	7.78	4.44	7.37	3.64
Total overhead expenses per acre	135.44	190.04	212.04	84.66
Total dir & ovhd expenses per acre	627.32	628.92	453.27	378.58
Net return per acre	-33.34	152.56	133.18	24.91
Government payments	5.07	8.68	5.05	7.34
Net return with govt pmts	-28.27	161.24	138.22	32.24
Labor & management charge	45.74	48.71	39.61	32.64
Net return over lbr & mgt	-74.01	112.53	98.62	-0.40
Cost of Production				
Total direct expense per bu.	2.61	17.75	42.12	6.79
Total dir & ovhd exp per bu.	3.33	25.43	79.13	8.74
Less govt & other income	3.21	25.08	78.25	8.29
With labor & management	3.45	27.05	85.17	9.04
Net value per unit	3.06	31.60	102.38	9.03
Machinery cost per acre	148.71	239.39	177.74	86.16
Est. labor hours per acre	3.40	4.93	4.53	2.22

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Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)
Owned and Rented Acres Combined *

	<u>Barley</u>	<u>Oats</u>	<u>Rye</u>	<u>Canola</u>
Number of farms	21	44	15	5
Acres	244.31	40.01	86.96	350.2
Yield per acre	95.26	80.48	35.47	24.04
Operators share of yield %	100.00	100.00	100.00	100.00
Value	4.41	2.22	3.43	17.93
Other product return per acre	0.42	3.71	49.72	-
Total product return per acre	420.62	182.31	171.41	431.01
Crop insurance per acre	1.34	2.86	-	-
Other crop income per acre	3.51	48.88	12.15	13.41
Gross return per acre	425.48	234.05	183.56	444.42
Direct Expenses				
Seed	14.89	14.96	11.49	52.36
Fertilizer	57.12	25.86	30.52	71.03
Crop chemicals	27.05	7.13	0.96	30.18
Crop insurance	12.02	4.62	1.99	12.32
Fuel & oil	16.42	12.37	11.55	14.37
Repairs	27.38	20.66	22.07	24.35
Custom hire & trucking	13.45	5.55	6.26	14.94
Hired labor	1.79	2.15	-	8.15
Land Rent	33.79	19.39	51.27	62.50
Machine Leases	4.36	0.86	-	-
Operating interest	7.35	5.06	7.93	5.30
Miscellaneous	2.32	1.18	1.95	0.49
Total direct expenses per acre	218.06	120.24	145.98	295.99
Return over direct exp per acre	207.42	113.81	37.58	148.43
Overhead Expenses				
Hired labor	5.69	3.63	10.29	7.89
Machinery leases	1.33	0.91	3.43	4.60
Building leases	1.89	0.19	-	0.47
RE & pers. property taxes	3.69	7.43	1.65	0.72
Farm insurance	6.45	5.45	8.20	5.20
Utilities	5.07	3.21	3.68	4.20
Dues & professional fees	2.52	1.70	2.53	1.63
Interest	17.27	18.71	10.72	3.69
Mach & bldg depreciation	26.62	24.10	26.87	35.16
Miscellaneous	2.64	1.80	2.80	1.10
Total overhead expenses per acre	73.17	66.70	70.17	64.66
Total dir & ovhd expenses per acre	291.23	186.94	216.15	360.66
Net return per acre	134.25	47.11	-32.59	83.77
Government payments	14.48	2.30	0.03	25.69
Net return with govt pmts	148.73	49.41	-32.56	109.46
Labor & management charge	21.33	23.89	22.33	28.29
Net return over lbr & mgt	127.40	25.52	-54.89	81.17
Cost of Production				
Total direct expense per bu.	2.29	1.49	4.12	12.31
Total dir & ovhd exp per bu.	3.06	2.32	6.09	15.00
Less govt & other income	2.85	1.61	4.35	13.37
With labor & management	3.07	1.90	4.98	14.55
Net value per unit	4.41	2.22	3.43	17.93
Machinery cost per acre	89.88	67.30	67.07	90.45
Est. labor hours per acre	1.07	2.25	2.38	1.69

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Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)
Owned and Rented Acres Combined *

	Soybeans, Seed	Beans, Pinto	Beans, Navy	Sunflowers
Number of farms	9	6	6	7
Acres	286.78	73.58	318.77	129.86
Yield per acre	46.11	16.83	20.10	14.04
Operators share of yield %	100.00	100.00	100.00	100.00
Value	9.90	24.35	25.88	17.89
Total product return per acre	456.55	409.95	520.09	251.22
Crop insurance per acre	-	7.08	16.03	2.39
Other crop income per acre	7.55	-	4.06	1.85
Gross return per acre	464.10	417.03	540.18	255.46
Direct Expenses				
Seed	51.61	49.86	54.80	36.42
Fertilizer	20.59	44.48	48.67	52.00
Crop chemicals	42.13	87.32	75.99	22.74
Crop insurance	9.30	26.45	19.06	11.41
Drying expense	-	-	-	1.66
Fuel & oil	13.70	26.14	17.69	18.73
Repairs	27.77	41.80	35.71	19.87
Custom hire	5.66	10.37	9.27	5.97
Hired labor	0.95	-	1.33	-
Land Rent	41.00	60.39	45.40	32.21
Operating interest	8.72	8.74	12.43	4.97
Miscellaneous	4.74	0.52	2.96	1.11
Total direct expenses per acre	226.16	357.39	326.13	207.42
Return over direct exp per acre	237.94	59.64	214.05	48.04
Overhead Expenses				
Hired labor	7.28	24.03	9.68	2.31
Machinery leases	0.85	13.01	7.64	-
Building leases	3.69	-	5.11	-
RE & pers. property taxes	11.98	6.93	11.76	2.05
Farm insurance	5.63	5.80	4.29	2.82
Utilities	4.74	6.02	3.47	3.75
Dues & professional fees	2.58	5.94	4.05	2.58
Interest	10.79	12.63	26.57	3.43
Mach & bldg depreciation	34.04	37.25	28.80	24.51
Miscellaneous	2.61	4.21	3.01	1.59
Total overhead expenses per acre	84.18	115.82	104.38	42.95
Total dir & ovhd expenses per acre	310.34	473.22	430.51	250.36
Net return per acre	153.76	-56.19	109.67	5.09
Government payments	8.22	-	-	11.24
Net return with govt pmts	161.98	-56.19	109.67	16.33
Labor & management charge	31.48	24.65	28.97	28.49
Net return over lbr & mgt	130.50	-80.83	80.70	-12.16
Cost of Production				
Total direct expense per bu.	4.90	21.23	16.23	14.77
Total dir & ovhd exp per bu.	6.73	28.11	21.42	17.83
Less govt & other income	6.39	27.69	20.42	16.73
With labor & management	7.07	29.16	21.86	18.76
Net value per unit	9.90	24.35	25.88	17.89
Machinery cost per acre	79.42	131.46	103.50	69.38
Est. labor hours per acre	1.49	1.82	1.55	1.72

* Combined data for rented and owned land. Actual land cost is the sum of: Land Rent, Interest, & RE taxes.

Crop Enterprise Analysis
Northern Minnesota Farm Business Management Data
(Farms Sorted By Return to Overhead)
Owned and Rented Acres Combined *

	<u>Organic Corn</u>	<u>Organic Hay, Alfalfa</u>	<u>Irrigated Dark Red Kidney</u>	<u>Irrigated Strawberries</u>
Number of farms	8	8	5	6
Acres	60.9	102.24	287.1	2.63
Yield per acre	109.78	3.35	22.45	5893.98
Operators share of yield %	100.00	100.00	100.00	100.00
Value	8.04	119.88	34.65	2.20
Total product return per acre	882.46	401.02	777.97	12963.50
Crop insurance per acre	-	10.35	0.86	-
Other crop income per acre	7.02	9.15	-	-
Gross return per acre	889.48	420.52	778.83	12963.50
Direct Expenses				
Seed	85.18	34.21	108.86	-
Fertilizer	66.64	34.21	99.05	389.87
Crop chemicals	-	-	105.79	429.87
Crop insurance	-	-	55.47	90.44
Drying expense	16.10	-	-	-
Irrigation Energy	-	-	26.85	45.80
Packaging and Supplies	2.20	11.13	0.27	255.25
Fuel & oil	33.50	35.63	13.68	218.03
Repairs	70.74	78.58	16.62	579.63
Custom hire and Trucking	8.89	20.52	28.70	123.48
Hired labor	14.54	3.89	3.87	2550.13
Land Rent	86.54	49.71	96.76	-
Organic Certification	3.48	2.21	-	-
Operating interest	6.70	9.81	14.80	-
Miscellaneous	6.81	8.57	2.74	1797.28
Total direct expenses per acre	409.84	254.80	610.70	6535.99
Return over direct exp per acre	479.64	165.72	168.13	6427.51
Overhead Expenses				
Hired labor	37.11	20.87	6.28	429.71
Mach and bldg leases	0.71	2.24	58.13	65.31
RE & pers. property taxes	1.68	3.89	6.25	152.85
Farm insurance	5.76	7.53	11.19	149.29
Utilities	4.36	7.60	4.20	192.39
Dues & professional fees	4.79	8.25	3.36	333.47
Interest	9.55	13.97	25.66	534.86
Mach & bldg depreciation	69.31	40.68	58.13	1047.57
Miscellaneous	1.50	4.16	19.88	509.28
Total overhead expenses per acre	134.76	108.67	127.55	3358.54
Total dir & ovhd expenses per acre	544.60	363.47	738.25	9894.53
Net return per acre	344.88	57.05	40.58	3068.97
Government payments	0.44	4.86	-	-
Net return with govt pmts	345.31	61.91	40.58	3068.97
Labor & management charge	56.15	56.17	52.82	1678.28
Net return over lbr & mgt	289.16	5.75	-12.23	1390.69
Cost of Production				
Total direct expense per bu.	3.73	76.17	27.20	1.11
Total dir & ovhd exp per bu.	4.96	108.65	32.88	1.68
Less govt & other income	4.89	101.37	32.84	1.68
With labor & management	5.40	118.16	35.19	1.96
Net value per unit	8.04	119.88	34.65	2.20
Machinery cost per acre	183.10	186.19	135.73	1938.46
Est. labor hours per acre	7.70	4.65	2.50	487.85

* Combined data for rented and owned land. Actual land cost is the sum of: Land Rent, Interest, & RE taxes.



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Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Organic and Organic Transition
(Farms Sorted By Return to Overhead)

Dairy -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	379		76		76	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	24,687.2	4,374.72	23,960.0	4,272.85	26,468.7	4,762.94
Dairy Calves sold (hd)	0.3	45.32	0.3	51.55	0.3	35.21
Transferred out (hd)	0.6	36.21	0.7	23.24	0.7	70.32
Cull sales (hd)	0.3	234.68	0.3	250.95	0.3	256.41
Other income		45.58		46.63		59.71
Purchased (hd)	0.0	-31.46	0.0	-32.04	0.0	-17.16
Transferred in (hd)	0.4	-60.53	0.4	-27.30	0.4	-134.68
Inventory change (hd)	0.0	50.06	0.1	80.22	0.0	56.44
Dairy repl net cost		-571.51		-631.08		-486.87
Gross margin		4,123.09		4,035.03		4,602.32
Direct Expenses						
Protein Vit Minerals (lb.)	3,383.6	692.52	3,121.8	646.61	4,033.7	857.09
Complete Ration (lb.)	2,751.1	342.14	2,626.3	372.00	843.3	173.07
Corn (bu.)	66.9	211.18	61.2	198.48	68.0	210.70
Corn Silage (lb.)	18,484.4	296.49	18,062.2	291.76	19,932.2	300.85
Hay, Alfalfa (lb.)	3,092.4	162.01	2,306.2	144.38	1,966.9	113.03
Haylage, Alfalfa (lb.)	4,498.1	133.02	4,674.3	132.60	4,672.1	152.65
Other feed stuffs (lb)	2,412.2	99.25	3,187.2	105.85	2,493.4	117.41
Breeding fees		48.29		46.05		45.20
Veterinary		116.44		116.88		132.52
Supplies		313.59		266.53		276.26
Fuel & oil		69.99		61.33		73.49
Repairs		152.49		148.11		164.35
Custom hire		71.90		64.89		61.84
Hired labor		361.07		392.95		187.89
Hauling and trucking		51.72		53.93		45.85
Bedding		81.18		101.74		70.60
Total direct expenses		3,203.29		3,144.09		2,982.79
Return over direct expense		919.80		890.94		1,619.52
Overhead Expenses						
Hired labor		97.01		41.40		255.56
Building leases		56.81		64.42		48.59
Farm insurance		47.09		50.61		48.66
Utilities		61.24		59.74		84.48
Interest		88.89		75.56		89.93
Mach & bldg depreciation		168.13		176.54		222.96
Miscellaneous		57.79		54.90		66.11
Total overhead expenses		576.97		523.17		816.29
Total dir & ovhd expenses		3,780.26		3,667.26		3,799.08
Net return		342.83		367.77		803.23
Labor & management charge		187.06		191.10		241.93
Net return over lbr & mgt		155.78		176.67		561.31
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		12.90		13.03		11.19
Total dir & ovhd expense per unit		15.22		15.20		14.25
With other revenue adjustments		16.32		16.29		14.95
With labor and management		17.08		17.08		15.85
Est. labor hours per unit		41.74		39.40		40.79
Other Information						
Number of cows		209.9		195.1		269.2
Milk produced per cow		24,830		24,122		26,655
Total milk sold		5,182,993		4,673,960		7,124,086
Lb. of milk sold per FTE		1,656,097		1,702,858		1,816,713
Culling percentage		30.0		30.2		31.0
Turnover rate		36.7		37.3		37.0
Cow death loss percent		6.3		6.5		5.6
Percent of barn capacity		113.6		117.8		114.7
Feed cost per day		5.31		5.18		5.27
Feed cost per cwt. of milk		7.80		7.84		7.22
Feed cost per cow		1,936.62		1,891.68		1,924.79
Hired labor per cow		458.08		434.35		443.45
Avg. milk price per cwt.		17.72		17.83		17.99
Milk price / feed margin		9.92		9.99		10.77

Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Organic & Organic Transition
(Farms Sorted By Return to Overhead)

Dairy -- Average Per Cwt. Of Milk

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	379		76		76	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	99.42	17.62	99.33	17.71	99.30	17.87
Dairy Calves sold (hd)	0.00	0.18	0.00	0.21	0.00	0.13
Transferred out (hd)	0.00	0.15	0.00	0.10	0.00	0.26
Cull sales (hd)	0.00	0.95	0.00	1.04	0.00	0.96
Other income		0.18		0.19		0.22
Purchased (hd)	0.00	-0.13	0.00	-0.13	0.00	-0.06
Transferred in (hd)	0.00	-0.24	0.00	-0.11	0.00	-0.51
Inventory change (hd)	0.00	0.20	0.00	0.33	0.00	0.21
Dairy repl net cost		-2.30		-2.62		-1.83
Gross margin		16.61		16.73		17.27
Direct Expenses						
Protein Vit Minerals (lb.)	13.63	2.79	12.94	2.68	15.13	3.22
Complete Ration (lb.)	11.08	1.38	10.89	1.54	3.16	0.65
Corn (bu.)	0.27	0.85	0.25	0.82	0.26	0.79
Corn Silage (lb.)	74.44	1.19	74.88	1.21	74.78	1.13
Hay, Alfalfa (lb.)	12.45	0.65	9.56	0.60	7.38	0.42
Haylage, Alfalfa (lb.)	18.12	0.54	19.38	0.55	17.53	0.57
Other feed stuffs (lb)	9.71	0.40	13.21	0.44	9.35	0.44
Breeding fees		0.19		0.19		0.17
Veterinary		0.47		0.48		0.50
Supplies		1.26		1.10		1.04
Fuel & oil		0.28		0.25		0.28
Repairs		0.61		0.61		0.62
Custom hire		0.29		0.27		0.23
Hired labor		1.45		1.63		0.70
Hauling and trucking		0.21		0.22		0.17
Bedding		0.33		0.42		0.26
Total direct expenses		12.90		13.03		11.19
Return over direct expense		3.70		3.69		6.08
Overhead Expenses						
Hired labor		0.39		0.17		0.96
Building leases		0.23		0.27		0.18
Farm insurance		0.19		0.21		0.18
Utilities		0.25		0.25		0.32
Interest		0.36		0.31		0.34
Mach & bldg depreciation		0.68		0.73		0.84
Miscellaneous		0.23		0.23		0.25
Total overhead expenses		2.32		2.17		3.06
Total dir & ovhd expenses		15.22		15.20		14.25
Net return		1.38		1.52		3.01
Labor & management charge		0.75		0.79		0.91
Net return over lbr & mgt		0.63		0.73		2.11
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		12.90		13.03		11.19
Total dir & ovhd expense per unit		15.22		15.20		14.25
With other revenue adjustments		16.32		16.29		14.95
With labor and management		17.08		17.08		15.85
Est. labor hours per unit		0.17		0.16		0.15
Other Information						
Number of cows		209.9		195.1		269.2
Milk produced per cow		24,830		24,122		26,655
Total milk sold		5,182,993		4,673,960		7,124,086
Lb. of milk sold per FTE		1,656,097		1,702,858		1,816,713
Culling percentage		30.0		30.2		31.0
Turnover rate		36.7		37.3		37.0
Cow death loss percent		6.3		6.5		5.6
Percent of barn capacity		113.6		117.8		114.7
Feed cost per day		5.31		5.18		5.27
Feed cost per cwt. of milk		7.80		7.84		7.22
Feed cost per cow		1,936.62		1,891.68		1,924.79
Hired labor per cow		458.08		434.35		443.45
Avg. milk price per cwt.		17.72		17.83		17.99
Milk price / feed margin		9.92		9.99		10.77

Livestock Enterprise Analysis
Farm Business Management Statewide Data
(Farms Sorted By Return to Overhead)

Organic Dairy -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>33 - 66%</u>		<u>High 34%</u>	
	16		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	15,273.6	5,002.41	13,471.5	4,415.38	16,854.7	5,590.06
Dairy Calves sold (hd)	0.3	50.08	0.5	68.27	0.2	48.63
Transferred out (hd)	0.7	22.09	0.5	18.12	0.7	10.62
Cull sales (hd)	0.3	190.32	0.2	206.62	0.3	185.79
Other income		126.15		134.28		105.20
Purchased (hd)	0.0	-57.81	-	-	0.0	-27.19
Transferred in (hd)	0.3	-77.65	0.3	-27.41	0.4	-123.51
Inventory change (hd)	0.1	111.54	0.0	-8.61	0.1	112.89
Dairy repl net cost		-678.11		-637.69		-585.06
Gross margin		4,694.14		4,188.56		5,317.42
Direct Expenses						
Protein Vit Minerals (lb.)	1,224.1	373.64	436.3	221.68	1,433.8	380.03
Complete Ration (lb.)	515.3	70.27	1,893.5	252.86	36.8	7.58
Haylage, Alfalfa (lb.)	4,746.9	184.01	-	-	8,682.6	336.58
Corn, Organic (bu.)	51.3	409.79	55.1	449.02	57.5	457.57
Corn Silage, Organic (lb.)	8,453.7	229.92	860.7	38.73	11,568.8	272.32
Hay, Alfalfa, Organic (lb.)	3,792.2	267.37	7,406.6	575.31	1,195.0	82.87
Pasture, Organic (aum)	2.2	60.91	3.7	76.01	1.5	44.01
Hay, Grass, Organic (lb.)	1,055.5	53.40	3,220.8	165.80	325.0	16.25
Other feed stuffs (lb)	3,329.8	231.05	981.2	137.59	4,297.8	284.50
Breeding fees		32.25		25.61		37.76
Supplies		263.47		193.35		267.06
Fuel & oil		54.59		49.16		59.51
Repairs		177.39		137.30		216.80
Hired labor		147.24		98.34		176.56
Machinery leases		52.32		36.24		68.07
Utilities		55.06		30.33		65.87
Marketing		37.56		73.06		22.84
Bedding		71.01		12.98		91.98
Total direct expenses		2,771.27		2,573.40		2,888.15
Return over direct expense		1,922.87		1,615.16		2,429.27
Overhead Expenses						
Hired labor		152.25		22.93		244.15
Building leases		85.76		264.55		0.54
Interest		87.60		87.76		99.92
Mach & bldg depreciation		158.45		64.08		220.33
Miscellaneous		170.46		120.45		217.80
Total overhead expenses		654.52		559.76		782.74
Total dir & ovhd expenses		3,425.79		3,133.16		3,670.89
Net return		1,268.35		1,055.40		1,646.53
Labor & management charge		370.39		518.12		298.94
Net return over lbr & mgt		897.96		537.27		1,347.59
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		17.62		18.30		16.75
Total dir & ovhd expense per unit		21.78		22.28		21.29
With other revenue adjustments		24.53		24.84		23.47
With labor and management		26.89		28.53		25.20
Est. labor hours per unit		35.87		27.65		38.21
Other Information						
Number of cows		105.5		88.3		153.8
Milk produced per cow		15,730		14,064		17,242
Total milk sold		1,611,609		1,189,536		2,592,811
Lb. of milk sold per FTE		1,192,217		1,364,262		1,235,080
Culling percentage		25.6		23.3		26.8
Turnover rate		30.3		29.9		29.6
Cow death loss percent		4.5		6.6		2.6
Percent of barn capacity		102.1		113.2		99.8
Feed cost per day		5.15		5.25		5.16
Feed cost per cwt. of milk		11.95		13.63		10.91
Feed cost per cow		1,880.38		1,917.02		1,881.71
Hired labor per cow		299.49		121.27		420.71
Avg. milk price per cwt.		32.75		32.78		33.17
Milk price / feed margin		20.80		19.15		22.25

Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Organic & Organic Transition
(Farms Sorted By Enterprise Size)

Dairy -- Average Per Cow

	<u>Up to 50</u>		<u>50 100</u>		<u>100 200</u>		<u>200 500</u>		<u>Over 500</u>	
Number of farms	42		121		109		74		33	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	16,172.1	2,755.78	21,123.3	3,651.15	22,720.7	3,970.28	24,925.7	4,410.73	27,012.2	4,853.18
Dairy Calves sold (hd)	0.2	28.43	0.2	41.04	0.2	35.96	0.3	58.47	0.3	41.96
Transferred out (hd)	0.6	48.81	0.7	68.71	0.6	38.21	0.6	34.65	0.6	26.13
Cull sales (hd)	0.3	180.21	0.3	226.89	0.3	217.30	0.3	230.42	0.3	252.08
Other income		40.80		32.99		28.24		50.16		54.80
Purchased (hd)	0.1	-149.23	0.0	-63.14	0.0	-44.59	0.0	-22.78	0.0	-15.87
Transferred in (hd)	0.3	-33.36	0.4	-92.77	0.3	-58.54	0.4	-79.40	0.4	-38.74
Inventory change (hd)	0.0	55.58	0.0	43.31	0.0	49.06	0.0	34.49	0.0	64.45
Dairy repl net cost		-499.79		-512.75		-552.78		-559.93		-611.32
Gross margin		2,428.50		3,395.44		3,683.13		4,156.80		4,626.66
Direct Expenses										
Protein Vit Minerals (lb.)	1,711.5	358.58	2,883.3	643.14	2,837.0	602.66	2,979.6	659.41	4,215.1	796.66
Complete Ration (lb.)	806.4	143.75	1,270.5	197.84	2,497.9	373.25	1,848.2	355.63	4,128.0	369.14
Corn (bu.)	54.0	159.54	63.8	196.65	60.8	187.07	72.1	229.98	67.6	215.82
Corn Silage (lb.)	13,882.0	209.39	16,772.2	241.67	16,630.3	253.16	19,480.1	313.71	19,402.1	325.95
Hay, Alfalfa (lb.)	4,169.7	219.09	4,372.6	255.12	3,261.9	201.15	2,654.8	151.77	2,912.0	119.53
Haylage, Alfalfa (lb.)	2,395.9	71.83	3,046.3	98.20	3,317.8	97.82	5,100.2	153.94	5,169.5	148.15
Other feed stuffs (lb)	3,522.2	143.64	2,141.2	93.01	2,525.0	106.60	2,050.3	118.69	2,658.1	79.77
Breeding fees		31.67		48.70		43.00		48.40		51.65
Veterinary		73.85		100.46		100.96		120.77		127.92
BST		-		6.24		10.45		39.20		64.72
Supplies		252.62		264.88		258.93		269.60		290.91
Fuel & oil		57.17		52.58		59.14		68.00		82.90
Repairs		120.72		135.14		151.35		147.33		163.93
Custom hire		21.08		45.15		49.55		76.62		90.21
Hired labor		14.85		63.73		154.31		381.95		556.35
Hauling and trucking		69.48		71.33		57.21		44.96		47.47
Bedding		34.46		53.16		73.09		87.25		91.34
Total direct expenses		1,981.70		2,567.01		2,779.71		3,267.21		3,622.42
Return over direct expense		446.80		828.43		903.42		889.59		1,004.24
Overhead Expenses										
Hired labor		33.43		64.92		90.51		114.86		99.26
Building leases		12.86		15.87		47.15		66.82		68.37
Utilities		88.21		95.16		66.27		56.62		50.82
Interest		94.35		82.42		110.90		97.34		72.72
Mach & bldg depreciation		114.80		159.50		201.22		172.73		153.14
Miscellaneous		132.39		114.08		118.63		104.56		93.96
Total overhead expenses		476.05		531.94		634.68		612.93		538.27
Total dir & ovhd expenses		2,457.75		3,098.95		3,414.39		3,880.14		4,160.70
Net return		-29.25		296.49		268.74		276.66		465.96
Labor & management charge		377.81		292.69		226.17		186.86		125.84
Net return over lbr & mgt		-407.06		3.79		42.56		89.81		340.13
Cost of Production Per Cwt. Of Milk										
Total direct expense per unit		12.11		12.07		12.18		13.00		13.36
Total dir & ovhd expense per unit		15.02		14.57		14.96		15.44		15.34
With other revenue adjustments		17.19		15.87		16.29		16.57		16.24
With labor and management		19.49		17.25		17.28		17.31		16.70
Est. labor hours per unit		44.17		35.97		32.75		41.00		48.45
Other Information										
Number of cows		38.7		73.6		140.5		318.5		913.6
Milk produced per cow		16,362		21,264		22,824		25,138		27,119
Total milk sold		625,630		1,555,377		3,193,107		7,939,028		24,676,984
Lb. of milk sold per FTE		1,025,132		1,644,064		1,942,291		1,702,164		1,560,957
Culling percentage		26.0		28.9		27.3		28.9		32.8
Turnover rate		36.6		37.1		34.6		35.8		38.4
Cow death loss percent		9.5		7.1		6.3		6.5		5.6
Percent of barn capacity		90.3		108.3		110.9		116.3		116.3
Feed cost per day		3.58		4.73		4.99		5.43		5.63
Feed cost per cwt. of milk		7.98		8.12		7.98		7.89		7.58
Feed cost per cow		1,305.82		1,725.63		1,821.72		1,983.12		2,055.02
Hired labor per cow		48.28		128.65		244.82		496.81		655.61
Avg. milk price per cwt.		17.04		17.28		17.47		17.70		17.97
Milk price / feed margin		9.06		9.17		9.49		9.81		10.39

Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Organic and Organic Transition
(Farms Sorted By Return to Overhead)

Dairy and Repl Heifers -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	315		63		63	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms		315		63		63
Milk sold (hd)	24,960.2	4,416.47	24,004.5	4,281.54	27,581.1	4,911.44
Dairy Calves sold (hd)	-	75.75	-	85.70	-	61.30
Transferred out (hd)	-	16.34	-	18.79	-	26.16
Cull sales (hd)	-	239.79	-	258.83	-	273.17
Other income	-	45.66	-	39.80	-	63.78
Purchased (hd)	-	-40.33	-	-43.14	-	-16.33
Transferred in (hd)	-	-9.99	-	-6.13	-	-7.13
Inventory change (hd)	-	95.74	-	105.28	-	84.07
Gross margin		4,839.46		4,740.67		5,396.48
Direct Expenses						
Protein Vit Minerals (lb.)	3,751.4	753.97	3,258.7	688.77	4,171.9	910.67
Complete Ration (lb.)	2,444.0	413.38	2,583.0	420.37	1,422.9	273.69
Corn (bu.)	72.6	229.90	66.4	216.24	77.3	240.22
Corn Silage (lb.)	22,116.0	351.15	20,929.0	341.00	24,682.7	376.87
Hay, Alfalfa (lb.)	3,850.7	201.99	3,133.5	192.64	3,039.3	168.86
Haylage, Alfalfa (lb.)	5,304.5	152.45	5,447.6	160.93	5,240.0	161.23
Other feed stuffs (lb)	3,906.4	173.20	4,440.2	159.43	3,732.4	208.20
Breeding fees		65.28		60.33		62.02
Veterinary		134.53		130.92		159.28
Supplies		385.72		332.56		324.00
Contract production exp.		123.55		177.50		73.77
Fuel & oil		80.62		69.69		88.20
Repairs		172.55		171.39		198.59
Custom hire		78.65		70.06		71.04
Hired labor		436.99		433.38		238.05
Bedding		102.47		124.58		99.01
Total direct expenses		3,856.40		3,749.77		3,653.69
Return over direct expense		983.06		990.90		1,742.80
Overhead Expenses						
Hired labor		94.53		43.86		271.85
Building leases		72.21		77.87		74.85
Utilities		69.61		62.72		101.23
Interest		99.57		90.38		105.91
Mach & bldg depreciation		190.56		207.72		275.38
Miscellaneous		114.47		120.40		125.71
Total overhead expenses		640.94		602.95		954.91
Total dir & ovhd expenses		4,497.34		4,352.72		4,608.60
Net return		342.12		387.95		787.88
Labor & management charge		196.13		216.79		234.94
Net return over lbr & mgt		145.99		171.16		552.94
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		15.36		15.53		13.13
Total dir & ovhd expense per unit		17.92		18.03		16.57
With other revenue adjustments		16.32		16.22		14.94
With labor and management		17.10		17.11		15.79
Est. labor hours per unit		49.11		46.61		48.28
Other Information						
Number of cows		219.0		213.5		243.6
Milk produced per cow		25,102		24,143		27,821
Total milk sold		5,466,349		5,123,834		6,718,870
Lb. of milk sold per FTE		1,422,960		1,442,049		1,599,484
Culling percentage		30.2		30.7		33.1
Turnover rate		36.8		37.8		39.1
Cow death loss percent		6.2		6.6		5.7
Percent of barn capacity		114.1		117.1		115.1
Feed cost per day		6.24		5.97		6.41
Feed cost per cwt. of milk		9.07		9.03		8.41
Feed cost per cow		2,276.04		2,179.36		2,339.74
Hired labor per cow		531.52		477.24		509.90
Avg. milk price per cwt.		17.69		17.84		17.81
Milk price / feed margin		8.63		8.81		9.40

Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Organic & Organic Transition
(Farms Sorted By Return to Overhead)

Dairy Replacement Heifers -- Average Per Head

	Avg. Of All Farms		40 - 60%		High 20%	
	350		70		70	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms		350		70		70
Replacements sold (hd)	0.1	46.25	0.1	29.86	0.1	76.66
Transferred out (hd)	0.4	567.30	0.4	575.43	0.5	699.10
Cull sales (hd)	0.0	3.59	0.0	1.55	0.0	4.91
Other income		1.58		0.37		1.99
Purchased (hd)	0.0	-20.23	0.0	-4.65	0.1	-22.55
Transferred in (hd)	0.6	-123.60	0.6	-124.19	0.6	-121.09
Inventory change (hd)	0.1	44.37	0.0	48.17	0.1	79.69
Gross margin		519.25		526.54		718.70
Direct Expenses						
Protein Vit Minerals (lb.)	457.7	87.89	332.7	69.69	477.0	64.65
Milk Replacer (lb.)	10.6	14.38	10.0	13.58	9.9	11.95
Milk (lb.)	104.6	15.78	59.2	10.15	112.5	19.70
Complete Ration (lb.)	391.6	60.65	466.8	66.59	334.8	57.63
Corn (bu.)	5.8	17.91	5.4	16.55	4.9	15.60
Corn Silage (lb.)	4,392.6	64.17	4,054.0	64.84	3,356.4	51.40
Hay, Alfalfa (lb.)	914.9	51.16	825.6	48.06	553.3	22.22
Hay, Grass (lb.)	667.3	24.41	620.7	24.74	521.2	17.39
Haylage, Alfalfa (lb.)	1,010.3	29.93	1,152.3	36.01	757.3	21.35
Other feed stuffs (lb)	1,200.7	33.26	1,393.1	34.29	1,197.3	24.04
Breeding fees		17.59		16.46		16.62
Veterinary		19.33		20.98		19.48
Supplies		25.03		22.16		20.83
Contract production exp.		82.28		91.00		112.92
Fuel & oil		11.54		11.03		11.65
Repairs		24.97		27.11		22.31
Hired labor		42.21		56.64		16.16
Bedding		19.86		15.15		15.98
Total direct expenses		642.36		645.02		541.89
Return over direct expense		-123.11		-118.48		176.81
Overhead Expenses						
Hired labor		24.79		8.80		54.09
Farm insurance		8.09		9.16		7.39
Utilities		12.07		11.44		12.78
Interest		15.87		18.38		13.03
Mach & bldg depreciation		29.81		31.31		28.41
Miscellaneous		17.85		16.73		14.21
Total overhead expenses		108.48		95.82		129.90
Total dir & ovhd expenses		750.85		740.84		671.80
Net return		-231.59		-214.30		46.90
Labor & management charge		32.29		33.81		33.96
Net return over lbr & mgt		-263.89		-248.11		12.94
Cost of Production Per Head Per Day						
Total direct expense per unit		2.02		1.98		1.64
Total dir & ovhd expense per unit		2.32		2.25		2.00
With other revenue adjustments		2.32		2.25		2.00
With labor and management		2.40		2.34		2.09
Est. labor hours per unit		6.89		7.34		6.98
Other Information						
No. purchased or trans in		115		93		140
Number sold or trans out		97		79		114
Average number of head		181		154		200
Percentage death loss		6.9		9.7		4.3
Feed cost per average head		399.54		384.49		305.93
Hired labor per average head		67.00		65.44		70.24
Feed cost/head sold/trans		746.51		754.75		537.01
Total cost/head sold/trans		1,639.41		1,675.19		1,339.00
Feed cost per head per day		1.09		1.05		0.84
Avg. purchase weight		11		-		28
Avg. purch price / head		638.04		947.55		409.27
Avg. sales price / head		464.99		345.85		929.87

Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Organic and Organic Transition
(Farms Sorted By Return to Overhead)

Dairy Feeder -- Average Per Cwt. Produced

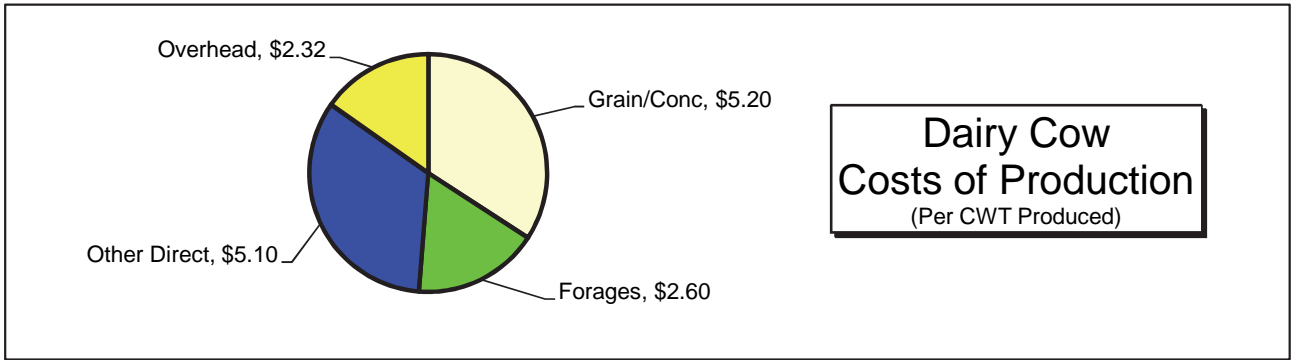
	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	24		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Dairy Feeder sold (lb)	103.75	119.33	117.71	125.87	108.86	127.94
Transferred out (lb)	5.52	6.30	6.67	7.34	4.58	5.50
Other income		1.31		-		-
Purchased (lb)	-17.89	-27.33	-27.33	-41.24	-13.29	-19.45
Transferred in (lb)	-5.23	-11.55	-4.26	-4.26	-4.12	-4.12
Inventory change (lb)	12.47	13.41	7.21	8.04	3.98	-0.23
Gross margin		101.46		95.75		109.63
Direct Expenses						
Protein Vit Minerals (lb.)	81.19	12.62	29.56	8.19	133.55	14.31
Milk Replacer (lb.)	7.72	10.00	12.93	14.92	5.64	7.37
Milk (lb.)	48.80	8.45	23.84	4.17	3.68	0.54
Creep / Starter (lb.)	28.73	6.42	58.13	12.43	11.97	2.58
Complete Ration (lb.)	53.74	9.15	57.68	10.78	19.47	4.75
Corn (bu.)	3.53	10.79	1.55	4.66	4.46	13.59
Hay, Alfalfa (lb.)	37.23	1.99	70.06	3.57	9.16	0.55
Hay, Grass (lb.)	41.89	1.58	13.45	0.57	10.31	0.41
Other feed stuffs (lb)	66.08	1.81	89.26	1.99	21.56	1.30
Veterinary		4.39		4.23		1.73
Supplies		3.26		4.41		1.36
Fuel & oil		1.71		2.08		1.56
Repairs		3.16		2.19		3.34
Bedding		5.04		1.64		1.12
Operating interest		1.21		3.16		0.64
Total direct expenses		81.58		78.99		55.14
Return over direct expense		19.88		16.77		54.49
Overhead Expenses						
Building leases		0.25		0.06		0.55
Farm insurance		1.49		1.20		2.47
Utilities		2.11		1.72		3.10
Dues & professional fees		0.33		0.54		0.27
Interest		3.25		3.16		4.72
Mach & bldg depreciation		5.26		7.34		5.20
Miscellaneous		1.19		1.46		0.90
Total overhead expenses		13.89		15.48		17.21
Total dir & ovhd expenses		95.47		94.46		72.36
Net return		5.99		1.29		37.27
Labor & management charge		6.67		5.81		7.82
Net return over lbr & mgt		-0.68		-4.52		29.46
Cost of Production Per Cwt. Produced						
Total direct expense per unit		96.76		93.62		69.60
Total dir & ovhd expense per unit		109.48		106.06		84.77
With other revenue adjustments		109.48		106.06		84.77
With labor and management		115.58		110.73		91.66
Est. labor hours per unit		1.07		1.17		0.69
Other Information						
No. purchased or trans in		118		143		122
Number sold or trans out		102		144		114
Percentage death loss		5.1		0.3		6.4
Avg. daily gain (lb.)		1.69		1.44		2.15
Lb. of conc / lb. of gain		4.55		2.39		7.26
Lb. of feed / lb. of gain		6.21		3.97		7.71
Feed cost per cwt. of gain		62.81		61.28		45.39
Feed cost per head		201.16		184.70		202.04
Hired labor per head		0.51		0.41		0.88
Average purchase weight		93		122		69
Avg wgt / Dairy Feeder sold		416		465		520
Avg purch price / head		141.37		183.99		101.29
Avg sales price / cwt.		115.01		106.94		117.53

Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Organic & Organic Transition
(Farms Sorted By Return to Overhead)

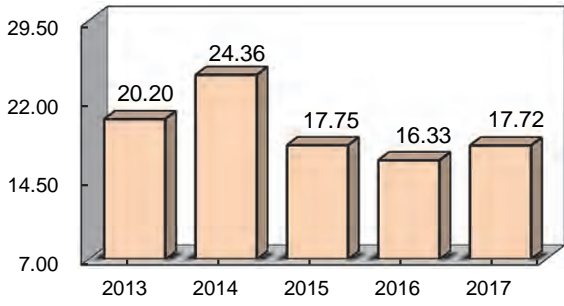
Dairy Finishing -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	115		23		23	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Dairy Finish sold (lb)	127.13	123.11	124.32	121.96	116.27	119.28
Transferred out (lb)	0.48	0.44	-	-	0.06	0.06
Other income		0.50		0.38		1.15
Purchased (lb)	-30.55	-34.14	-38.55	-40.34	-15.39	-20.16
Transferred in (lb)	-2.22	-3.39	-0.92	-2.50	-3.22	-4.40
Inventory change (lb)	4.16	4.91	14.83	12.55	1.31	7.75
Gross margin		91.44		92.05		103.68
Direct Expenses						
Protein Vit Minerals (lb.)	65.92	13.02	73.59	13.31	75.00	13.69
Complete Ration (lb.)	17.59	2.87	29.00	5.33	2.80	0.49
Corn (bu.)	9.71	29.82	8.84	26.90	8.34	25.54
Corn Silage (lb.)	157.69	2.42	262.82	4.41	127.29	1.71
DDGS, dry (lb.)	19.95	1.46	8.81	0.99	26.80	2.06
Other feed stuffs (lb)	154.32	5.28	133.60	5.12	92.02	4.30
Veterinary		2.52		2.51		2.49
Supplies		1.78		1.18		0.90
Fuel & oil		1.29		1.75		0.97
Repairs		2.50		2.77		2.49
Custom hire		0.72		1.03		0.28
Hired labor		0.92		1.07		0.28
Hauling and trucking		1.12		1.28		0.22
Marketing		1.06		0.89		1.05
Bedding		1.40		0.66		0.75
Operating interest		1.99		3.36		1.23
Total direct expenses		70.16		72.58		58.45
Return over direct expense		21.27		19.47		45.23
Overhead Expenses						
Hired labor		0.93		0.65		2.30
Building leases		1.01		0.18		0.11
Farm insurance		1.12		1.10		0.97
Interest		1.74		2.75		1.81
Mach & bldg depreciation		3.57		4.95		3.41
Miscellaneous		1.99		1.88		2.18
Total overhead expenses		10.36		11.51		10.77
Total dir & ovhd expenses		80.53		84.09		69.22
Net return		10.91		7.96		34.46
Labor & management charge		4.16		4.86		3.91
Net return over lbr & mgt		6.74		3.10		30.55
Cost of Production Per Cwt. Produced						
Total direct expense per unit		79.64		82.44		63.71
Total dir & ovhd expense per unit		87.76		91.70		72.96
With other revenue adjustments		88.28		91.70		72.96
With labor and management		91.54		95.61		76.33
Est. labor hours per unit		0.44		0.44		0.45
Other Information						
No. purchased or trans in		175		239		171
Number sold or trans out		158		213		152
Percentage death loss		2.7		2.9		2.9
Avg. daily gain (lb.)		2.45		2.38		2.47
Lb. of conc / lb. of gain		7.00		6.46		6.11
Lb. of feed / lb. of gain		8.34		8.11		6.97
Feed cost per cwt. of gain		54.86		56.08		47.79
Feed cost per head		561.45		536.01		557.70
Hired labor per head		18.96		16.40		30.05
Average purchase weight		382		422		282
Avg wgt / Dairy Finish sold		1,398		1,349		1,421
Avg purch price / head		426.67		441.78		369.65
Avg sales price / cwt.		96.84		98.10		102.59

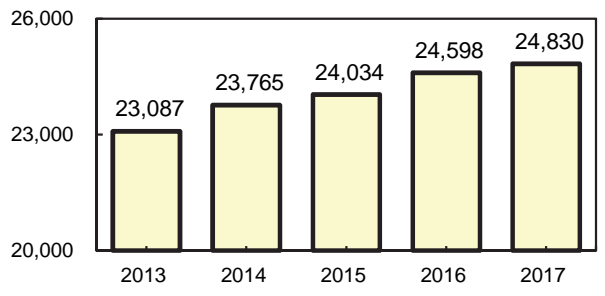
Summary of Selected Dairy Enterprise Factors



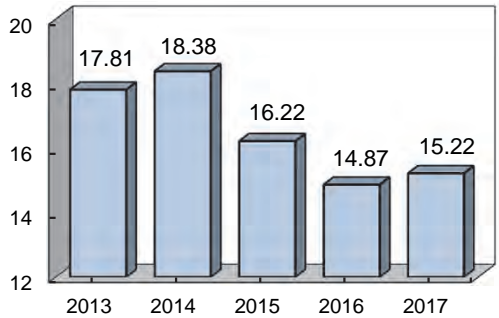
Ave Milk Price Recv'd



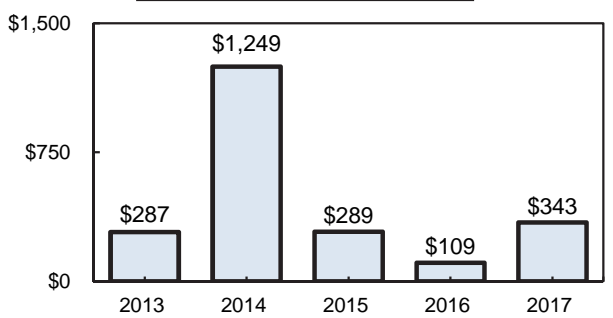
Milk Production per Cow



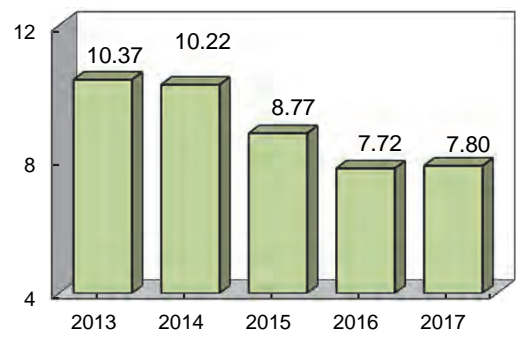
Dir & Ovhd Exp per CWT



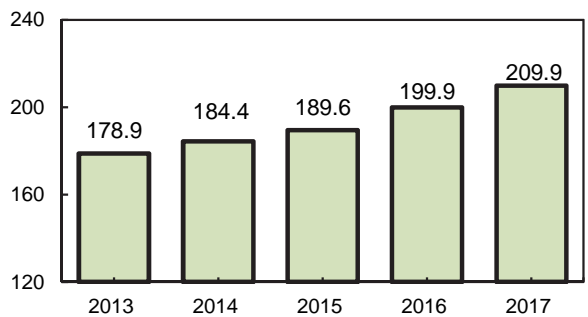
Net Return per Cow



Feed Cost per CWT



Ave. Number of Cows



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Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Backgrounding
(Farms Sorted By Return to Overhead)

Beef Cow-Calf -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	116		23		24	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms		116		23		24
Beef Calves sold (lb)	216.0	318.58	147.8	237.97	272.5	387.77
Transferred out (lb)	228.8	366.95	274.2	485.21	292.9	457.49
Cull sales (lb)	97.0	114.49	45.2	107.50	104.5	99.65
Other income		6.00		3.11		4.31
Purchased (lb)	-34.5	-142.78	-14.0	-124.49	-104.5	-167.30
Transferred in (lb)	-22.4	-57.10	-3.4	-113.52	-5.3	-5.31
Inventory change (lb)	5.9	92.04	-3.4	42.69	1.0	147.28
Gross margin		698.19		638.48		923.90
Direct Expenses						
Protein Vit Minerals (lb.)	300.4	44.22	168.5	39.01	275.5	48.11
Complete Ration (lb.)	71.6	7.85	89.0	17.30	48.6	9.20
Corn (bu.)	3.3	10.17	2.7	8.34	4.2	13.35
Corn Silage (lb.)	4,107.5	60.68	4,673.9	65.20	4,832.2	75.39
Hay, Alfalfa (lb.)	1,582.0	69.26	1,879.2	81.28	1,218.5	61.81
Hay, Grass (lb.)	3,423.1	105.11	3,034.9	90.65	1,899.6	46.83
Pasture (aum)	3.4	51.34	3.5	42.38	0.8	19.46
Hay (lb.)	738.5	21.89	1,205.9	34.49	445.8	13.47
Other feed stuffs (lb)	1,582.0	24.83	557.9	10.87	2,425.9	43.61
Veterinary		32.59		36.86		33.41
Supplies		49.43		35.74		35.50
Fuel & oil		24.91		21.68		26.51
Repairs		47.97		36.14		45.27
Operating interest		13.57		6.47		13.67
Total direct expenses		563.81		526.40		485.60
Return over direct expense		134.38		112.07		438.30
Overhead Expenses						
Hired labor		7.90		2.46		19.59
RE & pers. property taxes		6.44		7.89		6.52
Farm insurance		14.46		15.82		11.54
Utilities		12.59		11.57		10.97
Dues & professional fees		5.93		5.12		7.55
Interest		44.23		25.51		45.77
Mach & bldg depreciation		46.89		61.68		44.13
Miscellaneous		14.95		13.37		18.15
Total overhead expenses		153.39		143.43		164.22
Total dir & ovhd expenses		717.20		669.83		649.82
Net return		-19.01		-31.35		274.08
Labor & management charge		102.65		101.52		136.29
Net return over lbr & mgt		-121.66		-132.87		137.79
Cost of Production Per Cwt. Produced						
Total direct expense per unit		114.32		117.66		86.54
Total dir & ovhd expense per unit		145.42		149.72		115.81
With other revenue adjustments		147.61		172.03		109.94
With labor and management		168.42		194.73		134.23
Est. labor hours per unit		9.62		10.41		10.96
Other Information						
Number of cows		69.8		56.5		72.3
Pregnancy percentage		95.0		96.3		98.6
Pregnancy loss percentage		1.6		0.9		1.7
Culling percentage		12.5		12.5		9.6
Calving percentage		93.5		95.5		96.9
Weaning percentage		87.5		89.5		94.6
Calves sold per cow		0.82		0.90		0.92
Calf death loss percent		5.4		4.9		2.1
Cow death loss percent		2.3		2.0		2.0
Cows per FTE		291.2		269.0		255.5
Average weaning weight		535		533		552
Lb. weaned/exposed female		468		477		522
Feed cost per cow		395.34		389.51		331.23
Avg wgt/ Beef Calves sold		609		548		650
Avg price / cwt.		147.47		160.99		142.29

Livestock Enterprise Analysis
Farm Business Management Statewide Data
With Backgrounding Only
(Farms Sorted By Return to Overhead)

Beef Cow-Calf -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>33 - 66%</u>		<u>High 34%</u>	
	23		8		8	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Beef Calves sold (lb)	565.3	754.89	504.8	672.11	663.8	882.68
Transferred out (lb)	45.4	68.43	91.3	128.54	-	14.67
Cull sales (lb)	60.3	86.74	77.1	67.77	69.6	108.07
Other income		8.84		4.79		16.56
Purchased (lb)	-21.6	-129.95	-	-2.84	-64.4	-324.72
Transferred in (lb)	-11.7	-20.00	-24.1	-25.57	-	-23.05
Inventory change (lb)	-18.7	136.94	-28.3	-1.09	15.3	412.61
Gross margin		912.79		843.70		1,107.77
Direct Expenses						
Beet Pulp (dry) (lb.)	2,993.4	14.27	2,840.9	12.78	3,990.0	18.54
Protein Vit Minerals (lb.)	314.2	48.88	220.6	45.40	421.6	52.49
Complete Ration (lb.)	201.6	15.31	115.1	7.81	442.8	35.01
Corn Silage (lb.)	5,598.2	83.70	4,851.6	72.79	8,283.9	123.41
Hay, Alfalfa (lb.)	454.4	18.28	134.9	8.10	787.9	28.88
Hay, Grass (lb.)	4,499.8	130.06	4,801.1	140.26	1,460.6	36.35
Pasture (aum)	4.8	65.96	5.8	78.96	3.2	46.08
Hay (lb.)	2,659.7	78.79	2,306.8	74.31	4,679.5	129.83
Other feed stuffs (lb)	319.0	14.42	461.7	7.00	283.5	19.78
Veterinary		37.71		31.57		48.74
Supplies		36.86		23.97		54.16
Fuel & oil		26.64		27.21		29.52
Repairs		35.81		32.73		37.71
Custom hire		7.82		0.34		19.37
Livestock leases		6.90		14.20		-
Operating interest		17.63		21.70		10.73
Total direct expenses		639.05		599.12		690.60
Return over direct expense		273.73		244.58		417.17
Overhead Expenses						
Farm insurance		13.59		11.45		14.44
Dues & professional fees		9.26		6.78		14.93
Interest		31.28		35.94		24.31
Mach & bldg depreciation		26.71		26.77		32.19
Miscellaneous		35.93		36.18		37.28
Total overhead expenses		116.76		117.12		123.14
Total dir & ovhd expenses		755.82		716.24		813.74
Net return		156.97		127.47		294.04
Labor & management charge		97.11		83.37		121.22
Net return over lbr & mgt		59.86		44.09		172.81
Cost of Production Per Cwt. Produced						
Total direct expense per unit		102.59		96.10		100.15
Total dir & ovhd expense per unit		121.34		114.89		118.01
With other revenue adjustments		110.66		105.61		104.73
With labor and management		126.25		118.98		122.31
Est. labor hours per unit		7.89		6.63		8.59
Other Information						
Number of cows		126.1		176.0		119.3
Pregnancy percentage		96.2		95.2		98.0
Pregnancy loss percentage		1.8		1.2		0.5
Culling percentage		10.8		9.7		12.0
Calving percentage		94.5		94.0		97.5
Weaning percentage		90.1		89.9		93.0
Calves sold per cow		0.87		0.87		0.90
Calf death loss percent		4.8		3.9		4.7
Cow death loss percent		2.0		2.5		1.3
Cows per FTE		354.8		422.3		325.9
Average weaning weight		550		591		507
Lb. weaned/exposed female		496		531		471
Feed cost per cow		469.69		447.41		490.37
Avg wgt/ Beef Calves sold		727		725		754
Avg price / cwt.		133.54		133.15		132.97

Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Backgrounding
(Farms Sorted By Enterprise Size)

Beef Cow-Calf -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>Up to 50</u>		<u>50 100</u>		<u>100 200</u>	
Number of farms	116		58		40		14	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	216.0	318.58	189.5	275.26	249.7	375.13	162.1	245.30
Transferred out (lb)	228.8	366.95	193.5	281.89	232.5	376.93	291.0	488.16
Cull sales (lb)	97.0	114.49	60.3	72.94	156.3	153.47	97.1	80.50
Other income		6.00		8.19		4.29		5.04
Purchased (lb)	-34.5	-142.78	-40.5	-114.51	-42.3	-124.05	-43.8	-103.63
Transferred in (lb)	-22.4	-57.10	-7.8	-15.49	-30.8	-73.29	-40.8	-86.99
Inventory change (lb)	5.9	92.04	14.2	97.73	-3.7	25.24	10.3	137.85
Gross margin		698.19		606.01		737.73		766.23
Direct Expenses								
Protein Vit Minerals (lb.)	300.4	44.22	236.6	52.85	216.3	38.11	497.1	46.92
Corn (bu.)	3.3	10.17	7.6	23.34	1.7	5.22	4.1	12.62
Corn Silage (lb.)	4,107.5	60.68	3,801.3	54.35	3,411.5	49.92	6,945.2	104.64
Hay, Alfalfa (lb.)	1,582.0	69.26	1,403.6	60.29	1,991.4	83.33	1,562.7	78.37
Hay, Grass (lb.)	3,423.1	105.11	3,549.8	104.05	3,235.9	95.95	1,988.9	74.60
Pasture (aum)	3.4	51.34	2.2	30.92	2.6	40.49	3.6	61.15
Hay (lb.)	738.5	21.89	666.5	19.95	1,638.5	48.43	-	-
Other feed stuffs (lb)	1,653.7	32.68	852.2	34.05	2,263.0	40.33	2,226.3	29.44
Veterinary		32.59		33.64		29.70		42.18
Supplies		40.61		43.29		42.74		48.53
Fuel & oil		24.91		26.08		25.77		17.40
Repairs		47.97		44.43		44.02		34.75
Custom hire		4.97		5.46		3.20		3.92
Hired labor		3.85		2.15		3.76		2.60
Operating interest		13.57		12.09		10.43		11.26
Total direct expenses		563.81		546.93		561.41		568.39
Return over direct expense		134.38		59.08		176.32		197.84
Overhead Expenses								
Machinery leases		4.58		1.82		3.60		1.69
RE & pers. property taxes		6.44		11.22		8.59		2.99
Farm insurance		14.46		17.69		18.04		9.68
Utilities		12.59		13.18		16.05		10.09
Interest		44.23		52.62		28.56		19.80
Mach & bldg depreciation		46.89		52.92		51.76		45.97
Miscellaneous		24.20		25.45		30.65		23.54
Total overhead expenses		153.39		174.91		157.24		113.76
Total dir & ovhd expenses		717.20		721.84		718.64		682.14
Net return		-19.01		-115.83		19.09		84.09
Labor & management charge		102.65		133.84		107.11		84.91
Net return over lbr & mgt		-121.66		-249.67		-88.02		-0.83
Cost of Production Per Cwt. Produced								
Total direct expense per unit		114.32		131.71		99.79		118.55
Total dir & ovhd expense per unit		145.42		173.84		127.74		142.28
With other revenue adjustments		147.61		171.68		129.86		143.51
With labor and management		168.42		203.91		148.90		161.22
Est. labor hours per unit		9.62		13.65		8.87		8.70
Other Information								
Number of cows		69.8		30.6		73.1		136.4
Pregnancy percentage		95.0		93.5		96.0		94.4
Pregnancy loss percentage		1.6		2.0		1.6		0.8
Culling percentage		12.5		8.1		15.4		9.2
Calving percentage		93.5		91.6		94.5		93.6
Weaning percentage		87.5		86.8		87.6		90.1
Calves sold per cow		0.82		0.71		0.91		0.88
Calf death loss percent		5.4		6.9		5.7		3.0
Cow death loss percent		2.3		3.0		2.3		2.1
Cows per FTE		291.2		205.1		315.8		321.7
Average weaning weight		535		514		549		543
Lb. weaned/exposed female		468		447		481		490
Feed cost per cow		395.34		379.79		401.78		407.75
Avg wgt/ Beef Calves sold		609		549		609		601
Avg price / cwt.		147.47		145.28		150.25		151.35

Livestock Enterprise Analysis
Farm Business Management Statewide Data
(Farms Sorted By Return to Overhead)

Beef Finishing -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	79		16		16	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Finish Beef sold (lb)	194.03	232.08	178.10	215.13	160.62	199.45
Transferred out (lb)	2.05	3.00	2.89	5.45	5.06	7.16
Cull sales (lb)	0.01	0.01	0.07	0.05	-	-
Other income		-0.24		1.23		3.49
Purchased (lb)	-88.49	-133.15	-86.48	-137.29	-65.67	-89.61
Transferred in (lb)	-7.54	-11.07	-7.82	-11.85	-6.93	-8.81
Inventory change (lb)	-0.95	11.09	11.94	24.62	6.19	17.16
Gross margin		101.72		97.33		128.83
Direct Expenses						
Protein Vit Minerals (lb.)	46.45	8.47	33.73	9.14	24.82	5.12
Complete Ration (lb.)	22.00	2.19	16.75	2.04	102.53	8.54
Corn (bu.)	7.81	23.95	7.09	21.77	6.97	21.76
Corn Silage (lb.)	319.22	4.28	345.16	4.78	336.18	1.76
Corn, Ear (lb.)	21.97	0.66	80.34	3.45	-	-
Hay, Alfalfa (lb.)	41.16	1.88	60.47	3.18	53.26	1.63
DDGS, dry (lb.)	114.79	3.86	32.51	1.67	8.32	0.72
DDGS, wet (lb.)	26.66	0.82	100.42	3.02	23.83	1.11
Other feed stuffs (lb)	196.94	4.62	73.04	2.87	237.67	4.95
Veterinary		2.28		3.07		1.72
Supplies		1.95		1.78		0.76
Contract production exp.		1.71		-		0.78
Fuel & oil		1.84		1.31		0.95
Repairs		3.45		3.14		3.76
Hired labor		1.19		2.05		-
Hauling and trucking		1.75		2.96		2.45
Marketing		1.26		0.26		0.91
Operating interest		2.17		3.00		1.43
Total direct expenses		68.32		69.50		58.33
Return over direct expense		33.40		27.83		70.51
Overhead Expenses						
Hired labor		1.30		0.07		1.02
Farm insurance		1.55		0.78		1.79
Mach & bldg depreciation		5.44		5.37		3.05
Miscellaneous		3.66		2.48		3.55
Total overhead expenses		11.96		8.69		9.40
Total dir & ovhd expenses		80.28		78.20		67.73
Net return		21.44		19.14		61.11
Labor & management charge		5.88		8.09		4.68
Net return over lbr & mgt		15.56		11.05		56.43
Cost of Production Per Cwt. Produced						
Total direct expense per unit		102.23		106.38		83.75
Total dir & ovhd expense per unit		108.33		111.18		89.42
With other revenue adjustments		108.96		111.30		87.82
With labor and management		111.96		115.77		90.64
Est. labor hours per unit		0.42		0.49		0.46
Other Information						
No. purchased or trans in		219		172		127
Number sold or trans out		215		158		119
Percentage death loss		0.8		0.6		1.4
Avg. daily gain (lb.)		2.74		2.70		2.24
Lb. of conc / lb. of gain		7.10		6.75		5.93
Lb. of feed / lb. of gain		9.37		9.05		8.80
Feed cost per cwt. of gain		50.72		51.92		45.57
Feed cost per head		356.74		329.54		336.78
Hired labor per head		17.53		13.50		7.52
Average purchase weight		670		616		568
Avg wgt / Finish Beef sold		1,358		1,294		1,294
Avg purch price / cwt.		150.48		158.76		136.46
Avg sales price / cwt.		119.61		120.79		124.17

Livestock Enterprise Analysis
Farm Business Management Statewide Data
(Farms Sorted By Return to Overhead)

Hogs, Weaning to Finish -- Average Per Head

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	28		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Wean-Fin Pig sold (lb)	268.6	146.56	260.2	144.80	263.2	147.11
Transferred out (lb)	1.6	1.52	8.8	9.43	0.6	0.31
Cull sales (lb)	1.4	0.48	0.3	0.05	2.0	0.47
Other income		2.57		21.41		-0.35
Purchased (lb)	-13.8	-38.72	-5.5	-16.19	-15.9	-42.07
Transferred in (lb)	-1.9	-7.43	-11.1	-46.31	-	-
Inventory change (lb)	7.7	4.77	8.9	9.06	16.1	8.71
Gross margin		109.76		122.26		114.18
Direct Expenses						
Protein Vit Minerals (lb.)	157.6	27.28	140.8	36.68	174.4	25.73
Complete Ration (lb.)	67.4	6.38	0.5	0.12	13.9	1.36
Corn (bu.)	7.4	23.54	8.1	25.70	7.2	22.71
DDGS, dry (lb.)	82.3	4.52	88.9	5.06	128.6	6.97
Other feed stuffs (lb)	9.3	2.36	0.0	0.00	11.3	3.76
Veterinary		3.81		3.23		3.33
Supplies		2.01		2.80		1.73
Contract production exp.		5.48		8.40		5.88
Fuel & oil		0.76		1.31		0.60
Repairs		1.77		1.39		1.79
Custom hire		1.92		1.09		2.87
Hired labor		1.91		5.52		1.35
Hauling and trucking		1.71		0.15		1.56
Marketing		0.84		2.14		0.34
Operating interest		0.86		0.81		0.83
Total direct expenses		85.15		94.41		80.81
Return over direct expense		24.61		27.84		33.37
Overhead Expenses						
Hired labor		0.85		0.40		1.57
Building leases		6.61		0.82		6.62
Farm insurance		0.93		1.38		0.72
Utilities		0.53		1.35		0.37
Interest		0.85		0.89		0.84
Mach & bldg depreciation		2.84		4.84		3.04
Miscellaneous		0.79		0.96		0.70
Total overhead expenses		13.41		10.63		13.85
Total dir & ovhd expenses		98.56		105.04		94.66
Net return		11.20		17.22		19.52
Labor & management charge		4.07		8.87		2.03
Net return over lbr & mgt		7.13		8.35		17.49
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		63.36		76.75		58.62
Total dir & ovhd expense per unit		70.11		82.26		65.77
With other revenue adjustments		68.87		71.15		66.04
With labor and management		70.92		75.75		67.09
Est. labor hours per unit		0.26		0.34		0.24
Other Information						
No. purchased or trans in		20,506		18,006		40,563
Number sold or trans out		18,195		14,423		34,811
Percentage death loss		5.8		12.4		5.1
Percent substandard hogs		2		1		2
Avg. daily gain (lb.)		1.46		1.33		1.50
Lb. of feed / lb. of gain		2.79		2.61		2.83
Feed cost per cwt. of gain		24.29		25.83		22.73
Feed cost per head		64.07		67.56		60.53
Hired labor per head		2.76		5.91		2.92
Average purchase weight		15		14		15
Avg wgt / Wean-Fin Pig sold		265		254		262
Avg purch price / head		41.15		41.58		39.79
Avg sales price / cwt.		54.56		55.66		55.90
Average carcass weight		199		189		197
Average price / cwt. carcass		73.28		74.97		75.48

Livestock Enterprise Analysis
Farm Business Management Statewide Data
(Farms Sorted By Return to Overhead)

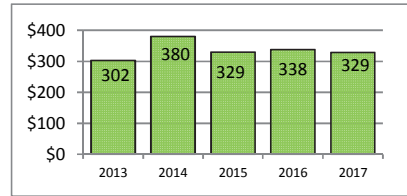
Hogs, Finish Feeder Pigs -- Average Per Cwt. Carcass Sold

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	26		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms		26		5		6
Finish Hogs sold (lb)	136.15	69.72	136.69	74.24	134.83	74.76
Transferred out (lb)	1.23	0.86	7.19	4.10	-	-
Cull sales (lb)	0.74	0.16	0.12	0.03	0.94	0.26
Other income		0.48		-0.98		0.22
Purchased (lb)	-20.19	-27.16	-26.32	-35.43	-27.25	-35.49
Transferred in (lb)	-2.51	-3.62	-	-	-	-
Inventory change (lb)	1.72	3.33	6.10	5.70	3.85	5.37
Gross margin		43.78		47.66		45.11
Direct Expenses						
Protein Vit Minerals (lb.)	73.00	11.70	97.30	15.55	84.05	12.88
Complete Ration (lb.)	85.45	5.87	-	-	-	-
Corn (bu.)	3.23	10.53	3.85	12.39	3.48	11.56
DDGS, dry (lb.)	3.57	0.21	11.82	0.66	4.17	0.31
Other feed stuffs (lb)	2.86	0.20	-	-	-	-
Veterinary		0.65		0.64		0.11
Supplies		0.61		0.28		0.31
Contract production exp.		1.41		3.39		-
Fuel & oil		0.25		0.62		0.49
Repairs		0.59		1.24		0.85
Custom hire		0.19		0.53		0.51
Utilities		0.11		0.32		0.00
Hauling and trucking		1.07		1.00		0.39
Marketing		0.25		0.25		0.14
Operating interest		0.58		0.77		0.40
Total direct expenses		34.22		37.65		27.96
Return over direct expense		9.56		10.01		17.16
Overhead Expenses						
Hired labor		0.54		0.32		0.76
Building leases		3.23		0.72		4.04
Farm insurance		0.52		0.51		0.46
Utilities		0.35		0.21		0.46
Interest		0.39		0.57		0.30
Mach & bldg depreciation		1.05		1.66		0.75
Miscellaneous		0.40		0.43		0.30
Total overhead expenses		6.48		4.42		7.07
Total dir & ovhd expenses		40.71		42.07		35.03
Net return		3.07		5.59		10.09
Labor & management charge		1.32		1.75		1.88
Net return over lbr & mgt		1.75		3.84		8.21
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		61.47		67.35		57.82
Total dir & ovhd expense per unit		67.96		71.77		64.89
With other revenue adjustments		67.51		72.75		64.67
With labor and management		68.83		74.50		66.55
Est. labor hours per unit		0.10		0.09		0.21
Other Information						
No. purchased or trans in		10,220		9,056		2,937
Number sold or trans out		9,356		7,991		2,466
Percentage death loss		3.5		2.2		3.7
Percent substandard hogs		2		2		2
Avg. daily gain (lb.)		1.80		2.06		1.67
Lb. of feed / lb. of gain		2.95		2.62		2.52
Feed cost per cwt. of gain		24.32		23.11		22.02
Feed cost per head		58.24		53.30		51.71
Hired labor per head		1.25		0.65		1.59
Average purchase weight		41		44		46
Avg wgt / Finish Hogs sold		275		273		271
Avg purch price / head		55.64		59.06		59.88
Avg sales price / cwt.		51.21		54.31		55.45
Average carcass weight		205		204		205
Average price / cwt. carcass		69.14		73.46		74.14

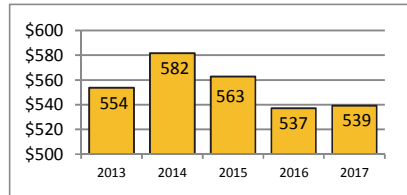
Selected Crop & Livestock Enterprise Trend Summary
Northern Minnesota Farm Business Management Data

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
<u>Alfalfa Hay</u>					
Yield per Acre	3.3	4.0	3.9	5.0	4.5
Value per Ton	\$153.38	\$176.49	\$153.84	\$110.40	\$108.87
Fuel, Oil, Repairs per Acre	\$91.09	\$114.57	\$83.10	\$79.40	\$82.42
Total Dir & Ovhd Exp per Acre	\$302.28	\$379.84	\$329.25	\$338.03	\$328.96
Net Return per Acre	\$218.54	\$337.71	\$292.23	\$209.56	\$167.85
Total Direct Expenses per Ton	\$51.79	\$48.66	\$42.09	\$32.55	\$35.05
Total Dir & Ovhd Exp per Ton	\$91.64	\$94.13	\$84.09	\$68.35	\$73.25

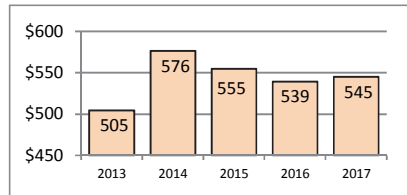
Total Dir&Ovhd Expense



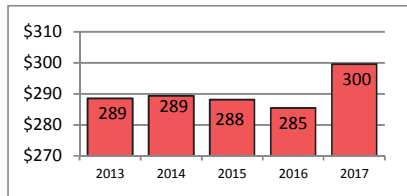
<u>Corn</u>					
Yield per Acre	108.5	118.8	164.2	179.5	164.6
Value per Bushel	\$4.02	\$3.42	\$3.30	\$2.95	\$3.08
Fuel, Oil, Repairs per Acre	\$88.78	\$87.92	\$80.80	\$71.55	\$74.43
Total Dir & Ovhd Exp per Acre	\$553.77	\$581.67	\$562.75	\$537.05	\$539.30
Net Return per Acre	-\$44.10	-\$75.40	-\$0.05	\$1.65	-\$14.68
Total Direct Expenses per Bu.	\$3.71	\$3.43	\$2.40	\$1.98	\$2.17
Total Dir & Ovhd Exp per Bushel	\$5.11	\$4.90	\$3.43	\$2.99	\$3.28



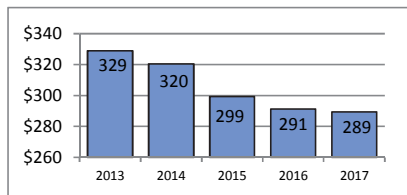
<u>Corn Silage</u>					
Yield per Acre	11.7	14.3	19.5	19.4	19.8
Value per Ton	\$40.01	\$35.05	\$34.46	\$33.91	\$30.45
Fuel, Oil, Repairs per Acre	\$100.48	\$122.88	\$93.91	\$88.07	\$93.48
Total Dir & Ovhd Exp per Acre	\$504.52	\$576.47	\$554.58	\$539.19	\$545.06
Net Return per Acre	\$155.90	\$9.68	\$120.30	\$119.00	\$68.81
Total Direct Expenses per Ton	\$31.22	\$27.70	\$19.47	\$18.88	\$18.82
Total Dir & Ovhd Exp per Ton	\$43.05	\$40.28	\$28.43	\$27.80	\$27.48



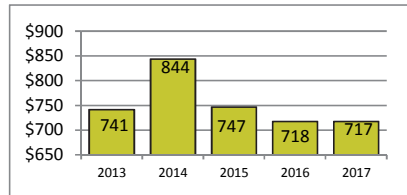
<u>Soybeans</u>					
Yield per Acre	33.4	33.0	38.1	46.7	35.2
Value per Bushel	\$12.52	\$9.73	\$8.33	\$9.27	\$9.05
Fuel, Oil, Repairs per Acre	\$45.26	\$46.04	\$38.24	\$38.23	\$39.35
Total Dir & Ovhd Exp per Acre	\$288.53	\$289.37	\$288.14	\$285.42	\$299.63
Net Return per Acre	\$139.81	\$52.87	\$43.58	\$151.42	\$38.07
Total Direct Expenses per Bu.	\$5.76	\$5.81	\$4.94	\$3.80	\$5.55
Total Dir & Ovhd Exp per Bushel	\$8.65	\$8.76	\$7.57	\$6.12	\$8.51



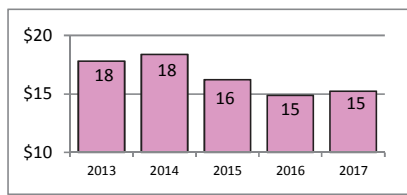
<u>Spring Wheat</u>					
Yield per Acre	66.5	60.2	66.0	66.0	72.3
Value per Bushel	\$6.24	\$5.62	\$4.96	\$4.95	\$5.90
Fuel, Oil, Repairs per Acre	\$44.21	\$43.17	\$38.15	\$35.53	\$39.62
Total Dir & Ovhd Exp per Acre	\$329.01	\$320.40	\$299.33	\$291.26	\$289.47
Net Return per Acre	\$95.54	\$32.83	\$40.40	\$39.56	\$146.74
Total Direct Expenses per Bu.	\$3.56	\$3.77	\$3.19	\$2.92	\$2.73
Total Dir & Ovhd Exp per Bushel	\$4.95	\$5.32	\$4.54	\$4.41	\$4.00



<u>Beef Cow Calf</u>					
Price Recv'd/Cwt Calf Sold	\$152.83	\$212.33	\$206.46	\$156.42	\$147.47
Total Feed Cost/Cow	\$479.03	\$508.48	\$438.89	\$412.74	\$395.34
Return over Feed/Cow	\$298.68	\$786.66	\$425.07	\$220.55	\$302.85
Net Return/Cow	\$36.61	\$451.63	\$117.23	-\$84.29	-\$19.01
Total Direct & Ovhd Expenses	\$741.10	\$843.51	\$746.72	\$717.58	\$717.20



<u>Dairy Cows</u>					
Production/Cow	23,087	23,765	24,034	24,598	24,830
Price Recv'd/Cwt Milk	\$20.20	\$24.36	\$17.75	\$16.33	\$17.72
Total Feed Cost/Cwt Milk	\$10.37	\$10.22	\$8.77	\$7.72	\$7.80
Return over Feed/Cwt Milk	\$8.69	\$13.42	\$8.65	\$8.61	\$9.92
Net Return/Cwt Milk	\$1.24	\$5.26	\$1.20	\$0.44	\$1.38
Total Direct & Ovhd Expenses	\$17.81	\$18.38	\$16.22	\$14.87	\$15.22



Minnesota State Farm Business Management Education

Vision:

To provide educational opportunities for students to be successful in a competitive agricultural environment.

Mission:

To deliver management education for decision-making that achieves an individual's business goals.

Guiding Principles:

- 1. Improved Quality of Life in Rural Communities*
 - 2. Achievement of Student Goals*
 - 3. Awareness of the Global Importance of Agriculture*
 - 4. Integrity in Student Interaction*
 - 5. Timely and Student-Focused Programming*
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Minnesota State FBM and Participating College Websites:

State FBM Website: agcentric.org/what-we-do/education-training/farm-business-management

Alexandria Technical and Community College: alextech.edu

Central Lakes College Website: clcmn.edu

Minnesota West Community & Technical College: mnwest.edu

Northland Community & Technical College Website: northlandcollege.edu

Ridgewater College: ridgewater.edu

Riverland Community & Technical College: riverland.edu

South Central College: southcentral.edu

St. Cloud Technical and Community College: sctcc.edu



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MyFarm Financial Scorecard

Year:

Name:

	This Year	5-Year Ave	Strong	Vulnerable
Liquidity				
Current ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	1.7	1.1
Working capital	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>		
Working cap to gross revenue	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	25%	10%
Solvency (market)	Note: These solvency ratios include deferred liabilities			
Farm debt/asset ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	30%	60%
Farm equity/asset ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	70%	40%
Farm debt/equity ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	0.43	1.50
Profitability (Cost)				
Rate of return on farm assets	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	8%	4%
Rate of return on farm equity	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	10%	3%
Operating profit margin	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	25%	15%
Net farm income	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>		
EBITDA	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>		
Repayment Capacity (Accrual)				
Capital debt repay capacity	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>		
Capital debt repay margin	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>		
Replacement margin	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>		
Term-debt coverage ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	1.50	1.20
Replacement margin ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	1.40	1.10
Financial Efficiency				
Asset-turnover rate (market)	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	45%	30%
Operating-expense ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	60%	80%
Depreciation-expense ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	5%	15%
Interest-expense ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	5%	10%
Net farm income ratio	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	20%	10%