



Farm Business Management

Northern Minnesota 2018 ANNUAL REPORT



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

A MEMBER OF THE MINNESOTA STATE SYSTEM

Northern Minnesota Annual Report Instructors and Locations



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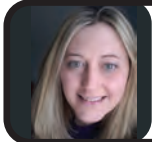
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2018 Annual Report – Executive Summary

The 2018 farm year can best be described as another year with a wide variety in earnings and production. Some areas were able to have excellent yields for another year while other areas had production issues that greatly reduced expected production. Profits were down for each of Minnesota's major types of livestock operations: dairy, pork and beef. In 2018, the median producer earned only \$25,857 from farm operations for the year. Hog producers went from a fairly profitable year in 2017 to another negative return year in 2018 for many operations. Dairy and beef producer's profits remained at low levels by historical standards. For dairy farms, the average price received for their milk was down by over a dollar per cwt. compared to what was received in 2017.

In 2018, Average Net Farm Income for the 615 farms in the Northern Minnesota database was \$59,306. This was up from

Financial Factors	2014	2015	2016	2017	2018
Average Net Farm Income	\$114,095	\$37,182	\$59,480	\$54,021	\$59,306
Median Net Farm Income	\$46,104	\$23,730	\$25,654	\$23,489	\$25,857

the \$54,021 reported in 2017 and nearly the same as the 2016 amount of \$59,480. Median Net Farm Income was up slightly increasing to \$25,857 in 2018, compared to \$23,489 in 2017. The increase in the yields of both corn and soybeans along with a strong Market Facilitation Program payments on soybeans caused the average Northern Minnesota farm profits to increase slightly. The MFP program on soybeans provided around \$65 per acre assistance to help the lower market prices, without that payment the net return per acre would only slightly be above the 2017 net return which was the lowest net return on soybeans in the past 5 years.

Some key financial measures showed a slight increase compared to 2017. Working Capital increased to \$140,409 at the end of 2018 compared to \$135,504 at the end of 2017; an increase of 3.6%. 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	2014	2015	2016	2017	2018
Working Capital	\$171,051	\$138,627	\$145,543	\$135,504	\$140,409
Working Capital as % of Gross	25.4%	24.7%	25.1%	23.6%	22.9%
Term Debt Coverage Ratio	1.75	0.88	1.22	1.18	1.27
Operating Expense Ratio	73.1%	81.4%	77.1%	77.5%	77.9%

Term Debt Coverage Ratio is a key financial measure that agricultural lenders consider in loan decisions. The 2018 Northern Minnesota average was 1.27 compared to 1.18 in 2017. In 2018, the median Term Debt Coverage Ratio was 0.96 which means over one half of the farms in this report had less than a 1.00. 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 2018. While Term Debt Coverage Ratio and Working Capital were modest increases in 2018, total debt to asset ratio increased by 2%, one cause of increased debt to asset ratio can be attributed to farmers restructuring current debt to intermediate or long term debt, so while current debt to asset decrease in 2018, total debt to asset increased.

With modest profitability in 2018, the Operating Expense Ratio came in at 77.9 %; 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 in 2018, it took 77.9 cents 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 2017 year at 77.5%, compared to 77.1% in 2016.

Trend information for the 2014-2018 Financial Summary can be found on page 4 of this report. A quick look at 2018 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.

2018 Annual Report – Executive Summary

The 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 -\$38.21 in 2018, which is the lowest return in the last 5 years and first

negative net return in that same time frame. This is a decrease of \$381 per cow from 2017.

This decrease in profit is tied directly to the lower yearly

average price received for milk, which decreased to \$16.44 per cwt compared to \$17.72 per cwt in 2017 as well as the first decrease in milk production per cow in the last ten years.

Statewide FBM Data	Dairy (Excluding Organic & Organic Transition)				
	2014	2015	2016	2017	2018
Gross Margin	\$5,618	\$4,187	\$3,767	\$4,123	\$3,667
Feed Cost / Cow	\$2,430	\$2,108	\$1,899	\$1,937	\$1,933
Dir & Ovhd Expense/Cow	\$4,369	\$3,897	\$3,659	\$3,780	\$3,705
Net Return / Cow	\$1,249	\$289	\$109	\$343	(\$38)
Average Milk Price	\$24.36	\$17.75	\$16.33	\$17.72	\$16.44
Cost of Prod w Lab&Mgmt/Cwt	\$20.00	\$17.42	\$16.65	\$17.08	\$17.29

Beef Cow/Calf enterprises showed a Net Return per cow of -\$54.31. 2017 showed a Net Return of -\$19 per cow, while

2016 had a Net Return of -\$84.

Feed costs were higher in 2018 for Beef Cow/Calf producers which led to a lower net return when combined with the smaller gross margin per cow.

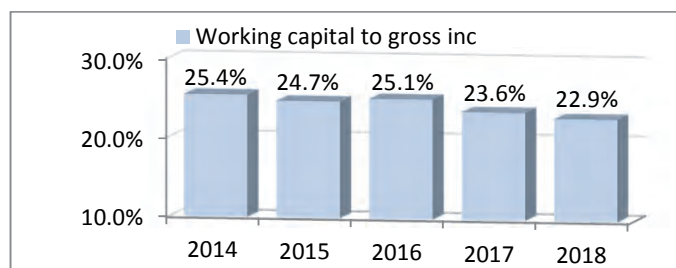
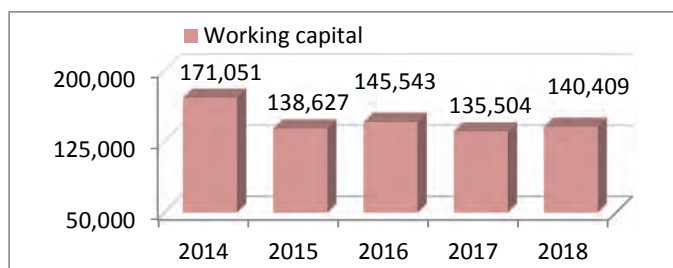
Statewide FBM Data	Beef Cow-Calf				
	2014	2015	2016	2017	2018
Gross Margin	\$1,295	\$864	\$633	\$698	\$692
Feed Cost / Cow	\$508	\$439	\$413	\$395	\$423
Dir & Ovhd Expense/Cow	\$844	\$747	\$718	\$717	\$746
Net Return / Cow	\$452	\$117	(\$84)	(\$19)	(\$54)
Ave Price per CWT calf sold	\$212.33	\$206.46	\$156.00	\$147.00	\$152.00

2018 was another interesting year for various crop yields in Minnesota. Some isolated areas experienced weather challenges that lowered yields in those areas, but some farms produced excellent crops. The average yield per acre for the northern half of Minnesota was 175 bushels for corn, 40 bushels for soybeans, and 60 bushels for wheat. Net returns increased in both soybeans and corn enterprises; while wheat enterprises showed a net return per acre of -\$1.80, the lowest in 5 years. Total direct and overhead expense for the crops listed below showed a slight increase, due in part to the increased cost of 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	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
	2018	174.9	\$3.29	\$591.86	\$600.68	(\$8.82)	\$3.43
Soybeans	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
	2018	39.9	\$8.44	\$417.24	\$342.97	\$74.27	\$8.60
Spring Wheat	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
	2018	59.6	\$5.53	\$355.89	\$338.44	(\$1.08)	\$5.68

Financial Trend Summary
Northern Minnesota Farm Business Management Data

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Income Statement					
Gross Cash Farm Income	658,798	551,703	557,016	562,001	585,946
Total Cash Farm Expense	522,485	469,847	473,748	470,535	505,816
Net Cash Farm Income	136,314	81,857	83,268	91,466	80,130
Inventory change	18,383	-5,368	20,084	7,106	21,774
Depreciation	-40,880	-40,070	-44,472	-44,668	-42,395
Net Farm Income From Operations	113,816	36,419	58,880	53,905	59,509
Gain or loss on capital sales	279	763	601	116	-202
Average Net Farm Income	114,095	37,182	59,480	54,021	59,306
Median Net Farm Income	46,104	23,730	25,654	23,489	25,857
Profitability (Cost)					
Rate of Return on Assets	6.4%	1.4%	2.7%	2.5%	3.1%
Rate of Return on Equity	8.3%	-0.9%	1.6%	1.2%	2.0%
Operating Profit Margin	17.8%	4.7%	9.2%	8.4%	10.0%
Asset Turnover Rate	36.2%	29.8%	29.6%	30.1%	30.6%
Liquidity & Repayment (end of year)					
Current Assets	379,735	362,417	395,719	372,786	413,286
Current Liabilities	208,684	223,790	250,175	237,282	272,877
Current Ratio	1.82	1.62	1.58	1.57	1.51
Working capital	171,051	138,627	145,543	135,504	140,409
Change in working capital	-	-	-	-	5,184
Working capital to gross inc	25.4%	24.7%	25.1%	23.6%	22.9%
Term Debt Coverage Ratio	1.75	0.88	1.22	1.18	1.27
Replacement coverage ratio	1.50	0.76	1.01	0.96	1.02
Term debt to EBITDA	2.45	4.33	3.63	3.85	3.80
Solvency (Market)					
Number of Farms	566	588	615	622	615
Total Assets	2,032,113	2,003,026	1,842,910	1,837,006	2,267,883
Total Liabilities	883,164	895,016	803,433	794,024	1,026,167
Net Worth	1,148,949	1,108,011	1,039,477	1,042,982	1,241,716
Net Worth Change	111,833	30,645	43,243	38,476	48,792
Farm Debt to Asset Ratio	44%	47%	46%	46%	48%
Total Debt to Asset Ratio	43%	45%	44%	43%	45%
Change in total net worth %	11%	3%	4%	4%	4%
Nonfarm Information					
Net Nonfarm Income	25,050	28,964	27,427	28,846	31,318
Farms Reporting Liv Expenses	88	76	101	76	75
Total Family Living Expense	51,248	48,783	47,828	50,678	50,802
Total Living, Invest, & Cap Purch	69,840	74,687	59,233	65,631	63,149
Crop Acres					
Total Crop Acres	697	688	713	755	754
Total Crop Acres Owned	253	248	239	257	251
Total Crop Acres Cash Rented	432	428	466	492	497
Total Crop Acres Share Rent	12	12	8	6	6
Machinery value per crop acre	607	542	622	596	531



<u>Year at a Glance</u>	Northern Minnesota	State FBM Data	Local Area	Your Farm Data	Your Farm Goal
<i>Data for the Average Farm</i>					
	615	2209			
	<u>Farms</u>	<u>Farms</u>			
<u>Income Statement</u>					
Gross Cash Farm Income	\$585,946	\$734,201	_____	_____	_____
Total Cash Operating Expense	\$505,816	\$646,508	_____	_____	_____
Net Cash Farm Income	\$80,130	\$87,693	_____	_____	_____
Net Operating Profit	\$101,904	\$95,925	_____	_____	_____
Net Farm Income	\$59,306	\$49,068	_____	_____	_____
Median Farm Income	\$25,857	\$24,817	_____	_____	_____
<u>Balance Sheet (Market)</u>					
Total Assets - 12/31	\$2,267,883	\$2,897,360	_____	_____	_____
Total Liabilities - 12/31	\$1,026,167	\$1,265,455	_____	_____	_____
Net Worth - 12/31	\$1,241,716	\$1,631,905	_____	_____	_____
Change in Net Worth	\$48,792	\$39,220	_____	_____	_____
<u>Financial Standards Measures</u>					
Working Capital - 12/31	\$140,409	\$180,805	_____	_____	_____
Debt to Asset Ratio - 12/31	48%	46%	_____	_____	_____
Rate of Return on Farm Assets - Cost	3.1%	1.8%	_____	_____	_____
Rate of Return on Farm Equity - Cost	2.0%	-0.3%	_____	_____	_____
Term Debt Coverage Ratio	1.27	1.08	_____	_____	_____
Asset Turnover Rate	30.6%	32.4%	_____	_____	_____
Operating Expense Ratio	77.9%	81.9%	_____	_____	_____
Interest Expense Ratio	5.4%	5.3%	_____	_____	_____
<u>Operator Information</u>					
Average Age of the Farmer	46.5	47.3	_____	_____	_____
Average Years Farming	21.5	23.2	_____	_____	_____
<u>Personal Spending & Income</u>					
Total Cash Family Living Expense	\$50,173	\$57,859	_____	_____	_____
Total Non Farm Income	\$31,318	\$37,849	_____	_____	_____

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.

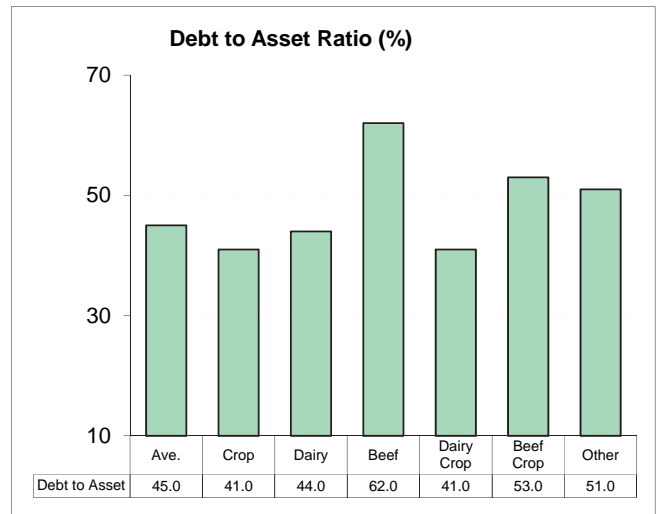
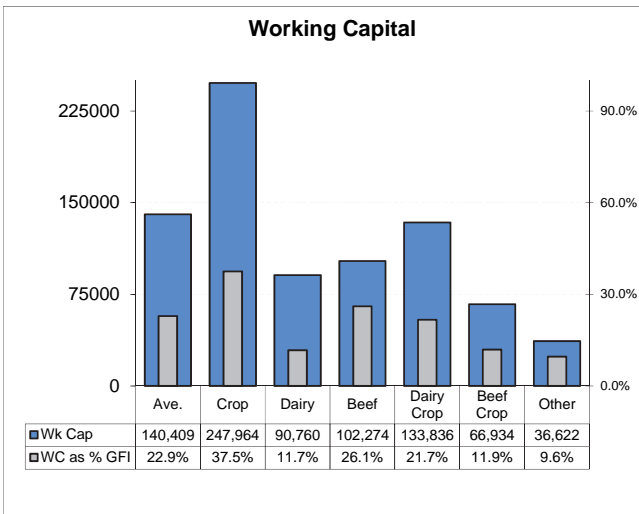
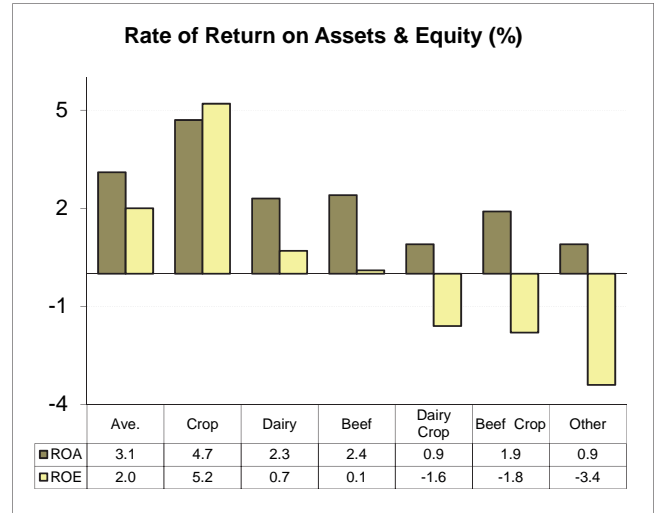
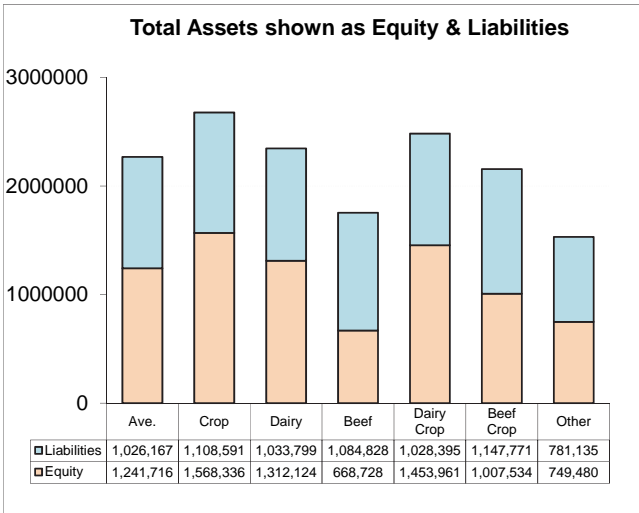
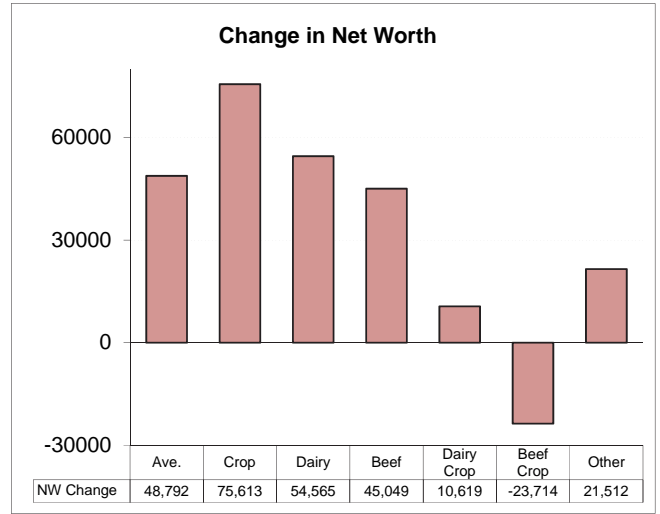
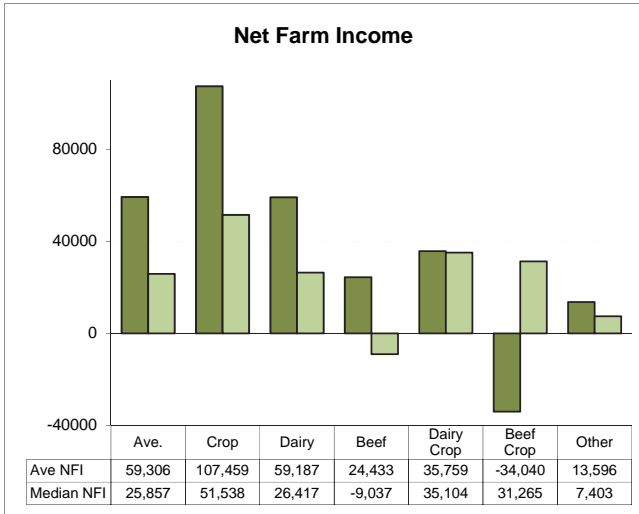
The following list shows expenses for the year:

		<u>Northern Minnesota</u>	<u>State Data</u>
Net Farm Income	(+)	\$59,306	\$49,068
Depreciation	(+)	\$42,395	\$49,692
Family Living (Excl Health/Med)	(-)	\$39,252	\$45,699
Social Security and Income Tax	(-)	\$5,331	\$8,123
Health and Medical Expense	(-)	\$7,418	\$9,704
Retirement Accounts	(-)	\$985	\$6,683
Principal Payments	(-)	\$57,262	\$59,201
Balance	(=)	-\$8,547	-\$30,650

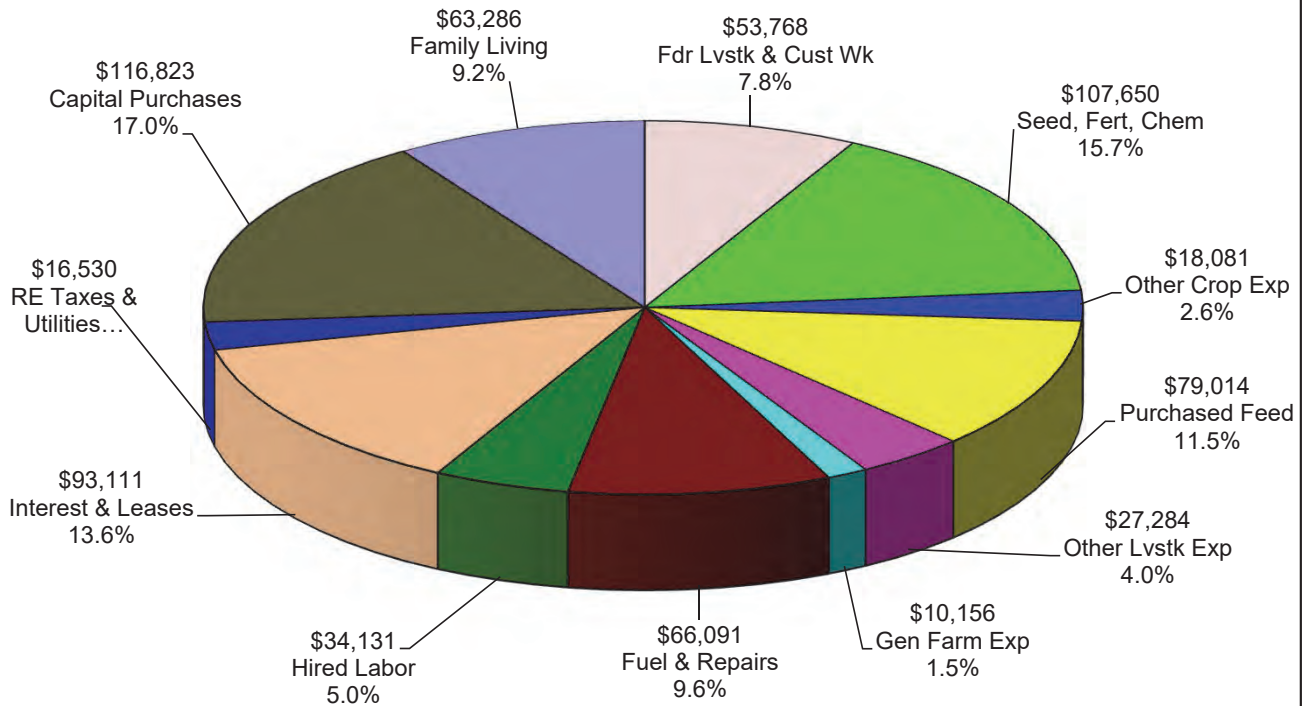
Financial Summary
Northern Minnesota Farm Business Management Data
(Farms Sorted By Farm Type)

	<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	615	230	160	47	29	33	112
Income Statement							
Gross cash farm income	585,946	623,850	751,887	334,040	622,138	537,933	371,232
Total cash farm expense	505,816	515,684	655,353	350,185	517,947	495,768	326,284
Net cash farm income	80,130	108,166	96,534	-16,145	104,191	42,165	44,948
Inventory change	21,774	39,844	13,158	51,323	-11,475	26,313	-3,394
Depreciation	-42,395	-46,870	-51,015	-15,429	-58,259	-42,623	-28,487
Net farm income from operations	59,509	101,140	58,677	19,749	34,458	25,855	13,067
Gain or loss on capital sales	-202	6,319	510	4,685	1,301	-59,895	529
Average net farm income	59,306	107,459	59,187	24,433	35,759	-34,040	13,596
Median net farm income	25,857	51,538	26,417	-9,037	35,104	31,265	7,403
Profitability (cost)							
Rate of return on assets	3.1 %	4.7 %	2.3 %	2.4 %	0.9 %	1.9 %	0.9 %
Rate of return on equity	2.0 %	5.2 %	0.7 %	0.1 %	-1.6 %	-1.8 %	-3.4 %
Operating profit margin	10.0 %	13.7 %	7.9 %	12.1 %	3.6 %	7.2 %	3.3 %
Asset turnover rate	30.6 %	34.8 %	29.7 %	19.5 %	25.2 %	26.7 %	28.2 %
Profitability (market)							
Rate of return on assets	2.9 %	3.6 %	2.7 %	1.7 %	1.1 %	2.9 %	2.4 %
Rate of return on equity	2.4 %	3.9 %	1.8 %	-0.8 %	-0.7 %	1.6 %	1.0 %
Operating profit margin	11.4 %	13.0 %	10.3 %	10.3 %	5.3 %	13.6 %	10.6 %
Asset turnover rate	25.4 %	27.9 %	25.9 %	16.8 %	21.2 %	21.5 %	22.6 %
Liquidity & Repayment (end of year)							
Current assets	413,286	589,861	258,355	465,295	374,574	421,261	258,258
Current liabilities	272,877	341,897	167,595	363,021	240,738	354,328	221,636
Current ratio	1.51	1.73	1.54	1.28	1.56	1.19	1.17
Working capital	140,409	247,964	90,760	102,274	133,836	66,934	36,622
Change in working capital	5,184	32,981	-29,405	50,034	-20,580	-10,611	-5,959
Working capital to gross inc	22.9 %	37.5 %	11.7 %	26.1 %	21.7 %	11.9 %	9.6 %
Term debt coverage ratio	1.27	1.70	1.10	1.52	0.87	0.91	0.87
Replacement coverage ratio	1.02	1.23	0.98	1.24	0.70	0.70	0.75
Term debt to EBITDA	3.80	2.57	4.43	7.67	4.69	4.68	5.93
Solvency (end of year at cost)							
Number of farms	615	230	160	47	29	33	112
Total assets	1,899,464	2,184,688	2,061,670	1,525,013	2,102,630	1,735,888	1,244,694
Total liabilities	843,704	872,099	876,736	944,713	825,577	952,837	662,961
Net worth	1,055,761	1,312,589	1,184,934	580,300	1,277,053	783,051	581,733
Net worth change	40,532	79,902	39,904	49,976	5,822	-51,866	-2,944
Farm debt to asset ratio	47 %	42 %	45 %	66 %	41 %	57 %	58 %
Total debt to asset ratio	44 %	40 %	43 %	62 %	39 %	55 %	53 %
Change in earned net worth %	4 %	6 %	3 %	9 %	0 %	-6 %	-1 %
Solvency (end of year at market)							
Number of farms	615	230	160	47	29	33	112
Total assets	2,267,883	2,676,927	2,345,923	1,753,556	2,482,356	2,155,305	1,530,615
Total liabilities	1,026,167	1,108,591	1,033,799	1,084,828	1,028,395	1,147,771	781,135
Net worth	1,241,716	1,568,336	1,312,124	668,728	1,453,960	1,007,533	749,480
Total net worth change	48,792	75,613	54,565	45,049	10,619	-23,714	21,512
Farm debt to asset ratio	48 %	44 %	46 %	66 %	43 %	55 %	54 %
Total debt to asset ratio	45 %	41 %	44 %	62 %	41 %	53 %	51 %
Change in total net worth %	4 %	5 %	4 %	7 %	1 %	-2 %	3 %
Nonfarm Information							
Net nonfarm income	31,318	37,719	14,947	58,117	15,180	30,007	34,642
Farms reporting living expenses	75	23	25	4	3	-	19
Total family living expense	50,802	53,493	49,383	-	-	-	47,290
Total living, invest, cap. purch	63,149	82,603	58,164	-	-	-	48,331
Crop Acres							
Total crop acres	754	1,304	356	309	590	745	427
Total crop acres owned	251	397	148	184	254	210	133
Total crop acres cash rented	497	893	207	126	326	531	294
Total crop acres share rented	6	13	1	-	9	4	-
Machinery value per crop acre	615	471	1,156	772	999	672	670

Selected Factors by Type of Farm



Each farmer, on average, spent \$685,925 in the Greater Community in 2018



Average Money Spent by Each Farmer in the Greater Community: \$685,925

Average Money Spent by Each Farmer in a 40 Yr Career: \$27,437,000
Money Spent in Community by 615 Farmers: \$421,843,875

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. The 2018 Northern Minnesota Annual Report includes data from Farm Business Management programs administered by: Northland Community & Technical College, Central Lakes College, 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.

Report tables were created using FINPACK and RankEm Central, copyrighted software of the Center for Farm Financial Management, University of Minnesota. The Center also shared the Financial Scorecard on the back cover.

The financial portion of the report, found in the first 27 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	615	177	129	91	120	98
Income Statement						
Gross cash farm income	585,946	307,536	662,995	667,613	831,788	610,502
Total cash farm expense	505,816	275,876	569,464	610,365	703,345	498,383
Net cash farm income	80,130	31,659	93,531	57,248	128,444	112,119
Inventory change	21,774	31,723	27,344	46,690	-1,756	2,149
Depreciation	-42,395	-19,962	-42,602	-51,633	-60,720	-51,625
Net farm income from operations	59,509	43,421	78,274	52,305	65,968	62,643
Gain or loss on capital sales	-202	-79	-231	15,084	4,592	-20,454
Average net farm income	59,306	43,342	78,043	67,389	70,560	42,189
Median net farm income	25,857	25,572	20,731	20,283	30,189	29,943
Profitability (cost)						
Rate of return on assets	3.1 %	4.2 %	4.5 %	2.4 %	2.2 %	2.5 %
Rate of return on equity	2.0 %	5.2 %	5.1 %	0.4 %	0.8 %	1.1 %
Operating profit margin	10.0 %	11.2 %	13.4 %	8.5 %	7.6 %	9.2 %
Asset turnover rate	30.6 %	37.7 %	33.7 %	28.3 %	28.5 %	27.6 %
Profitability (market)						
Rate of return on assets	2.9 %	5.8 %	5.0 %	-0.2 %	2.6 %	2.5 %
Rate of return on equity	2.4 %	9.6 %	6.9 %	-3.8 %	2.0 %	1.8 %
Operating profit margin	11.4 %	17.5 %	16.5 %	-0.7 %	11.0 %	12.4 %
Asset turnover rate	25.4 %	33.4 %	30.1 %	23.3 %	23.7 %	20.1 %
Liquidity & Repayment (end of year)						
Current assets	413,286	205,791	419,623	551,515	537,999	498,639
Current liabilities	272,877	161,212	311,612	388,716	314,052	265,583
Current ratio	1.51	1.28	1.35	1.42	1.71	1.88
Working capital	140,409	44,580	108,010	162,799	223,947	233,055
Change in working capital	5,184	1,832	16,890	12,200	-12,017	10,375
Working capital to gross inc	22.9 %	12.8 %	15.6 %	22.6 %	26.7 %	38.3 %
Term debt coverage ratio	1.27	1.55	1.51	1.01	1.11	1.21
Replacement coverage ratio	1.02	1.40	1.27	0.80	0.87	0.87
Term debt to EBITDA	3.80	4.10	3.64	4.62	3.47	3.40
Solvency (end of year at cost)						
Number of farms	615	177	129	91	120	98
Total assets	1,899,464	978,401	1,849,237	2,535,949	2,612,679	2,164,787
Total liabilities	843,704	568,641	954,194	1,155,194	923,040	808,672
Net worth	1,055,761	409,760	895,043	1,380,756	1,689,639	1,356,115
Net worth change	40,532	46,902	66,561	42,816	41,366	-8,375
Farm debt to asset ratio	47 %	61 %	54 %	48 %	38 %	41 %
Total debt to asset ratio	44 %	58 %	52 %	46 %	35 %	37 %
Change in earned net worth %	4 %	13 %	8 %	3 %	3 %	-1 %
Solvency (end of year at market)						
Number of farms	615	177	129	91	120	98
Total assets	2,267,883	1,100,707	2,068,989	3,006,326	3,117,718	2,911,443
Total liabilities	1,026,167	626,488	1,104,057	1,406,559	1,182,282	1,101,125
Net worth	1,241,716	474,219	964,932	1,599,766	1,935,436	1,810,318
Total net worth change	48,792	66,881	84,161	-15,745	65,208	9,390
Farm debt to asset ratio	48 %	60 %	56 %	49 %	40 %	40 %
Total debt to asset ratio	45 %	57 %	53 %	47 %	38 %	38 %
Change in total net worth %	4 %	16 %	10 %	-1 %	3 %	1 %
Nonfarm Information						
Net nonfarm income	31,318	38,344	30,136	31,061	27,476	25,126
Farms reporting living expenses	75	13	17	17	20	8
Total family living expense	50,802	35,825	54,174	56,841	48,242	61,544
Total living, invest, cap. purch	63,149	40,911	54,435	67,428	64,590	105,104
Crop Acres						
Total crop acres	754	502	653	995	907	930
Total crop acres owned	251	94	145	303	359	492
Total crop acres cash rented	497	405	508	683	548	414
Total crop acres share rented	6	3	0	9	0	24
Machinery value per crop acre	615	394	637	639	711	672

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	615	116	136	151	124	59	29
Income Statement							
Gross cash farm income	585,946	50,758	166,481	362,471	704,967	1,339,986	3,814,449
Total cash farm expense	505,816	59,554	154,569	302,528	611,006	1,109,191	3,319,264
Net cash farm income	80,130	-8,795	11,912	59,944	93,961	230,795	495,185
Inventory change	21,774	9,843	7,505	10,639	7,401	87,976	121,177
Depreciation	-42,395	-7,463	-15,369	-29,193	-56,264	-102,729	-195,561
Net farm income from operations	59,509	-6,416	4,047	41,390	45,098	216,041	420,801
Gain or loss on capital sales	-202	1,515	-16,176	2,394	9,052	-594	15,546
Average net farm income	59,306	-4,901	-12,129	43,784	54,150	215,447	436,347
Median net farm income	25,857	-4,743	14,045	38,981	60,400	162,151	344,908
Profitability (cost)							
Rate of return on assets	3.1 %	-3.0 %	-0.8 %	2.5 %	1.9 %	5.1 %	5.3 %
Rate of return on equity	2.0 %	-12.5 %	-7.1 %	0.8 %	-0.6 %	5.6 %	6.0 %
Operating profit margin	10.0 %	-19.8 %	-3.4 %	9.0 %	6.2 %	15.0 %	14.9 %
Asset turnover rate	30.6 %	15.1 %	23.0 %	27.2 %	30.9 %	33.7 %	35.5 %
Profitability (market)							
Rate of return on assets	2.9 %	-1.1 %	-0.5 %	2.0 %	3.1 %	3.3 %	5.4 %
Rate of return on equity	2.4 %	-5.9 %	-4.4 %	0.7 %	2.6 %	3.4 %	7.1 %
Operating profit margin	11.4 %	-9.5 %	-2.7 %	9.3 %	12.4 %	12.0 %	16.1 %
Asset turnover rate	25.4 %	11.9 %	17.5 %	21.3 %	24.9 %	27.8 %	33.2 %
Liquidity & Repayment (end of year)							
Current assets	413,286	57,079	125,086	247,746	493,448	1,137,218	2,236,030
Current liabilities	272,877	41,730	99,404	155,889	361,704	659,770	1,453,187
Current ratio	1.51	1.37	1.26	1.59	1.36	1.72	1.54
Working capital	140,409	15,349	25,682	91,857	131,744	477,448	782,843
Change in working capital	5,184	8,594	-4,690	3	4,184	52,493	-27,152
Working capital to gross inc	22.9 %	24.5 %	14.3 %	24.4 %	18.2 %	33.6 %	19.7 %
Term debt coverage ratio	1.27	1.07	0.84	1.18	0.90	1.64	1.70
Replacement coverage ratio	1.02	0.89	0.72	0.94	0.71	1.29	1.39
Term debt to EBITDA	3.80	19.10	8.56	4.20	4.52	2.31	2.76
Solvency (end of year at cost)							
Number of farms	615	116	136	151	124	59	29
Total assets	1,899,464	483,585	808,108	1,390,437	2,319,201	4,091,539	9,077,046
Total liabilities	843,704	254,792	427,419	609,783	1,100,973	1,601,959	3,726,876
Net worth	1,055,761	228,794	380,689	780,654	1,218,228	2,489,580	5,350,169
Net worth change	40,532	12,366	-17,523	29,726	21,524	145,163	350,133
Farm debt to asset ratio	47 %	59 %	60 %	48 %	51 %	40 %	42 %
Total debt to asset ratio	44 %	53 %	53 %	44 %	47 %	39 %	41 %
Change in earned net worth %	4 %	6 %	-4 %	4 %	2 %	6 %	7 %
Solvency (end of year at market)							
Number of farms	615	116	136	151	124	59	29
Total assets	2,267,883	593,258	1,028,108	1,728,734	2,850,519	4,914,107	9,712,818
Total liabilities	1,026,167	282,480	488,335	734,118	1,327,329	2,103,155	4,564,983
Net worth	1,241,716	310,778	539,772	994,616	1,523,190	2,810,952	5,147,835
Total net worth change	48,792	17,725	-15,755	30,370	61,913	107,825	395,483
Farm debt to asset ratio	48 %	52 %	52 %	46 %	49 %	44 %	48 %
Total debt to asset ratio	45 %	48 %	47 %	42 %	47 %	43 %	47 %
Change in total net worth %	4 %	6 %	-3 %	3 %	4 %	4 %	8 %
Nonfarm Information							
Net nonfarm income	31,318	50,702	37,712	25,932	25,519	16,724	6,321
Farms reporting living expenses	75	12	17	24	14	5	3
Total family living expense	50,802	35,034	40,139	56,257	60,170	57,602	-
Total living, invest, cap. purch	63,149	35,479	42,968	64,676	97,889	89,672	-
Crop Acres							
Total crop acres	754	129	316	526	1,002	2,095	2,711
Total crop acres owned	251	59	128	214	311	662	690
Total crop acres cash rented	497	70	186	307	680	1,410	2,018
Total crop acres share rented	6	-	1	4	11	23	3
Machinery value per crop acre	615	613	553	606	588	579	757

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

	<u>Avg. Of All Farms</u>	<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	615	102	127	123	109	55	42	53
Income Statement								
Gross cash farm income	585,946	194,316	227,897	355,915	479,657	924,843	890,580	2,133,826
Total cash farm expense	505,816	171,503	187,091	305,788	420,908	814,141	771,656	1,820,177
Net cash farm income	80,130	22,814	40,806	50,127	58,749	110,703	118,924	313,649
Inventory change	21,774	-2,508	-14,285	3,020	20,194	29,518	57,610	156,481
Depreciation	-42,395	-14,744	-18,068	-31,522	-37,935	-67,801	-69,614	-133,345
Net farm income from operations	59,509	5,562	8,453	21,626	41,007	72,419	106,920	336,786
Gain or loss on capital sales	-202	456	1,179	966	-18,867	4,271	1,550	24,036
Average net farm income	59,306	6,018	9,633	22,592	22,140	76,690	108,470	360,821
Median net farm income	25,857	946	10,308	26,127	37,571	77,924	88,099	250,478
Profitability (cost)								
Rate of return on assets	3.1 %	0.0 %	0.0 %	0.8 %	2.1 %	2.7 %	3.7 %	6.0 %
Rate of return on equity	2.0 %	-6.5 %	-5.3 %	-2.5 %	0.1 %	1.1 %	3.3 %	7.4 %
Operating profit margin	10.0 %	0.1 %	0.0 %	3.0 %	7.7 %	8.8 %	9.8 %	16.8 %
Asset turnover rate	30.6 %	22.2 %	22.3 %	25.5 %	27.5 %	30.2 %	37.5 %	35.7 %
Profitability (market)								
Rate of return on assets	2.9 %	2.2 %	0.3 %	1.1 %	2.3 %	3.7 %	3.3 %	4.6 %
Rate of return on equity	2.4 %	0.4 %	-3.1 %	-1.0 %	1.1 %	3.6 %	3.3 %	5.8 %
Operating profit margin	11.4 %	12.3 %	1.9 %	5.4 %	10.1 %	14.4 %	10.6 %	15.0 %
Asset turnover rate	25.4 %	17.8 %	17.8 %	20.1 %	22.4 %	25.5 %	30.6 %	30.5 %
Liquidity & Repayment (end of year)								
Current assets	413,286	91,506	101,885	201,767	338,172	540,713	809,782	1,784,281
Current liabilities	272,877	89,430	77,680	120,628	240,455	384,534	502,355	1,105,366
Current ratio	1.51	1.02	1.31	1.67	1.41	1.41	1.61	1.61
Working capital	140,409	2,076	24,205	81,139	97,716	156,179	307,428	678,915
Change in working capital	5,184	-4,454	-7,796	352	-7,402	4,646	13,728	89,811
Working capital to gross inc	22.9 %	1.1 %	10.8 %	22.2 %	19.4 %	16.3 %	31.9 %	29.7 %
Term debt coverage ratio	1.27	0.82	0.84	1.01	1.03	1.13	1.26	2.09
Replacement coverage ratio	1.02	0.74	0.73	0.81	0.85	0.95	0.98	1.55
Term debt to EBITDA	3.80	7.64	7.82	5.35	4.67	4.17	2.37	2.14
Solvency (end of year at cost)								
Number of farms	615	102	127	123	109	55	42	53
Total assets	1,899,464	715,717	880,981	1,305,662	1,784,340	2,946,816	2,744,798	5,939,938
Total liabilities	843,704	411,585	460,768	569,966	824,192	1,260,526	1,066,710	2,437,308
Net worth	1,055,761	304,132	420,213	735,696	960,148	1,686,290	1,678,088	3,502,630
Net worth change	40,532	9,465	-1,984	14,375	6,231	84,915	51,347	266,341
Farm debt to asset ratio	47 %	62 %	58 %	48 %	49 %	46 %	41 %	42 %
Total debt to asset ratio	44 %	58 %	52 %	44 %	46 %	43 %	39 %	41 %
Change in earned net worth %	4 %	3 %	0 %	2 %	1 %	5 %	3 %	8 %
Solvency (end of year at market)								
Number of farms	615	102	127	123	109	55	42	53
Total assets	2,267,883	881,878	1,072,072	1,618,140	2,161,288	3,467,920	3,314,465	6,909,168
Total liabilities	1,026,167	458,502	521,891	688,539	986,610	1,501,686	1,393,234	3,136,197
Net worth	1,241,716	423,376	550,180	929,601	1,174,678	1,966,235	1,921,231	3,772,971
Total net worth change	48,792	26,004	1,325	21,728	17,268	130,379	57,616	234,291
Farm debt to asset ratio	48 %	55 %	53 %	46 %	49 %	46 %	45 %	46 %
Total debt to asset ratio	45 %	52 %	49 %	43 %	46 %	43 %	42 %	45 %
Change in total net worth %	4 %	7 %	0 %	2 %	1 %	7 %	3 %	7 %
Nonfarm Information								
Net nonfarm income	31,318	37,225	33,376	28,956	31,798	36,600	25,107	20,476
Farms reporting living expenses	75	11	22	19	9	5	5	4
Total family living expense	50,802	38,121	49,513	51,494	46,029	49,578	58,600	-
Total living, invest, cap. purch	63,149	40,398	53,799	59,621	53,046	57,635	154,730	-
Crop Acres								
Total crop acres	754	24	171	370	679	1,221	1,728	2,845
Total crop acres owned	251	17	88	155	259	462	487	861
Total crop acres cash rented	497	8	82	215	415	757	1,206	1,958
Total crop acres share rented	6	-	2	-	5	2	35	26
Machinery value per crop acre	615	1,641	1,031	871	630	680	454	559

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

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	615	123	123	123
Sale of Crops				
Barley	3,844	2,504	1,155	13,776
Beans, Edible	6,903	3,429	2,281	17,388
Corn	78,353	47,263	44,547	196,765
Corn Silage	546	199	309	1,546
Hay, Alfalfa	632	1,331	678	197
Hay, Other	2,717	2,015	3,069	2,834
Fruit and Vegetable Crops	940	751	1,856	-
Potatoes	12,587	398	7,979	50,568
Soybeans	82,225	46,778	38,506	208,186
Soybeans, Food	440	-	-	2,199
Soybeans, Seed	1,639	597	565	5,386
Sunflowers	541	1,003	72	544
Oats	738	515	1,061	1,645
Wheat, Spring	39,128	12,998	15,103	120,125
Grass Seed	6,833	2,612	292	26,916
Other Crop Enterprises	2,278	2,323	4,657	2,277
Miscellaneous crop income	3,547	3,628	2,440	4,727
Total Crop Sales	243,891	128,344	124,570	655,079
Sale of Livestock				
Beef Cow-Calf, Beef Calves	7,376	15,541	6,459	5,764
Beef, Backgrounding	8,596	2,426	7,273	24,659
Beef, Finishing	23,750	26,008	5,443	79,454
Other Beef Enterprises	656	692	438	-
Dairy, Milk	184,864	181,410	113,227	377,565
Dairy Calves	1,679	1,692	1,371	3,009
Dairy Heifers (for sale)	767	855	501	2,174
Dairy Feeders & Backgrounding	3,313	6,628	5,851	322
Dairy Finishing	15,298	12,849	2,193	34,854
Hogs, Weaning to Finish	3,097	11,655	3,627	-
Other Livestock Enterprises	1,627	2,767	787	88
Cull breeding livestock	11,154	15,606	8,247	16,068
Misc. livestock income	2,277	322	501	5,884
Total Livestock & Product Sales	264,454	278,451	155,918	549,841
Other farm income				
Crop government payments	5,216	2,963	3,740	12,693
CRP payments	778	71	1,216	1,055
Livestock govt payments	2,767	2,146	2,425	3,731
Other government payments	21,471	10,610	10,158	52,226
Custom work income	14,182	9,001	9,083	25,269
Patronage dividends, cash	5,236	5,854	3,348	9,144
Insurance income	8,987	9,184	2,389	24,311
Contract livestock income	6,373	23,817	3,081	3,712
Other farm income	12,591	17,706	7,423	18,858
Total Other Farm Income	77,601	81,352	42,863	150,999
Gross Cash Farm Income	585,946	488,147	323,351	1,355,919

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	615	123	123	123
Direct Crop Expense				
Seed	38,225	28,236	19,619	88,044
Fertilizer	47,216	28,400	21,332	125,925
Crop chemicals	22,209	15,499	10,913	53,187
Crop insurance	9,599	7,110	5,208	23,022
Drying Expense	3,250	2,015	1,954	7,464
Other direct crop expenses	5,232	4,996	2,776	10,924
Total Direct Crop Expense	125,731	86,256	61,802	308,566
Direct Livestock Expense				
Feeder livestock purchase	19,637	28,751	6,633	51,439
Purchased feed	79,014	82,657	45,251	166,964
Breeding fees	2,833	2,410	1,484	6,523
Veterinary	6,845	9,530	4,716	10,914
Supplies	7,987	8,218	5,110	15,155
Contract production exp.	3,350	6,416	1,806	7,626
Livestock hauling and trucking	4,985	4,743	3,902	8,831
Livestock marketing	3,451	4,040	2,160	5,832
Bedding	4,194	5,693	2,761	6,821
Other livestock expenses	2,052	1,853	1,317	4,413
Total Direct Livestock Expense	134,348	154,311	75,140	284,518
Other Farm Expense				
Interest	32,737	37,923	21,224	57,508
Fuel & oil	25,444	24,280	14,980	49,189
Repairs	40,641	42,472	23,363	80,740
Custom hire	15,486	13,242	7,101	35,440
Hired labor	34,131	44,085	13,632	73,016
Land rent	51,130	31,148	25,145	135,022
Machinery & bldg leases	9,244	11,217	5,527	17,405
Real estate taxes	5,262	4,579	3,427	10,234
Farm insurance	9,503	9,621	6,865	17,205
Utilities	11,268	12,596	7,924	19,131
Dues & professional fees	4,084	4,038	2,320	9,650
Miscellaneous	6,807	7,268	8,547	6,915
Total Other Farm Expense	245,737	242,469	140,055	511,455
Total cash expense	505,816	483,036	276,997	1,104,539
Net cash farm income	80,130	5,111	46,354	251,380
Inventory Changes				
Prepays and supplies	336	-2,124	-1,170	6,129
Accounts receivable	7,618	-94	2,998	29,757
Hedging acct. & Oth Cur Assets	2,996	1,377	-48	11,416
Crops and feed	11,025	-23,295	6,437	51,097
Market livestock	3,916	4,737	-2,259	16,152
Breeding livestock	-323	-18,694	-664	14,341
Accounts payable	-5,492	-8,713	-4,596	-8,809
Accrued Interest & other assets	1,698	339	956	3,653
Total inventory change	21,774	-46,467	1,654	123,736
Net operating profit	101,904	-41,356	48,008	375,116
Depreciation				
Machinery and equipment	-30,360	-29,904	-15,759	-60,960
Titled vehicles	-3,601	-3,782	-2,246	-6,911
Buildings and improvements	-8,435	-7,943	-5,508	-17,005
Total depreciation	-42,395	-41,629	-23,513	-84,876
Net farm income from operations	59,509	-82,985	24,495	290,240
Gain or loss on capital sales	-203	-17,249	14	15,179
Net farm income	59,306	-100,234	24,509	305,419

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	615	123	123	123
Assets				
Current Farm Assets				
Cash and checking balance	31,004	15,693	13,288	78,929
Prepaid expenses & supplies	32,715	12,190	13,467	101,212
Growing crops	1,919	1,769	257	4,297
Accounts receivable	35,259	27,360	16,900	88,031
Hedging accounts	1,696	344	360	6,573
Crops held for sale or feed	254,019	161,813	121,313	657,989
Crops under government loan	-	-	-	-
Market livestock held for sale	53,997	57,798	21,563	134,304
Other current assets	2,677	5,371	1,294	2,360
Total current farm assets	413,286	282,338	188,442	1,073,695
Intermediate Farm Assets				
Breeding livestock	156,131	154,897	108,229	299,997
Machinery and equipment	387,150	351,124	211,476	792,252
Titled vehicles	32,616	31,549	20,942	64,334
Other intermediate assets	24,871	23,202	20,245	51,616
Total intermediate farm assets	600,767	560,773	360,891	1,208,200
Long Term Farm Assets				
Farm land	437,259	392,711	275,259	841,431
Buildings and improvements	227,927	206,497	137,421	486,695
Other long-term assets	38,573	49,869	23,151	62,542
Total long-term farm assets	703,759	649,077	435,831	1,390,669
Total Farm Assets	1,717,812	1,492,187	985,165	3,672,565
Total Nonfarm Assets	181,653	160,616	153,589	264,419
Total Assets	1,899,464	1,652,803	1,138,754	3,936,984
Liabilities				
Current Farm Liabilities				
Accrued interest	8,684	9,425	6,245	16,954
Accounts payable	29,520	37,391	18,334	55,062
Current notes	177,410	171,039	106,021	390,565
Government crop loans	-	-	-	-
Principal due on term debt	57,262	55,546	38,762	107,312
Total current farm liabilities	272,877	273,401	169,363	569,892
Total intermediate farm liabs	159,295	187,978	107,681	283,677
Total long term farm liabilities	378,304	451,841	268,483	586,178
Total farm liabilities	810,475	913,219	545,527	1,439,748
Total nonfarm liabilities	33,228	32,053	29,917	46,241
Total liabilities	843,704	945,273	575,444	1,485,989
Net worth (farm and nonfarm)	1,055,761	707,530	563,310	2,450,996
Net worth change	40,532	-95,998	13,189	241,435
Percent net worth change	4 %	-12 %	2 %	11 %
Ratio Analysis				
Current farm liabilities / assets	66 %	97 %	90 %	53 %
Intermediate farm liab. / assets	27 %	34 %	30 %	23 %
Long term farm liab. / assets	54 %	70 %	62 %	42 %
Total debt to asset ratio	44 %	57 %	51 %	38 %

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

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	615	123	123	123
Assets				
Current Farm Assets				
Cash and checking balance	31,004	15,693	13,288	78,929
Prepaid expenses & supplies	32,715	12,190	13,467	101,212
Growing crops	1,919	1,769	257	4,297
Accounts receivable	35,259	27,360	16,900	88,031
Hedging accounts	1,696	344	360	6,573
Crops held for sale or feed	254,019	161,813	121,313	657,989
Crops under government loan	-	-	-	-
Market livestock held for sale	53,997	57,798	21,563	134,304
Other current assets	2,677	5,371	1,294	2,360
Total current farm assets	413,286	282,338	188,442	1,073,695
Intermediate Farm Assets				
Breeding livestock	158,107	156,170	109,764	306,774
Machinery and equipment	453,383	421,429	240,495	936,494
Titled vehicles	37,227	36,218	24,112	72,011
Other intermediate assets	24,948	24,914	17,453	52,138
Total intermediate farm assets	673,665	638,731	391,823	1,367,417
Long Term Farm Assets				
Farm land	690,672	588,057	486,653	1,248,151
Buildings and improvements	250,609	233,269	147,972	519,099
Other long-term assets	45,679	50,577	23,500	92,967
Total long-term farm assets	986,959	871,902	658,125	1,860,218
Total Farm Assets	2,073,910	1,792,971	1,238,391	4,301,329
Total Nonfarm Assets	193,972	174,800	167,857	283,018
Total Assets	2,267,883	1,967,772	1,406,247	4,584,347
Liabilities				
Current Farm Liabilities				
Accrued interest	8,684	9,425	6,245	16,954
Accounts payable	29,520	37,391	18,334	55,062
Current notes	177,410	171,039	106,021	390,565
Government crop loans	-	-	-	-
Principal due on term debt	57,262	55,546	38,762	107,312
Total current farm liabilities	272,877	273,401	169,363	569,892
Total intermediate farm liabs	159,295	187,978	107,681	283,677
Total long term farm liabilities	378,304	451,841	268,483	586,178
Total farm liabilities	810,475	913,219	545,527	1,439,748
Total nonfarm liabilities	33,228	32,053	29,917	46,241
Total liabs excluding deferreds	843,704	945,273	575,444	1,485,988
Total deferred liabilities	182,463	146,306	100,956	427,116
Total liabilities	1,026,167	1,091,579	676,400	1,913,104
Retained earnings	1,055,761	707,530	563,310	2,450,996
Market valuation equity	185,955	168,662	166,538	220,248
Net worth (farm and nonfarm)	1,241,716	876,192	729,847	2,671,243
Net worth excluding deferreds	1,424,179	1,022,499	830,803	3,098,359
Net worth change	48,792	-56,510	22,853	216,037
Percent net worth change	4 %	-6 %	3 %	9 %
Ratio Analysis				
Current farm liabilities / assets	66 %	97 %	90 %	53 %
Intermediate farm liab. / assets	24 %	29 %	27 %	21 %
Long term farm liab. / assets	38 %	52 %	41 %	32 %
Total debt to asset ratio	45 %	55 %	48 %	42 %
Debt to assets excl deferreds	37 %	48 %	41 %	32 %

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.

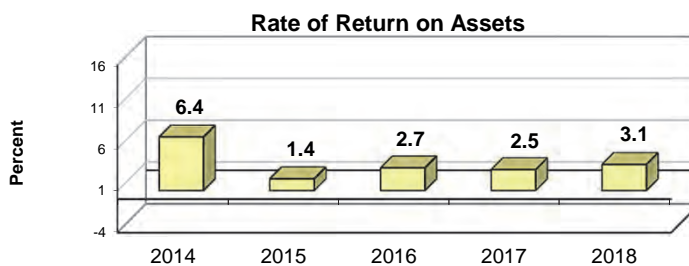
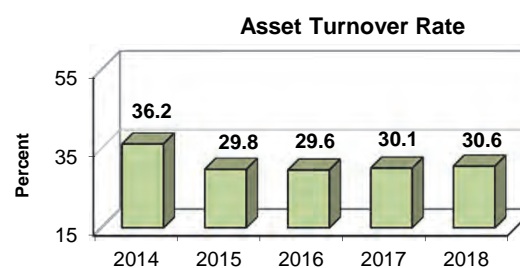
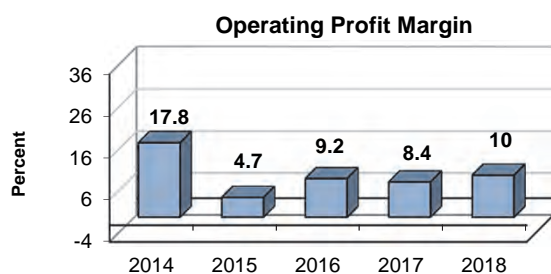
Interest Expense Ratio: This ratio indicates the percent of the gross farm income, which is used to pay farm interest expenses.

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	615	123	123	123
Liquidity				
Current ratio	1.51	1.03	1.11	1.88
Working capital	140,409	8,937	19,079	503,803
Working capital to gross inc.	22.9 %	2.0 %	5.7 %	34.0 %
Solvency (market)				
Farm debt to asset ratio	48 %	59 %	52 %	43 %
Farm equity to asset ratio	52 %	41 %	48 %	57 %
Farm debt to equity ratio	0.91	1.44	1.09	0.76
Profitability (cost)				
Rate of return on farm assets	3.1 %	-5.2 %	1.7 %	7.9 %
Rate of return on farm equity	2.0 %	-18.9 %	-1.4 %	10.3 %
Operating profit margin	10.0 %	23.2 %	5.9 %	21.9 %
Net farm income	59,306	-100,234	24,509	305,419
EBIDTA	135,326	-1,707	70,676	432,003
Repayment Capacity				
Capital debt repayment capacity	101,946	-11,357	49,997	337,083
Capital debt repayment margin	21,728	-99,330	-1,996	195,842
Replacement margin	2,241	-114,419	-11,384	150,483
Term debt coverage ratio	1.27	-0.13	0.96	2.39
Replacement coverage ratio	1.02	-0.11	0.81	1.81
Efficiency				
Asset turnover rate (cost)	30.6 %	22.5 %	29.0 %	35.9 %
Operating expense ratio	77.9 %	100.4 %	78.7 %	70.8 %
Depreciation expense ratio	6.9 %	9.2 %	7.1 %	5.7 %
Interest expense ratio	5.4 %	8.7 %	6.8 %	3.8 %
Net farm income ratio	9.7 %	-22.1 %	7.4 %	20.6 %

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

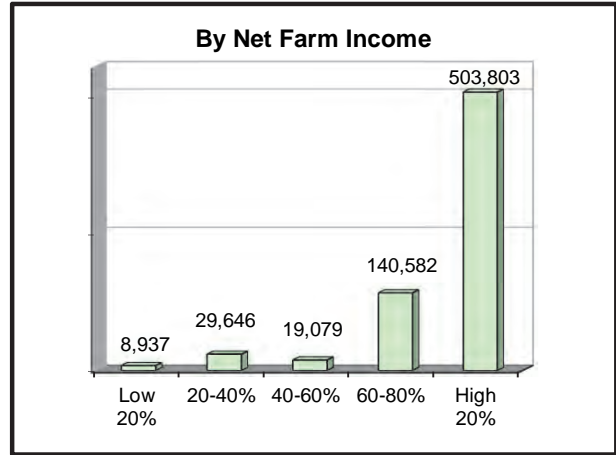
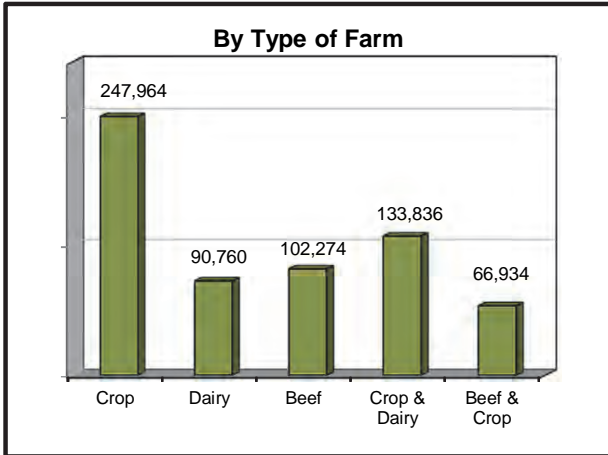
Below is a summary of the low, average, and high farms using the 21 Financial Standards Measures. The numbers listed below are intended to provide a general overview of the farm situation for the current year and over a five year period. The current year data provides a snapshot of the conditions that 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.

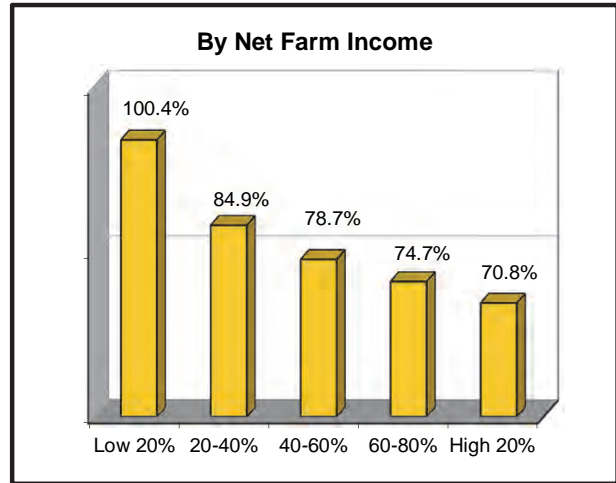
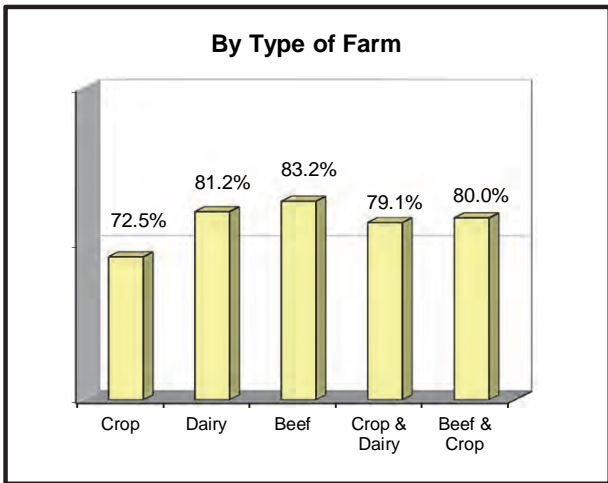
Evaluation Chart	<u>Low Farms</u>		<u>Average</u>		<u>High Farms</u>		<u>Your Farm</u>	
	2018	5 Yr Ave	2018	5 Yr Ave	2018	5 Yr Ave	2018	5 Yr Ave
<u>Liquidity</u>								
Current Ratio	1.03	1.05	1.51	1.62	1.88	2.22		
Working Capital	\$ 8,937	20,341	140,409	146,227	503,803	481,160		
Working Capital to Gross Inc.	% 2.0%	3.6%	22.9%	24.3%	34.0%	34.8%		
<u>Solvency (Market)</u>								
Farm Debt to Asset Ratio	% 59%	57%	48%	46%	43%	40%		
Farm Equity to Asset Ratio	% 41%	43%	52%	54%	57%	60%		
Farm Debt to Equity Ratio	% 1.44	1.33	0.91	0.86	0.76	0.68		
<u>Profitability (Cost)</u>								
Rate of Return on Farm Assets	% -5.2%	-5.4%	3.1%	3.2%	7.9%	8.6%		
Rate of Return on Farm Equity	% -18.9%	-18.6%	2.0%	2.4%	10.3%	11.3%		
Operating Profit Margin	% -23.2%	-22.5%	10.0%	10.0%	21.9%	22.9%		
Net Farm Income	\$ -100,234	-91,446	59,306	64,817	305,419	305,745		
EBIDTA	\$ -1,707	1,084	135,326	136,662	432,003	430,608		
<u>Repayment Capacity (Accrual)</u>								
Capital Debt Repayment Cap.	\$ -11,357	-22,420	101,946	100,249	337,083	341,336		
Capital Debt Repayment Margin	\$ -99,330	-116,598	21,728	20,533	195,842	202,112		
Replacement Margin	\$ -114,419	-131,658	2,241	4,428	150,483	168,138		
Term Debt Coverage Ratio	-0.13	-0.25	1.27	1.26	2.39	2.43		
Replacement Coverage Ratio	-0.11	-0.21	1.02	1.05	1.81	1.96		
<u>Efficiency</u>								
Asset Turnover Rate (Cost)	% 22.5%	23.7%	30.6%	31.3%	35.9%	36.9%		
Operating Expense Ratio	% 100.4%	99.8%	77.9%	77.4%	70.8%	69.5%		
Depreciation Expense Ratio	% 9.2%	9.6%	6.9%	7.1%	5.7%	6.1%		
Interest Expense Ratio	% 8.7%	8.1%	5.4%	4.9%	3.8%	3.3%		
Net Farm Income Ratio	% -22.1%	-18.4%	9.7%	10.6%	20.6%	21.5%		

Selected Financial Guideline Measures
Northern Minnesota Farm Business Management Data

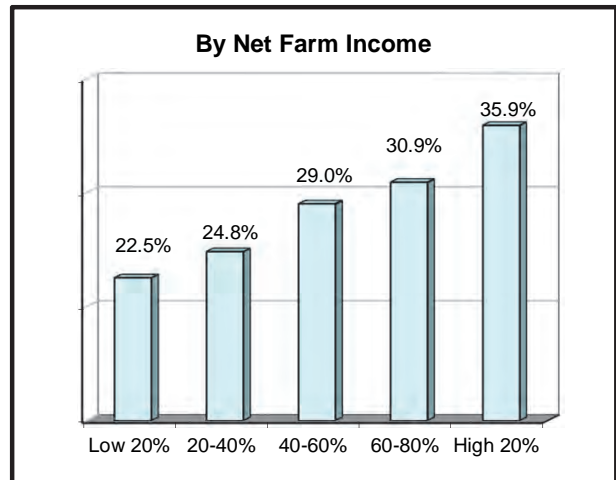
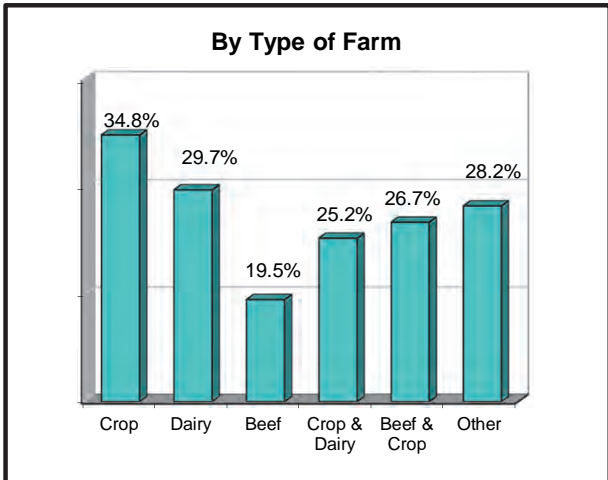
Working Capital



Operating Expense Ratio



Asset Turnover Rate

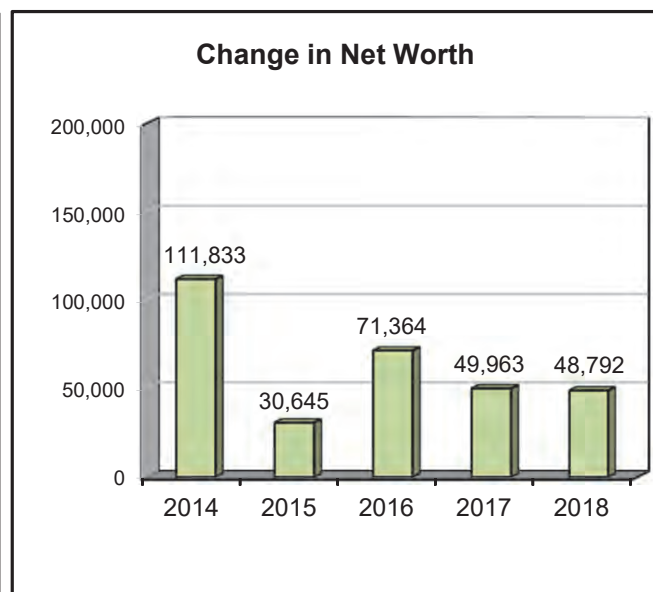
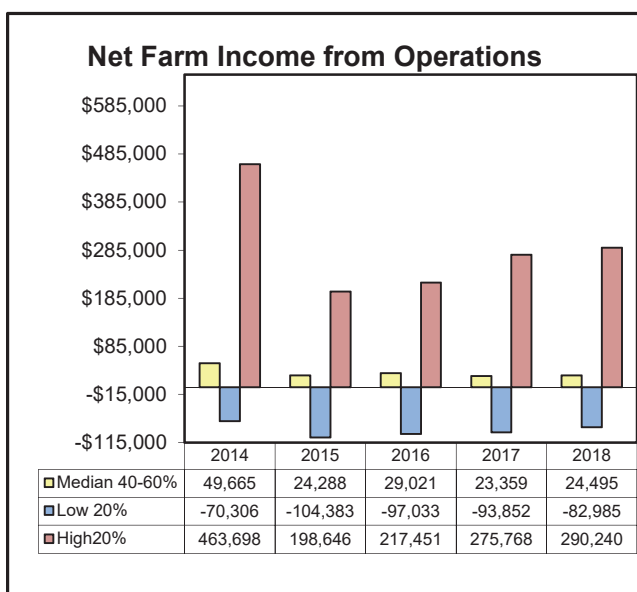


Profitability Measures
Northern Minnesota Farm Business Management Data
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	615	123	123	123
Profitability (assets valued at cost)				
Net farm income from operations	59,509	-82,985	24,495	290,240
Rate of return on assets	3.1 %	-5.2 %	1.7 %	7.9 %
Rate of return on equity	2.0 %	-18.9 %	-1.4 %	10.3 %
Operating profit margin	10.0 %	-23.2 %	5.9 %	21.9 %
Asset turnover rate	30.6 %	22.5 %	29.0 %	35.9 %
Farm interest expense	33,422	39,648	22,669	56,887
Value of operator lbr and mgmt.	41,759	35,700	30,587	70,641
Return on farm assets	51,171	-79,036	16,577	276,486
Average farm assets	1,677,045	1,509,292	964,737	3,520,286
Return on farm equity	17,750	-118,685	-6,092	219,600
Average farm equity	890,706	626,490	435,982	2,122,076
Value of farm production	513,664	340,060	279,900	1,263,356
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	615	123	123	123
Profitability (assets valued at market)				
Net farm income from operations	66,997	-44,396	34,046	262,209
Rate of return on assets	2.9 %	-2.3 %	2.2 %	6.0 %
Rate of return on equity	2.4 %	-10.5 %	0.6 %	8.2 %
Operating profit margin	11.4 %	-11.9 %	9.3 %	19.7 %
Asset turnover rate	25.4 %	19.0 %	23.1 %	30.5 %
Farm interest expense	33,422	39,648	22,669	56,887
Value of operator lbr and mgmt.	41,759	35,700	30,587	70,641
Return on farm assets	58,660	-40,448	26,128	248,455
Average farm assets	2,025,316	1,791,354	1,212,261	4,145,795
Return on farm equity	25,238	-80,096	3,459	191,569
Average farm equity	1,062,797	764,254	585,482	2,341,742
Value of farm production	513,664	340,060	279,900	1,263,356

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	615	123	123	123
Liquidity				
Current ratio	1.51	1.03	1.11	1.88
Working capital	140,409	8,937	19,079	503,803
Working capital to gross inc.	22.9%	2.0%	5.7%	34.0%
Current assets	413,286	282,338	188,442	1,073,695
Current liabilities	272,877	273,401	169,363	569,892
Gross revenues (accrual)	613,249	453,179	332,145	1,481,892
Repayment capacity				
Net farm income from operations	59,509	-82,985	24,495	290,240
Depreciation	42,395	41,629	23,513	84,876
Personal income	31,318	44,825	26,903	18,700
Family living/owner withdrawals	-46,682	-38,581	-37,020	-73,454
Cash discrepancy	-69	-83	-18	-117
Payments on personal debt	-2,814	-3,019	-2,406	-3,483
Income taxes paid	-5,957	-4,154	-1,838	-16,905
Interest on term debt	24,247	31,012	16,368	37,226
Capital debt repayment capacity	101,946	-11,357	49,997	337,083
Scheduled term debt payments	-80,218	-87,972	-51,992	-141,241
Capital debt repayment margin	21,728	-99,330	-1,996	195,842
Cash replacement allowance	-19,487	-15,089	-9,388	-45,358
Replacement margin	2,241	-114,419	-11,384	150,483
Term debt coverage ratio	1.27	-0.13	0.96	2.39
Replacement coverage ratio	1.02	-0.11	0.81	1.81





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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	75	13	14	17
Average family size	3.3	2.5	3.1	4.2
Family Living Expenses				
Food and meals expense	8,358	7,934	9,882	9,218
Medical care	3,181	1,958	2,639	4,985
Health insurance	3,874	3,651	4,394	6,044
Cash donations	1,330	573	1,940	2,198
Household supplies	3,189	2,574	2,095	4,794
Clothing	1,872	622	1,912	3,125
Personal care	2,579	2,482	1,839	3,043
Child / Dependent care	750	427	103	1,073
Alimony and child support	65	-	-	-
Gifts	1,004	709	1,709	955
Education	1,123	566	541	1,774
Recreation	2,870	1,445	2,944	4,437
Utilities (household share)	2,899	2,700	2,111	2,722
Personal vehicle operating exp	3,636	5,488	2,197	2,786
Household real estate taxes	219	57	356	549
Dwelling rent	457	-	1,571	520
Household repairs	1,860	2,916	1,286	2,225
Personal interest	1,066	328	703	891
Disability / Long term care ins	363	647	74	948
Life insurance payments	1,992	1,506	1,993	3,636
Personal property insurance	415	659	216	187
Miscellaneous	7,070	6,206	8,098	7,075
Total cash family living expense	50,173	43,449	48,601	63,184
Family living from the farm	629	376	630	1,035
Total family living	50,802	43,825	49,231	64,220
Other Nonfarm Expenditures				
Income taxes	6,193	1,751	2,196	16,847
Furnishing & appliance purchases	-	-	-	-
Nonfarm vehicle purchases	1,881	2,654	2,568	2,724
Nonfarm real estate purchases	3,277	-	9,643	3,317
Other nonfarm capital purchases	640	-	-	2,824
Nonfarm savings & investments	985	-4,132	-10,001	14,755
Total other nonfarm expenditures	12,976	274	4,405	40,467
Total cash family living investment & nonfarm capital purch	63,149	43,723	53,006	103,651

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	615	123	123	123
Nonfarm Income				
Personal wages & salary	21,761	32,691	17,542	12,165
Net nonfarm business income	3,877	3,719	3,744	1,320
Personal rental income	225	549	114	140
Personal interest income	167	17	221	387
Personal cash dividends	21	38	3	58
Tax refunds	1,938	2,312	2,531	1,112
Other nonfarm income	3,329	5,498	2,747	3,517
Total nonfarm income	31,318	44,825	26,903	18,700
Gifts and inheritances	2,021	1,751	1,952	1,902
Nonfarm Assets (market)				
Checking & savings	7,585	5,415	4,213	13,706
Stocks & bonds	8,539	12,796	4,513	14,192
Other current assets	1,995	907	1,721	5,031
Furniture & appliances	8,057	8,679	8,908	7,950
Nonfarm vehicles	15,561	12,916	14,815	20,976
Cash value of life ins.	4,996	4,698	4,519	4,353
Retirement accounts	49,372	43,602	51,079	60,118
Other intermediate assets	5,488	7,080	6,055	4,954
Nonfarm real estate	73,917	63,313	68,668	98,305
Personal bus. investment	10,349	154	285	45,284
Other long term assets	8,115	15,240	3,079	8,151
Total nonfarm assets	193,972	174,800	167,857	283,018
Nonfarm Liabilities				
Accrued interest	85	54	59	85
Accounts payable	695	1,856	573	93
Current notes	1,986	2,853	660	450
Princ due on term debt	2,831	3,184	2,337	3,522
Total current liabilities	7,895	8,266	4,015	14,008
Intermediate liabilities	4,566	5,088	6,711	3,384
Long term liabilities	20,767	18,699	19,191	28,849
Total nonfarm liabilities	33,228	32,053	29,917	46,241
Nonfarm net worth	160,744	142,747	137,939	236,777
Nonfarm debt to asset ratio	17 %	18 %	18 %	16 %

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	615	123	123	123
Operator Information				
Average number of operators	1.2	1.2	1.1	1.3
Average age of operators	46.5	49.6	44.0	46.5
Average number of years farming	21.5	24.8	19.3	22.8
Results Per Operator				
Working capital	117,938	7,189	17,860	382,163
Total assets (market)	1,904,925	1,582,969	1,316,350	3,477,488
Total liabilities	861,936	878,118	633,160	1,451,198
Net worth (market)	1,042,988	704,851	683,190	2,026,290
Net worth excl deferred liabs	1,196,250	822,547	777,692	2,350,282
Gross farm income	515,103	364,559	310,912	1,124,100
Total farm expense	465,119	431,316	287,983	903,936
Net farm income from operations	49,985	-66,757	22,929	220,164
Net nonfarm income	26,306	36,059	25,184	14,185
Family living & tax withdrawals	44,273	34,445	36,391	68,631
Total acres owned	265.3	219.3	185.3	470.1
Total crop acres	633.3	442.0	383.8	1,293.3
Crop acres owned	210.7	175.0	132.9	379.9
Crop acres cash rented	417.6	266.5	249.8	897.1
Crop acres share rented	5.1	0.5	1.1	16.2
Total pasture acres	28.4	36.0	22.1	31.8
Labor Analysis				
Number of farms	615	123	123	123
Total unpaid labor hours	2,549	2,607	2,378	3,118
Total hired labor hours	2,067	2,643	761	4,507
Total labor hours per farm	4,616	5,250	3,139	7,625
Unpaid hours per operator	2,141	2,097	2,226	2,365
Value of farm production / hour	111.29	64.77	89.16	165.68
Net farm income / unpaid hour	23.35	-31.83	10.30	93.08
Average hourly hired labor wage	16.69	16.61	15.26	16.79
Partnerships & LLCs				
Number of farms	75	15	10	23
Number of operators	2.2	2.3	1.9	2.2
Owner withdrawals per farm	83,679	-	-	122,652
Withdrawals per operator	38,492	-	-	57,719
Corporations				
Number of farms	17	5	1	6
Number of operators	2.3	2.0	-	2.0

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

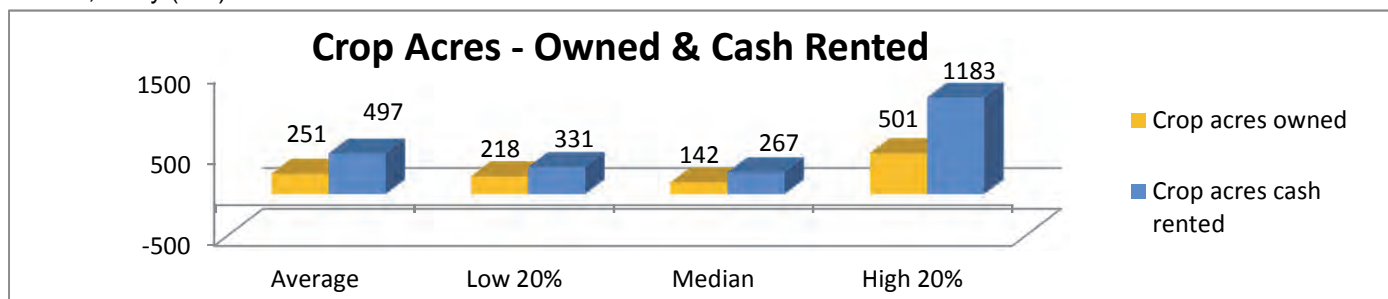
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	615	123	123	123
Acres Summary				
Total acres owned	316	273	198	620
Total crop acres	754	549	410	1,705
Crop acres owned	251	218	142	501
Crop acres cash rented	497	331	267	1183
Crop acres share rented	6	1	1	21
Total pasture acres	34	45	24	42
Percent crop acres owned	33 %	40 %	35 %	29 %
Mach invest/crop acre cost	531	676	522	482
Mach invest/crop acre market	615	789	581	566

Average Price Received (Cash Sales Only)

Soybeans per bushel	8.84	8.85	9.03	9.08
Corn per bushel	3.22	3.22	3.26	3.22
Wheat, Spring per bushel	5.68	5.49	5.61	5.70
Hay, Alfalfa per ton	115.46	141.44	-	-
Oats per bushel	2.65	2.07	2.92	2.87
Barley per bushel	4.45	-	-	4.45
Hay, Grass per ton	86.43	75.66	-	-
Hay per ton	84.08	95.75	74.21	101.59
Corn Silage per ton	28.34	-	-	-
Rye per bushel	5.06	-	-	-
Sunflowers per cwt	19.10	-	-	-
Grass Seed, Perennial Rye per lb	0.572	-	-	0.575
Soybeans, Food per bushel	12.56	-	-	-
Beans, Navy per cwt	23.57	-	-	-

Average Yield Per Acre

Soybeans (bushel)	40.22	40.50	40.45	40.43
Corn (bushel)	176.00	166.23	167.95	185.23
Corn Silage (ton)	20.40	19.22	19.61	21.00
Hay, Alfalfa (ton)	4.00	4.08	3.63	4.20
Wheat, Spring (bushel)	61.56	56.56	59.96	63.54
Hay (ton)	2.43	1.95	2.92	2.46
Hay, Grass (ton)	1.87	2.04	1.93	2.03
Oats (bushel)	69.77	56.13	79.24	-
Barley (bushel)	76.75	72.26	-	78.13
Rye (bushel)	17.72	-	-	-
Soybeans, Food (bushel)	32.50	-	-	-
Sunflowers (cwt)	15.68	-	-	-
Beans, Navy (cwt)	17.65	-	-	20.82



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.

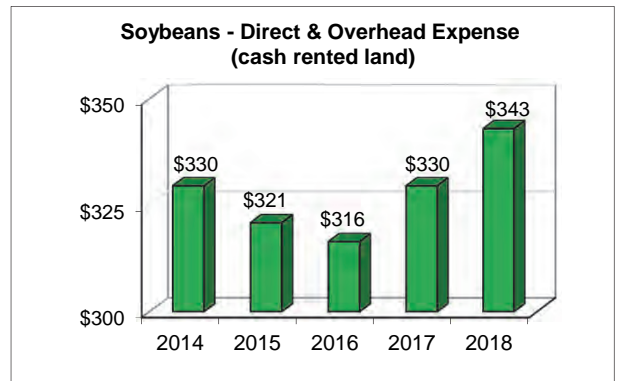
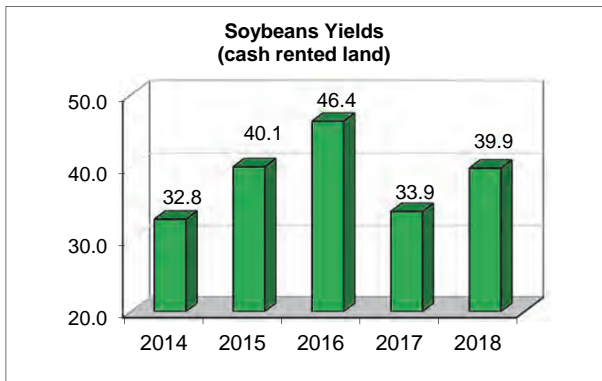
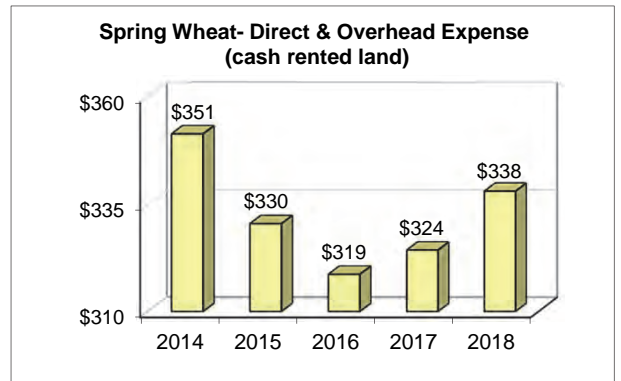
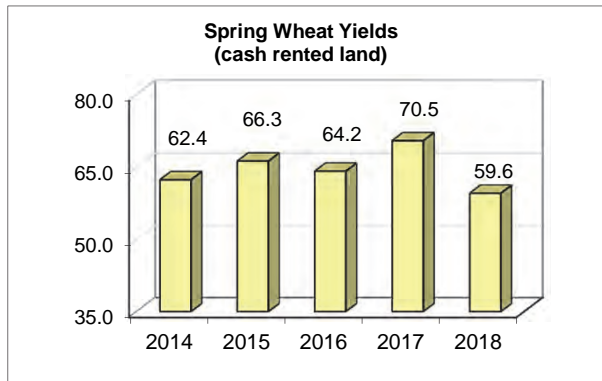
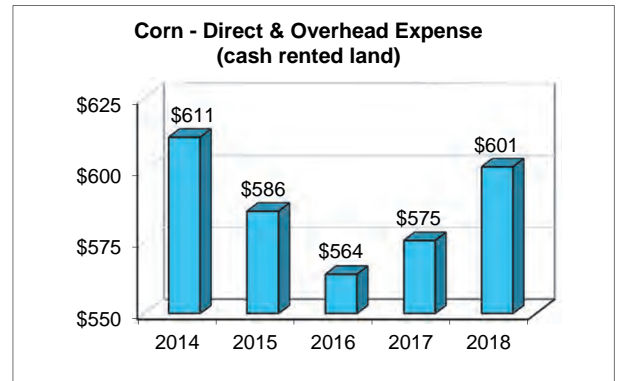
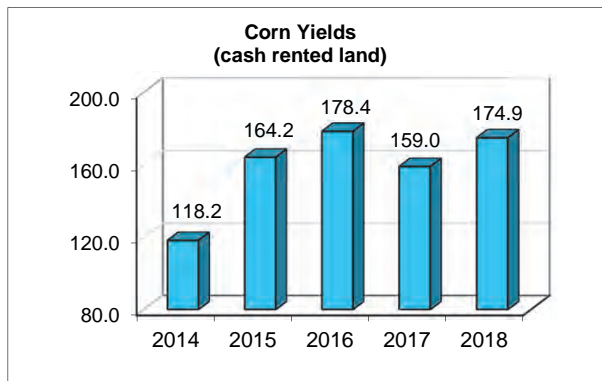
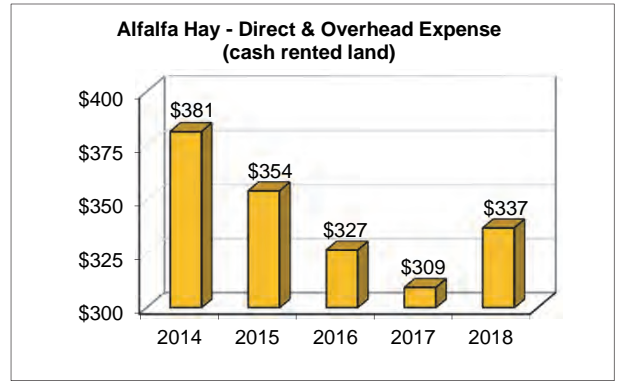
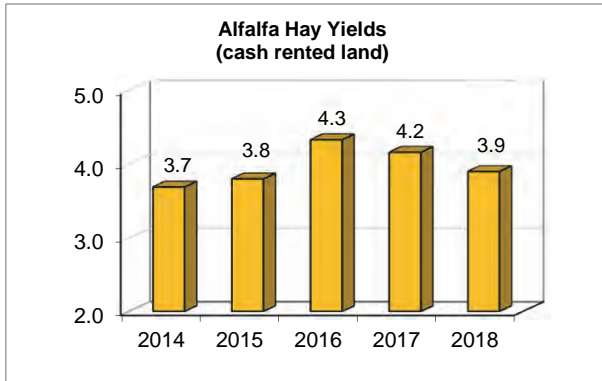
At the bottom of each livestock report, there is a list of selected factors for each enterprise. These factors are a combination of production indicators and efficiency indicators.

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	2014	2015	2016	2017	2018
Alfalfa Hay	\$190.49	\$164.47	\$169.50	\$171.76	\$177.01
Corn	\$162.84	\$159.23	\$151.43	\$153.51	\$161.45
Corn Silage	\$229.01	\$209.02	\$204.12	\$214.87	\$206.32
Soybeans	\$87.39	\$81.89	\$88.15	\$83.66	\$88.20
Spring Wheat	\$86.33	\$84.02	\$84.95	\$83.56	\$87.85

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	187	38	38
Acres	123.95	159.54	160.25
Yield per acre (bu.)	178.95	176.97	197.85
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.22	3.19	3.30
Other product return per acre	3.75	5.59	4.67
Total product return per acre	579.33	570.45	657.04
Hedging gains/losses per acre	2.07	-	7.90
Crop insurance per acre	4.58	-	4.42
Other crop income per acre	6.25	3.47	11.87
Gross return per acre	592.24	573.92	681.23
Direct Expenses			
Seed and plants	89.98	95.45	82.11
Fertilizer	96.97	106.00	91.39
Crop chemicals	25.79	22.57	22.49
Crop insurance	18.43	19.46	17.42
Drying expense	18.64	15.29	22.02
Storage	2.49	0.73	2.12
Packaging and supplies	0.77	0.50	0.50
Fuel & oil	32.34	33.54	28.26
Repairs	49.84	56.56	44.53
Custom hire	14.85	9.34	11.59
Hired labor	5.55	9.45	2.91
Machinery leases	2.25	1.49	0.40
Utilities	0.50	0.15	0.01
Hauling and trucking	2.01	1.50	0.93
Marketing	1.64	0.36	1.16
Operating interest	13.83	18.18	13.85
Miscellaneous	2.15	2.46	2.73
Total direct expenses per acre	378.01	393.04	344.41
Return over direct exp per acre	214.23	180.88	336.82
Overhead Expenses			
Hired labor	10.75	10.00	14.24
Machinery leases	2.93	0.38	4.06
Building leases	1.44	0.55	4.34
RE & pers. property taxes	18.64	21.41	23.24
Farm insurance	10.61	10.30	9.90
Utilities	6.40	4.90	7.72
Dues & professional fees	4.67	4.98	3.27
Interest	54.08	36.38	76.14
Mach & bldg depreciation	57.14	48.83	54.79
Miscellaneous	8.79	18.54	6.66
Total overhead expenses per acre	175.47	156.26	204.36
Total dir & ovhd expenses per acre	553.48	549.29	548.77
Net return per acre	38.76	24.62	132.46
Government payments	2.36	1.17	1.61
Net return with govt pmts	41.12	25.79	134.07
Labor & management charge	45.44	40.30	41.56
Net return over lbr & mgt	-4.33	-14.51	92.51
Cost of Production			
Total direct expense per bu.	2.11	2.22	1.74
Total dir & ovhd exp per bu.	3.09	3.10	2.77
Less govt & other income	2.99	3.05	2.62
With labor & management	3.24	3.27	2.83
Net value per unit	3.23	3.19	3.34
Machinery cost per acre	161.45	150.90	141.86
Est. labor hours per acre	3.54	3.21	3.24

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	244	49	49
Acres	223.45	233.42	206.37
Yield per acre (bu.)	174.96	169.88	192.04
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.29	3.25	3.34
Other product return per acre	2.28	2.03	7.73
Total product return per acre	577.75	553.51	649.83
Hedging gains/losses per acre	1.23	-	0.26
Crop insurance per acre	5.88	0.05	0.75
Other crop income per acre	7.00	7.15	15.72
Gross return per acre	591.86	560.71	666.56
Direct Expenses			
Seed and plants	89.07	90.86	92.67
Fertilizer	100.94	106.12	85.84
Crop chemicals	25.86	25.14	25.62
Crop insurance	17.16	17.54	18.02
Drying expense	20.40	17.14	18.12
Storage	1.73	1.10	0.99
Packaging and supplies	0.71	0.20	0.48
Fuel & oil	28.70	30.69	26.43
Repairs	45.22	41.64	42.60
Custom hire	16.14	14.87	9.34
Hired labor	5.28	7.92	0.77
Land rent	127.82	103.22	114.43
Machinery leases	2.82	3.72	1.26
Utilities	0.43	0.71	0.07
Hauling and trucking	1.41	0.87	0.74
Marketing	2.07	0.85	2.27
Operating interest	14.82	15.93	7.98
Miscellaneous	2.31	2.35	1.73
Total direct expenses per acre	502.90	480.88	449.36
Return over direct exp per acre	88.96	79.83	217.20
Overhead Expenses			
Hired labor	9.79	10.24	11.36
Machinery leases	7.31	2.61	8.69
Building leases	3.26	1.70	1.90
Farm insurance	8.40	8.19	9.73
Utilities	5.69	5.08	7.63
Dues & professional fees	3.50	4.42	4.56
Interest	7.81	9.35	5.20
Mach & bldg depreciation	44.60	40.18	53.08
Miscellaneous	7.41	14.01	7.91
Total overhead expenses per acre	97.78	95.79	110.07
Total dir & ovhd expenses per acre	600.68	576.66	559.42
Net return per acre	-8.82	-15.95	107.14
Government payments	2.39	2.26	3.87
Net return with govt pmts	-6.43	-13.69	111.00
Labor & management charge	39.45	35.43	52.23
Net return over lbr & mgt	-45.88	-49.12	58.77
Cost of Production			
Total direct expense per bu.	2.87	2.83	2.34
Total dir & ovhd exp per bu.	3.43	3.39	2.91
Less govt & other income	3.33	3.33	2.77
With labor & management	3.55	3.54	3.04
Net value per unit	3.30	3.25	3.34
Machinery cost per acre	147.85	140.34	139.41
Est. labor hours per acre	2.85	3.05	2.76

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	187	38	38
Acres	210.68	207.13	149.22
Yield per acre (bu.)	40.98	40.83	54.99
Operators share of yield %	100.00	100.00	100.00
Value per bu.	8.38	8.45	8.70
Other product return per acre	0.00	-	0.01
Total product return per acre	343.29	344.92	478.20
Hedging gains/losses per acre	1.66	-	11.57
Crop insurance per acre	9.78	10.91	2.93
Other crop income per acre	72.08	67.04	106.17
Gross return per acre	426.81	422.87	598.87
Direct Expenses			
Seed and plants	59.64	58.41	53.61
Fertilizer	30.68	35.02	32.35
Crop chemicals	29.98	25.85	46.22
Crop insurance	14.64	13.13	15.28
Drying expense	0.73	0.27	0.36
Fuel & oil	17.60	16.96	19.11
Repairs	26.53	24.81	33.12
Custom hire	8.27	7.96	5.12
Hired labor	1.92	1.17	1.39
Machinery leases	2.20	1.25	3.75
Utilities	0.35	0.26	0.91
Hauling and trucking	0.96	0.26	1.05
Marketing	1.03	0.79	1.64
Operating interest	6.37	4.58	7.59
Miscellaneous	1.85	1.12	5.04
Total direct expenses per acre	202.75	191.84	226.54
Return over direct exp per acre	224.06	231.02	372.33
Overhead Expenses			
Hired labor	6.43	3.74	8.21
Machinery leases	1.11	0.60	2.27
Building leases	0.46	0.59	0.35
RE & pers. property taxes	13.74	11.04	21.57
Farm insurance	6.77	5.22	7.00
Utilities	4.12	3.22	4.17
Dues & professional fees	2.59	1.35	2.74
Interest	32.98	26.47	46.61
Mach & bldg depreciation	32.52	37.60	38.68
Miscellaneous	4.76	1.22	4.03
Total overhead expenses per acre	105.49	91.04	135.63
Total dir & ovhd expenses per acre	308.24	282.89	362.17
Net return per acre	118.57	139.98	236.70
Government payments	6.85	11.15	2.25
Net return with govt pmts	125.42	151.13	238.95
Labor & management charge	29.39	28.66	31.36
Net return over lbr & mgt	96.04	122.48	207.58
Cost of Production			
Total direct expense per bu.	4.95	4.70	4.12
Total dir & ovhd exp per bu.	7.52	6.93	6.59
Less govt & other income	5.32	4.75	4.35
With labor & management	6.03	5.45	4.92
Net value per unit	8.42	8.45	8.91
Machinery cost per acre	88.20	88.45	103.07
Est. labor hours per acre	1.76	1.65	1.99

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	269	54	54
Acres	346.21	348.37	308.50
Yield per acre (bu.)	39.90	38.87	49.47
Operators share of yield %	100.00	100.00	100.00
Value per bu.	8.44	8.22	8.70
Other product return per acre	0.04	-	0.24
Total product return per acre	336.84	319.65	430.54
Hedging gains/losses per acre	0.72	-	3.54
Crop insurance per acre	12.54	14.39	8.58
Other crop income per acre	67.14	61.25	95.27
Gross return per acre	417.24	395.29	537.93
Direct Expenses			
Seed and plants	58.47	53.47	59.83
Fertilizer	25.63	27.70	27.65
Crop chemicals	31.56	29.41	32.95
Crop insurance	14.64	15.69	15.46
Drying expense	0.60	0.46	1.26
Storage	0.22	0.11	0.78
Fuel & oil	16.95	16.85	18.21
Repairs	23.73	22.21	25.47
Custom hire	8.20	6.90	4.34
Hired labor	1.59	0.25	2.16
Land rent	94.38	85.03	106.57
Machinery leases	2.73	1.52	2.33
Hauling and trucking	0.59	0.76	0.53
Marketing	0.95	0.52	1.13
Operating interest	7.30	5.47	6.24
Miscellaneous	1.62	1.07	2.40
Total direct expenses per acre	289.15	267.42	307.31
Return over direct exp per acre	128.09	127.87	230.62
Overhead Expenses			
Hired labor	6.55	4.56	10.65
Machinery leases	3.43	4.69	1.49
Building leases	0.92	0.64	0.53
Farm insurance	5.27	4.92	6.19
Utilities	3.50	3.77	4.87
Dues & professional fees	2.01	2.12	3.07
Interest	4.11	4.65	4.15
Mach & bldg depreciation	25.57	27.08	30.72
Miscellaneous	2.48	2.21	4.37
Total overhead expenses per acre	53.82	54.64	66.03
Total dir & ovhd expenses per acre	342.97	322.06	373.34
Net return per acre	74.27	73.23	164.58
Government payments	7.37	8.19	3.78
Net return with govt pmts	81.64	81.42	168.37
Labor & management charge	26.25	27.72	27.73
Net return over lbr & mgt	55.39	53.69	140.64
Cost of Production			
Total direct expense per bu.	7.25	6.88	6.21
Total dir & ovhd exp per bu.	8.60	8.29	7.55
Less govt & other income	6.40	6.13	5.29
With labor & management	7.05	6.84	5.86
Net value per unit	8.46	8.22	8.77
Machinery cost per acre	82.46	81.65	84.06
Est. labor hours per acre	1.56	1.56	1.73

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	102	21	21
Acres	249.45	188.03	469.93
Yield per acre (bu.)	65.78	58.00	74.83
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.47	5.60	5.52
Other product return per acre	0.26	0.09	-
Total product return per acre	360.16	324.71	413.14
Hedging gains/losses per acre	0.81	-	2.10
Crop insurance per acre	4.42	10.00	3.83
Other crop income per acre	18.90	11.41	19.73
Gross return per acre	384.29	346.12	438.79
Direct Expenses			
Seed and plants	20.57	19.56	17.93
Fertilizer	79.77	74.94	77.85
Crop chemicals	31.28	29.64	32.17
Crop insurance	11.40	11.44	12.94
Drying expense	0.59	0.58	0.80
Storage	0.30	0.90	0.29
Fuel & oil	18.36	17.36	16.89
Repairs	26.89	26.00	20.87
Custom hire	8.45	5.38	10.14
Hired labor	2.57	4.53	-
Machinery leases	0.62	-	0.09
Hauling and trucking	0.82	0.30	1.92
Marketing	0.70	1.67	0.44
Operating interest	6.49	6.35	4.72
Miscellaneous	0.98	0.90	0.66
Total direct expenses per acre	209.80	199.56	197.70
Return over direct exp per acre	174.49	146.56	241.09
Overhead Expenses			
Hired labor	7.83	8.53	6.71
Machinery leases	1.95	2.45	3.12
Building leases	0.61	-	0.68
RE & pers. property taxes	12.22	15.88	8.62
Farm insurance	6.32	5.43	5.36
Utilities	4.29	3.33	4.22
Dues & professional fees	2.12	2.50	1.59
Interest	22.15	14.72	21.94
Mach & bldg depreciation	32.19	21.71	39.98
Miscellaneous	4.11	2.96	3.97
Total overhead expenses per acre	93.79	77.52	96.19
Total dir & ovhd expenses per acre	303.60	277.07	293.89
Net return per acre	80.69	69.05	144.90
Government payments	9.72	4.95	12.92
Net return with govt pmts	90.41	74.00	157.82
Labor & management charge	27.47	28.91	28.86
Net return over lbr & mgt	62.94	45.09	128.96
Cost of Production			
Total direct expense per bu.	3.19	3.44	2.64
Total dir & ovhd exp per bu.	4.62	4.78	3.93
Less govt & other income	4.10	4.32	3.41
With labor & management	4.51	4.82	3.80
Net value per unit	5.48	5.60	5.55
Machinery cost per acre	87.85	72.92	89.34
Est. labor hours per acre	1.47	1.70	1.35

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	141	28	29
Acres	376.94	656.60	445.27
Yield per acre (bu.)	59.61	55.95	70.61
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.53	5.46	5.65
Other product return per acre	0.33	-	-
Total product return per acre	330.13	305.32	399.10
Hedging gains/losses per acre	2.13	1.30	6.92
Crop insurance per acre	7.44	15.70	3.09
Other crop income per acre	16.19	14.69	18.65
Gross return per acre	355.89	337.01	427.76
Direct Expenses			
Seed and plants	20.83	19.56	20.25
Fertilizer	81.19	85.77	78.72
Crop chemicals	30.16	29.03	32.89
Cover crop expense	0.37	0.54	-
Crop insurance	11.57	10.35	13.23
Drying expense	0.76	1.04	0.33
Fuel & oil	16.79	17.20	15.72
Repairs	22.47	22.34	20.30
Custom hire	7.56	7.14	10.59
Hired labor	1.76	0.28	-
Land rent	79.62	86.14	61.14
Machinery leases	1.84	0.97	1.79
Hauling and trucking	0.33	0.08	0.71
Marketing	0.92	0.59	0.17
Operating interest	6.64	5.90	7.00
Miscellaneous	1.27	1.06	0.49
Total direct expenses per acre	284.06	288.00	263.34
Return over direct exp per acre	71.83	49.01	164.42
Overhead Expenses			
Hired labor	8.85	12.26	7.64
Machinery leases	3.71	3.12	6.03
Building leases	0.88	1.04	1.53
Farm insurance	5.40	5.27	4.81
Utilities	3.89	4.64	3.69
Dues & professional fees	2.21	1.96	1.93
Interest	3.08	2.05	4.84
Mach & bldg depreciation	22.69	20.22	25.48
Miscellaneous	3.66	1.61	4.90
Total overhead expenses per acre	54.38	52.17	60.86
Total dir & ovhd expenses per acre	338.44	340.17	324.19
Net return per acre	17.45	-3.16	103.57
Government payments	7.24	6.39	10.93
Net return with govt pmts	24.69	3.24	114.49
Labor & management charge	25.78	23.55	27.30
Net return over lbr & mgt	-1.08	-20.31	87.20
Cost of Production			
Total direct expense per bu.	4.77	5.15	3.73
Total dir & ovhd exp per bu.	5.68	6.08	4.59
Less govt & other income	5.12	5.40	4.03
With labor & management	5.55	5.82	4.42
Net value per unit	5.57	5.48	5.75
Machinery cost per acre	76.52	72.06	82.20
Est. labor hours per acre	1.52	1.52	1.31

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

Corn Silage on Owned Land

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	154	31	31
Acres	58.80	63.82	50.25
Yield per acre (ton)	20.57	20.57	25.79
Operators share of yield %	100.00	100.00	100.00
Value per ton	29.98	30.00	30.67
Total product return per acre	616.82	617.05	791.00
Crop insurance per acre	1.82	0.39	0.23
Other crop income per acre	1.52	0.40	3.95
Gross return per acre	620.16	617.84	795.19
Direct Expenses			
Seed and plants	88.98	93.71	80.98
Fertilizer	55.15	59.01	31.20
Crop chemicals	30.49	26.17	27.34
Crop insurance	12.76	12.76	12.38
Storage	0.92	1.23	3.03
Packaging and supplies	12.01	11.80	12.07
Fuel & oil	41.35	44.67	40.26
Repairs	53.94	65.40	45.19
Custom hire	49.41	35.84	36.93
Hired labor	2.98	4.03	0.04
Machinery leases	2.49	1.33	4.46
Utilities	0.53	0.74	0.14
Operating interest	6.28	6.75	7.08
Miscellaneous	3.70	1.89	0.51
Total direct expenses per acre	361.00	365.31	301.62
Return over direct exp per acre	259.16	252.53	493.57
Overhead Expenses			
Hired labor	22.92	14.09	13.96
Machinery leases	2.43	3.27	2.10
Building leases	0.58	1.39	0.24
RE & pers. property taxes	12.49	10.77	15.73
Farm insurance	9.98	10.84	10.75
Utilities	6.63	6.35	9.39
Dues & professional fees	3.72	5.94	3.47
Interest	57.03	47.72	90.47
Mach & bldg depreciation	51.77	43.42	60.79
Miscellaneous	5.15	2.57	8.35
Total overhead expenses per acre	172.70	146.36	215.24
Total dir & ovhd expenses per acre	533.70	511.67	516.86
Net return per acre	86.46	106.17	278.33
Government payments	2.90	1.27	0.28
Net return with govt pmts	89.35	107.44	278.61
Labor & management charge	42.16	34.81	54.93
Net return over lbr & mgt	47.19	72.63	223.68
Cost of Production			
Total direct expense per ton	17.55	17.76	11.69
Total dir & ovhd exp per ton	25.94	24.88	20.04
Less govt & other income	25.64	24.78	19.87
With labor & management	27.69	26.47	21.99
Net value per unit	29.98	30.00	30.67
Machinery cost per acre	206.31	197.38	199.11
Est. labor hours per acre	5.44	6.17	5.78

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

Corn Silage on Cash Rent

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	117	24	24
Acres	94.45	64.90	67.78
Yield per acre (ton)	20.27	20.83	22.59
Operators share of yield %	100.00	100.00	100.00
Value per ton	29.62	30.12	31.04
Total product return per acre	600.47	627.28	701.02
Crop insurance per acre	5.20	0.14	34.68
Other crop income per acre	2.55	0.87	1.50
Gross return per acre	608.23	628.29	737.20
Direct Expenses			
Seed and plants	97.29	98.08	81.37
Fertilizer	73.16	58.41	48.19
Crop chemicals	33.45	28.12	27.38
Crop insurance	15.06	16.63	11.37
Storage	1.00	3.52	2.11
Packaging and supplies	18.88	8.77	3.70
Fuel & oil	42.03	42.38	34.16
Repairs	53.36	58.13	48.38
Custom hire	49.81	55.40	12.92
Hired labor	3.50	1.74	3.64
Land rent	93.62	95.59	87.10
Machinery leases	2.70	5.02	4.96
Utilities	0.40	0.84	0.18
Operating interest	4.51	3.81	6.16
Miscellaneous	3.76	3.01	1.21
Total direct expenses per acre	492.54	479.45	372.84
Return over direct exp per acre	115.69	148.84	364.36
Overhead Expenses			
Hired labor	22.91	18.46	12.15
Machinery leases	6.03	6.59	2.04
Building leases	0.92	2.14	2.30
Farm insurance	7.30	13.07	9.02
Utilities	4.69	6.68	5.12
Dues & professional fees	2.91	5.97	2.47
Interest	12.56	15.88	14.85
Mach & bldg depreciation	48.13	53.74	47.93
Miscellaneous	2.97	3.95	3.61
Total overhead expenses per acre	108.41	126.49	99.48
Total dir & ovhd expenses per acre	600.95	605.94	472.31
Net return per acre	7.28	22.35	264.89
Government payments	4.12	2.27	0.06
Net return with govt pmts	11.40	24.62	264.95
Labor & management charge	38.86	61.66	42.68
Net return over lbr & mgt	-27.46	-37.04	222.27
Cost of Production			
Total direct expense per ton	24.30	23.02	16.51
Total dir & ovhd exp per ton	29.64	29.09	20.91
Less govt & other income	29.06	28.93	19.31
With labor & management	30.97	31.89	21.20
Net value per unit	29.62	30.12	31.04
Machinery cost per acre	209.73	227.51	160.56
Est. labor hours per acre	4.42	5.77	3.41

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	101	20	21
Acres	54.03	46.44	58.01
Yield per acre (ton)	4.08	4.11	5.55
Operators share of yield %	100.00	100.00	100.00
Value per ton	134.75	134.41	146.80
Total product return per acre	550.14	551.87	815.31
Crop insurance per acre	0.13	-	-
Other crop income per acre	1.02	2.29	0.07
Gross return per acre	551.30	554.16	815.38
Direct Expenses			
Fertilizer	25.07	27.66	27.99
Crop chemicals	1.63	0.55	2.41
Crop insurance	1.91	1.09	3.84
Storage	1.51	-	4.99
Packaging and supplies	6.14	10.51	9.04
Fuel & oil	38.55	47.44	37.23
Repairs	55.15	54.66	55.59
Custom hire	18.70	29.19	17.20
Hired labor	0.87	-	0.38
Machinery leases	3.38	10.90	0.31
Operating interest	7.68	8.09	5.14
Miscellaneous	1.96	2.07	1.26
Total direct expenses per acre	162.56	192.16	165.38
Return over direct exp per acre	388.73	362.01	649.99
Overhead Expenses			
Hired labor	18.69	19.52	29.75
Machinery leases	2.74	1.94	2.70
Building leases	0.72	-	0.62
RE & pers. property taxes	14.06	17.52	11.86
Farm insurance	11.92	10.66	14.88
Utilities	6.30	5.87	6.59
Dues & professional fees	3.66	4.00	2.55
Interest	59.67	63.19	72.82
Mach & bldg depreciation	55.68	58.27	69.02
Miscellaneous	4.54	5.84	3.37
Total overhead expenses per acre	177.98	186.82	214.15
Total dir & ovhd expenses per acre	340.55	378.98	379.53
Net return per acre	210.75	175.18	435.85
Government payments	0.62	0.19	0.15
Net return with govt pmts	211.37	175.37	435.99
Labor & management charge	47.75	41.93	43.63
Net return over lbr & mgt	163.62	133.44	392.36
Cost of Production			
Total direct expense per ton	39.82	46.80	29.78
Total dir & ovhd exp per ton	83.41	92.30	68.34
Less govt & other income	82.98	91.70	68.30
With labor & management	94.68	101.91	76.15
Net value per unit	134.75	134.41	146.80
Machinery cost per acre	177.01	201.23	191.94
Est. labor hours per acre	5.04	4.43	6.20

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	100	20	20
Acres	69.36	70.66	66.61
Yield per acre (ton)	3.97	3.78	5.45
Operators share of yield %	100.00	100.00	100.00
Value per ton	125.24	128.50	146.31
Total product return per acre	497.48	485.34	797.77
Crop insurance per acre	1.48	-	7.70
Other crop income per acre	1.69	0.69	0.25
Gross return per acre	500.66	486.04	805.73
Direct Expenses			
Seed and plants	1.40	0.11	-
Fertilizer	33.97	39.56	22.00
Crop chemicals	2.21	3.42	0.76
Crop insurance	1.53	0.68	3.81
Storage	1.74	-	7.39
Packaging and supplies	5.26	4.06	6.52
Fuel & oil	32.77	38.04	32.51
Repairs	50.97	48.19	50.31
Custom hire	11.76	22.42	5.40
Hired labor	0.16	0.78	-
Land rent	85.88	67.73	95.87
Machinery leases	2.35	8.02	-
Utilities	0.22	0.64	0.45
Operating interest	6.78	3.36	4.50
Miscellaneous	2.68	0.12	10.17
Total direct expenses per acre	239.68	237.11	239.68
Return over direct exp per acre	260.98	248.92	566.04
Overhead Expenses			
Hired labor	18.33	12.00	22.94
Machinery leases	3.75	2.34	7.54
Building leases	0.98	-	0.35
Farm insurance	7.19	6.60	6.79
Utilities	4.91	4.50	4.71
Dues & professional fees	3.66	2.47	2.85
Interest	10.08	4.86	14.73
Mach & bldg depreciation	43.90	32.75	54.55
Miscellaneous	4.57	4.33	2.37
Total overhead expenses per acre	97.37	69.85	116.83
Total dir & ovhd expenses per acre	337.05	306.96	356.51
Net return per acre	163.61	179.07	449.22
Government payments	0.48	0.01	-
Net return with govt pmts	164.09	179.08	449.22
Labor & management charge	44.90	32.02	47.47
Net return over lbr & mgt	119.19	147.06	401.75
Cost of Production			
Total direct expense per ton	60.34	62.78	43.96
Total dir & ovhd exp per ton	84.85	81.27	65.38
Less govt & other income	83.93	81.09	63.93
With labor & management	95.23	89.57	72.63
Net value per unit	125.24	128.50	146.31
Machinery cost per acre	150.72	153.39	158.16
Est. labor hours per acre	4.21	3.28	5.98

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	23	4	5
Acres	134.08	74.53	190.97
Yield per acre (ton)	2.07	2.91	2.24
Operators share of yield %	100.00	100.00	100.00
Value per ton	75.50	70.37	91.27
Total product return per acre	156.44	204.90	204.26
Other crop income per acre	2.22	-	-
Gross return per acre	158.66	204.90	204.26
Direct Expenses			
Seed and plants	0.26	-	0.74
Fertilizer	6.27	47.30	-
Crop chemicals	0.83	-	1.43
Packaging and supplies	2.80	0.81	3.15
Fuel & oil	19.18	17.75	13.94
Repairs	21.83	18.64	12.65
Custom hire	4.50	25.76	2.01
Hired labor	3.26	0.81	10.09
Land rent	25.59	24.51	21.68
Utilities	0.44	0.83	0.43
Operating interest	4.16	3.47	1.01
Miscellaneous	2.27	0.13	0.49
Total direct expenses per acre	91.37	139.99	67.63
Return over direct exp per acre	67.29	64.91	136.63
Overhead Expenses			
Hired labor	2.61	4.51	0.46
Machinery leases	3.32	0.06	0.30
Farm insurance	4.57	5.59	3.33
Utilities	1.82	0.86	0.45
Dues & professional fees	1.19	0.93	0.35
Interest	7.18	1.31	9.68
Mach & bldg depreciation	15.11	19.39	5.98
Miscellaneous	2.23	1.36	2.49
Total overhead expenses per acre	38.04	34.00	23.04
Total dir & ovhd expenses per acre	129.41	173.99	90.67
Net return per acre	29.25	30.90	113.59
Government payments	1.05	1.92	-
Net return with govt pmts	30.30	32.82	113.59
Labor & management charge	22.53	27.66	14.95
Net return over lbr & mgt	7.77	5.16	98.64
Cost of Production			
Total direct expense per ton	44.10	48.08	30.22
Total dir & ovhd exp per ton	62.45	59.76	40.51
Less govt & other income	60.88	59.10	40.51
With labor & management	71.75	68.60	47.20
Net value per unit	75.50	70.37	91.27
Machinery cost per acre	70.13	79.84	44.21
Est. labor hours per acre	2.36	3.16	3.42

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	58	11	12
Acres	61.14	71.44	28.67
Yield per acre (ton)	1.85	2.19	3.20
Operators share of yield %	100.00	100.00	100.00
Value per ton	72.57	71.33	78.55
Total product return per acre	134.58	156.21	251.51
Other crop income per acre	1.38	-	-
Gross return per acre	135.96	156.21	251.51
Direct Expenses			
Seed and plants	0.48	0.57	0.52
Fertilizer	5.84	7.63	5.87
Packaging and supplies	3.58	7.81	0.70
Fuel & oil	15.11	15.94	18.48
Repairs	21.69	27.57	25.88
Custom hire	2.91	1.83	-
Hired labor	0.69	1.20	-
Land rent	46.74	45.19	32.85
Machinery leases	2.52	-	7.50
Utilities	0.61	0.04	-
Operating interest	2.28	2.53	1.65
Miscellaneous	2.11	4.89	2.04
Total direct expenses per acre	104.55	115.21	95.49
Return over direct exp per acre	31.41	41.00	156.02
Overhead Expenses			
Hired labor	12.31	16.93	15.87
Machinery leases	2.86	10.16	0.66
Building leases	0.51	0.44	-
Farm insurance	2.97	3.24	2.61
Utilities	1.75	2.84	3.24
Dues & professional fees	1.13	2.19	1.23
Interest	6.17	6.88	10.48
Mach & bldg depreciation	21.20	23.85	21.05
Miscellaneous	2.51	2.48	2.17
Total overhead expenses per acre	51.41	69.01	57.31
Total dir & ovhd expenses per acre	155.95	184.22	152.80
Net return per acre	-19.99	-28.01	98.71
Government payments	1.26	-	-
Net return with govt pmts	-18.73	-28.01	98.71
Labor & management charge	14.70	13.34	22.10
Net return over lbr & mgt	-33.43	-41.35	76.61
Cost of Production			
Total direct expense per ton	56.38	52.61	29.82
Total dir & ovhd exp per ton	84.10	84.12	47.72
Less govt & other income	82.68	84.12	47.72
With labor & management	90.60	90.21	54.63
Net value per unit	72.57	71.33	78.55
Machinery cost per acre	71.12	85.45	80.98
Est. labor hours per acre	2.23	2.00	2.59

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

	<u>Establish Alfalfa Hay</u>	<u>Oatlage</u>	<u>Fescue Grass Seed</u>	<u>Perennial Rye Grass Seed</u>
Number of farms	54	29	6	10
Acres	42.37	40.71	334.22	466.80
Yield per acre	1.97	4.11	617.79	940.31
Operators share of yield %	100.00	100.00	100.00	100.00
Value	134.14	40.54	0.65	0.58
Total product return per acre	264.45	166.62	401.56	547.83
Other crop income per acre	2.63	-	9.09	8.11
Gross return per acre	267.08	166.62	410.65	555.94
Direct Expenses				
Seed	118.82	21.91	6.23	16.82
Fertilizer	29.59	10.16	96.73	92.30
Crop chemicals	2.70	1.87	23.58	47.37
Crop insurance	0.44	0.91	9.95	11.50
Packaging and supplies	10.09	4.31	-	-
Fuel & oil	29.04	18.49	15.98	26.04
Repairs	46.49	26.43	21.56	33.83
Custom hire	10.34	6.93	4.42	8.81
Machinery Leases	4.44	1.31	3.73	2.62
Land Rent	40.61	32.42	83.42	33.63
Operating interest	4.46	3.33	5.48	9.96
Miscellaneous	6.23	2.22	3.92	3.78
Total direct expenses per acre	304.54	128.98	275.01	286.65
Return over direct exp per acre	-37.46	37.64	135.64	269.29
Overhead Expenses				
Hired labor	13.89	13.96	8.84	9.21
Mach and bldg leases	2.42	3.05	-	6.06
RE & pers. property taxes	5.28	4.40	1.95	4.21
Farm insurance	9.01	5.40	7.70	8.83
Utilities	5.81	2.91	7.12	4.58
Dues & professional fees	3.45	1.61	2.29	1.82
Interest	38.81	26.24	12.17	8.45
Mach & bldg depreciation	42.97	28.25	16.92	42.98
Miscellaneous	3.33	3.18	3.65	2.32
Total overhead expenses per acre	124.98	89.01	60.64	88.45
Total dir & ovhd expenses per acre	429.53	217.99	335.65	375.09
Net return per acre	-162.45	-51.37	75.00	180.84
Government payments	0.98	0.46	2.16	15.43
Net return with govt pmts	-161.47	-50.91	77.17	196.27
Labor & management charge	39.69	25.60	20.29	40.54
Net return over lbr & mgt	-201.16	-76.51	56.87	155.73
Cost of Production				
Total direct expense per bu.	154.48	31.38	0.45	0.30
Total dir & ovhd exp per bu.	217.88	53.04	0.54	0.40
Less govt & other income	216.04	52.92	0.52	0.37
With labor & management	236.18	59.15	0.55	0.42
Net value per unit	134.14	40.54	0.65	0.58
Machinery cost per acre	141.50	91.32	64.78	118.71
Est. labor hours per acre	4.31	3.10	1.55	1.80

* 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	59	16	13	37
Acres	213.97	85.25	90.35	189.3
Yield per acre	197.97	25.10	5.02	50.22
Operators share of yield %	100.00	100.00	100.00	100.00
Value	3.20	29.82	135.81	8.41
Total product return per acre	633.50	748.63	681.32	422.35
Crop insurance per acre	0.30	-	-	0.82
Other crop income per acre	15.38	0.41	-	59.23
Gross return per acre	649.18	749.04	681.32	482.40
Direct Expenses				
Seed	84.80	110.44	1.69	53.23
Fertilizer	138.85	59.51	59.31	31.57
Crop chemicals	31.16	29.87	3.62	39.21
Crop insurance	14.66	19.05	-	14.88
Marketing	1.78	-	-	1.41
Storage	0.79	-	-	1.92
Irrigation energy	25.85	24.01	19.83	19.45
Packaging and supplies/Drying Corn	18.72	14.92	3.57	-
Fuel & oil	28.34	44.54	37.37	19.57
Repairs	46.09	60.49	57.59	24.63
Custom hire and Trucking	18.78	30.97	45.40	9.57
Hired labor	0.80	-	1.93	0.93
Land Rent	68.62	44.70	54.33	80.30
Operating interest	8.92	6.12	5.28	4.23
Miscellaneous	7.81	7.98	4.12	5.29
Total direct expenses per acre	495.99	452.89	295.83	313.80
Return over direct exp per acre	153.19	296.14	385.49	168.61
Overhead Expenses				
Hired labor	19.12	43.38	31.75	6.29
Mach and bldg leases	2.68	10.67	5.60	1.87
RE & pers. property taxes	7.37	8.36	9.82	3.91
Farm insurance	11.76	15.37	11.52	9.13
Utilities	5.47	5.65	5.29	2.89
Dues & professional fees	2.96	5.34	2.79	3.38
Interest	30.80	42.21	69.54	19.89
Mach & bldg depreciation	58.13	68.83	58.14	23.80
Miscellaneous	4.21	1.31	2.40	4.30
Total overhead expenses per acre	142.51	201.13	196.85	75.45
Total dir & ovhd expenses per acre	638.49	654.02	492.68	389.25
Net return per acre	10.69	95.02	188.64	93.16
Government payments	3.43	1.13	0.46	1.87
Net return with govt pmts	14.11	96.15	189.10	95.02
Labor & management charge	46.09	48.44	48.89	25.76
Net return over lbr & mgt	-31.98	47.71	140.22	69.26
Cost of Production				
Total direct expense per bu.	2.51	18.04	58.97	6.25
Total dir & ovhd exp per bu.	3.23	26.05	98.21	7.75
Less govt & other income	3.13	25.99	98.12	6.52
With labor & management	3.36	27.92	107.86	7.03
Net value per unit	3.20	29.82	135.81	8.41
Machinery cost per acre	154.54	223.64	204.99	87.89
Est. labor hours per acre	3.31	4.32	4.95	1.93

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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	41	12	5
Acres	154.18	44.54	91.81	394.2
Yield per acre	76.75	69.38	17.72	19.97
Operators share of yield %	100.00	100.00	100.00	100.00
Value	4.32	2.49	5.90	17.27
Other product return per acre	0.69	11.07	8.44	-
Total product return per acre	332.04	184.10	113.05	344.96
Crop insurance per acre	0.19	1.50	3.18	38.02
Other crop income per acre	8.62	48.35	25.02	2.43
Gross return per acre	340.85	233.95	141.25	385.41
Direct Expenses				
Seed	16.59	21.10	15.97	47.96
Fertilizer	63.26	22.72	30.90	79.13
Crop chemicals	24.97	6.27	5.42	29.72
Crop insurance	11.69	4.91	1.02	13.21
Fuel & oil	18.66	14.32	17.98	14.77
Repairs	24.16	21.71	18.44	18.08
Custom hire & trucking	3.67	5.83	16.43	6.22
Hired labor	0.59	1.44	-	-
Land Rent	39.67	25.62	55.83	56.27
Machine Leases	-	1.00	0.90	-
Operating interest	7.58	3.75	4.96	5.37
Miscellaneous	2.35	1.99	1.78	0.61
Total direct expenses per acre	213.20	130.64	169.61	271.36
Return over direct exp per acre	127.65	103.31	-28.36	114.05
Overhead Expenses				
Hired labor	4.42	4.77	8.28	10.98
Machinery leases	5.10	1.36	-	2.68
Building leases	1.89	0.17	0.19	1.08
RE & pers. property taxes	3.96	5.18	1.84	1.17
Farm insurance	5.36	4.59	6.88	4.56
Utilities	4.15	2.71	2.26	1.99
Dues & professional fees	2.22	1.85	2.43	1.37
Interest	17.67	18.60	4.16	3.49
Mach & bldg depreciation	24.81	18.85	24.35	23.60
Miscellaneous	2.41	1.81	2.87	0.86
Total overhead expenses per acre	72.00	59.88	53.25	51.78
Total dir & ovhd expenses per acre	285.19	190.52	222.86	323.14
Net return per acre	55.65	43.43	-81.61	62.28
Government payments	7.35	2.99	-	14.26
Net return with govt pmts	63.01	46.42	-81.61	76.54
Labor & management charge	24.82	24.39	25.85	28.77
Net return over lbr & mgt	38.19	22.03	-107.46	47.77
Cost of Production				
Total direct expense per bu.	2.78	1.88	9.57	13.59
Total dir & ovhd exp per bu.	3.72	2.75	12.58	16.18
Less govt & other income	3.50	1.82	10.51	13.44
With labor & management	3.82	2.18	11.97	14.88
Net value per unit	4.33	2.49	5.90	17.27
Machinery cost per acre	77.24	65.34	77.57	65.75
Est. labor hours per acre	1.26	2.62	1.99	1.74

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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, Navy	Irr. Beans, Dark Red Kidney	Sunflowers
Number of farms	11	9	6	8
Acres	284.36	242.8	248.92	177.13
Yield per acre	49.80	17.65	27.00	15.68
Operators share of yield %	100.00	100.00	100.00	100.00
Value	9.55	23.80	36.11	18.78
Total product return per acre	475.36	420.03	974.83	294.55
Crop insurance per acre	-	19.21	-	2.25
Other crop income per acre	88.09	3.38	-	1.16
Gross return per acre	563.45	442.62	974.83	297.96
Direct Expenses				
Seed	41.04	54.95	97.41	34.15
Fertilizer	18.51	52.21	132.01	57.17
Crop chemicals	42.86	81.28	101.69	35.02
Crop insurance	13.02	17.06	41.36	15.65
Irrigation Energy	-	-	21.38	-
Fuel & oil	15.34	19.61	15.12	28.72
Repairs	25.02	33.66	22.29	36.82
Custom hire	3.70	7.28	63.19	2.55
Hired labor	-	36.98	2.83	0.34
Land Rent	71.42	75.29	74.34	29.98
Operating interest	2.77	14.85	1.27	19.53
Miscellaneous	3.32	7.06	5.05	4.54
Total direct expenses per acre	236.99	400.23	601.76	264.48
Return over direct exp per acre	326.46	42.38	373.07	33.48
Overhead Expenses				
Hired labor	9.92	6.42	10.73	13.81
Machinery leases	10.90	6.82	1.69	4.23
Building leases	0.54	2.43	-	0.22
RE & pers. property taxes	8.78	5.00	3.44	2.31
Farm insurance	4.81	7.39	10.02	7.37
Utilities	5.22	4.63	2.01	4.21
Dues & professional fees	2.48	5.69	3.20	1.68
Interest	13.65	16.17	31.09	11.54
Mach & bldg depreciation	26.43	20.15	43.57	25.88
Miscellaneous	2.35	31.72	3.54	2.49
Total overhead expenses per acre	85.07	106.42	109.29	73.74
Total dir & ovhd expenses per acre	322.06	506.65	711.04	338.22
Net return per acre	241.40	-64.04	263.79	-40.26
Government payments	1.74	-	-	10.41
Net return with govt pmts	243.13	-64.04	263.79	-29.85
Labor & management charge	31.43	15.88	36.74	33.10
Net return over lbr & mgt	211.70	-79.92	227.04	-62.95
Cost of Production				
Total direct expense per bu.	4.76	22.68	22.29	16.86
Total dir & ovhd exp per bu.	6.47	28.71	26.34	21.56
Less govt & other income	4.66	27.43	26.34	20.68
With labor & management	5.29	28.33	27.70	22.79
Net value per unit	9.55	23.80	36.11	18.78
Machinery cost per acre	76.51	93.94	156.57	99.11
Est. labor hours per acre	1.32	1.62	3.33	1.78

* 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 Corn Silage</u>	<u>Organic Hay, Alfalfa</u>	<u>Irrigated Strawberries</u>
Number of farms	8	7	6	6
Acres	68.88	50.79	90.79	2.51
Yield per acre	116.41	14.34	3.24	3178.54
Operators share of yield %	100.00	100.00	100.00	100.00
Value	8.82	67.59	115.22	2.41
Total product return per acre	1026.41	969.09	372.75	7657.87
Crop insurance per acre	-	-	4.93	-
Other crop income per acre	4.05	3.75	18.53	0.93
Gross return per acre	1030.46	972.84	396.21	7658.80
Direct Expenses				
Seed and Plants	91.47	73.32	-	130.50
Fertilizer	55.09	99.65	8.90	342.99
Crop chemicals	-	-	-	320.00
Crop insurance	17.40	6.75	3.04	-
Drying expense	8.52	-	-	-
Irrigation Energy	-	-	-	48.02
Packaging and Supplies	-	14.75	4.26	154.35
Fuel & oil	43.92	45.25	29.90	230.75
Repairs	79.18	65.70	44.91	494.10
Custom hire and Trucking	19.09	32.23	32.59	140.40
Hired labor	1.05	9.15	-	803.19
Land Rent	102.31	67.74	19.28	-
Organic Certification	6.13	3.26	4.78	13.95
Operating interest	7.42	1.88	4.07	-
Miscellaneous	4.74	3.35	1.10	489.57
Total direct expenses per acre	436.34	423.01	152.83	3774.99
Return over direct exp per acre	594.12	549.83	243.39	3883.81
Overhead Expenses				
Hired labor	64.97	36.13	44.78	1266.87
Mach and bldg leases	3.87	1.35	0.36	-
RE & pers. property taxes	1.77	3.28	4.73	115.88
Farm insurance	4.42	5.90	8.63	317.63
Utilities	6.69	5.91	7.15	227.07
Dues & professional fees	3.86	5.78	2.96	247.38
Interest	2.64	17.68	14.87	324.27
Mach & bldg depreciation	32.41	37.64	20.39	1009.74
Miscellaneous	2.69	3.54	1.81	429.30
Total overhead expenses per acre	123.14	117.22	105.67	3722.38
Total dir & ovhd expenses per acre	559.47	540.23	258.50	7497.38
Net return per acre	470.98	432.61	137.71	161.42
Government payments	0.61	1.85	5.24	-
Net return with govt pmts	471.59	434.46	142.96	161.42
Labor & management charge	83.20	46.31	31.14	1041.25
Net return over lbr & mgt	388.39	388.15	111.82	-879.83
Cost of Production				
Total direct expense / Unit of Production	3.75	29.50	47.24	1.19
Total dir & ovhd exp / Unit of Production	4.81	37.68	79.91	2.36
Less govt & other income	4.77	37.29	71.03	2.36
With labor & management	5.48	40.52	80.66	2.69
Net value per unit	8.82	67.59	115.22	2.41
Machinery cost per acre	171.50	192.06	136.23	1516.14
Est. labor hours per acre	8.81	6.00	4.85	434.98

* 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 Cwt. Of Milk

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	326		65		66	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	99.28	16.32	99.29	16.23	99.33	17.09
Dairy Calves sold (hd)	0.00	0.13	0.00	0.11	0.00	0.14
Transferred out (hd)	0.00	0.13	0.00	0.08	0.00	0.21
Cull sales (hd)	0.00	0.89	0.00	1.01	0.00	0.83
Insurance income		0.06		0.07		0.03
Government payments		0.22		0.21		0.22
Other income		0.22		0.21		0.25
Purchased (hd)	0.00	-0.14	0.00	-0.16	0.00	-0.09
Transferred in (hd)	0.00	-0.18	0.00	-0.11	0.00	-0.22
Inventory change (hd)	0.00	0.28	0.00	0.26	0.00	0.48
Dairy repl net cost		-2.63		-2.75		-2.22
Gross margin		15.30		15.17		16.71
Direct Expenses						
Protein Vit Minerals (lb.)	13.32	2.82	9.91	2.26	17.04	3.49
Complete Ration (lb.)	7.27	1.39	7.47	1.75	4.45	0.79
Corn (bu.)	0.28	0.91	0.27	0.85	0.29	0.91
Corn Silage (lb.)	79.93	1.28	81.68	1.38	81.16	1.24
Hay, Alfalfa (lb.)	9.97	0.63	7.57	0.46	7.94	0.50
Haylage, Alfalfa (lb.)	17.29	0.56	14.05	0.43	14.38	0.48
Other feed stuffs (lb)	11.26	0.49	13.73	0.72	8.15	0.37
Breeding fees		0.19		0.19		0.22
Veterinary		0.44		0.43		0.40
Supplies		1.99		2.09		1.89
Fuel & oil		0.36		0.47		0.31
Repairs		0.58		0.55		0.56
Hired labor		1.23		1.22		0.70
Total direct expenses		12.85		12.78		11.85
Return over direct expense		2.44		2.39		4.86
Overhead Expenses						
Hired labor		0.64		0.87		1.13
Interest		0.39		0.39		0.40
Mach & bldg depreciation		0.69		0.68		0.73
Miscellaneous		0.89		0.99		0.82
Total overhead expenses		2.60		2.93		3.08
Total dir & ovhd expenses		15.45		15.71		14.93
Net return		-0.16		-0.55		1.78
Labor & management charge		0.71		0.53		0.77
Net return over lbr & mgt		-0.87		-1.08		1.01
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		12.85		12.78		11.85
Total dir & ovhd expense per unit		15.45		15.71		14.93
With other revenue adjustments		16.58		16.87		15.40
With labor and management		17.29		17.40		16.17
Est. labor hours per unit		0.16		0.18		0.15
Other Information						
Number of cows		227.5		252.1		300.1
Milk produced per cow		23,974		24,339		24,992
Total milk sold		5,413,819		6,092,062		7,449,084
Lb. of milk sold per FTE		1,697,258		1,575,705		1,821,607
Culling percentage		30.6		32.9		29.4
Turnover rate		37.1		39.3		35.3
Cow death loss percent		6.2		6.0		5.6
Percent of barn capacity		114.5		113.8		114.3
Feed cost per day		5.30		5.23		5.33
Feed cost per cwt. of milk		8.06		7.84		7.78
Feed cost per cow		1,932.89		1,908.68		1,945.19
Hired labor per cow		449.25		506.88		457.34
Avg. milk price per cwt.		16.44		16.35		17.21
Milk price / feed margin		8.37		8.51		9.42

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>	
	326		65		66	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms		326		65		66
Milk sold (hd)	23,800.9	3,911.70	24,167.2	3,950.64	24,825.1	4,271.40
Dairy Calves sold (hd)	0.3	31.30	0.3	27.83	0.3	34.56
Transferred out (hd)	0.7	31.46	0.7	20.31	0.7	52.16
Cull sales (hd)	0.3	213.96	0.3	245.86	0.3	206.94
Insurance income		13.20		18.01		7.13
Government payments		51.75		51.64		54.11
Other income		51.81		50.02		63.14
Purchased (hd)	0.0	-32.38	0.0	-39.07	0.0	-21.87
Transferred in (hd)	0.4	-42.11	0.4	-26.64	0.4	-55.25
Inventory change (hd)	0.1	66.68	0.1	62.07	0.1	120.19
Dairy repl net cost		-630.37		-669.49		-556.02
Gross margin		3,667.01		3,691.17		4,176.48
Direct Expenses						
Protein Vit Minerals (lb.)	3,194.4	675.75	2,411.5	550.20	4,259.0	872.82
Complete Ration (lb.)	1,743.0	333.05	1,818.4	426.23	1,110.9	197.90
Corn (bu.)	67.9	217.29	64.7	205.85	71.3	227.60
Corn Silage (lb.)	19,161.6	305.89	19,880.9	335.02	20,283.7	309.54
Hay, Alfalfa (lb.)	2,390.5	150.07	1,842.1	112.40	1,983.3	124.57
Haylage, Alfalfa (lb.)	4,145.2	134.02	3,418.7	104.31	3,593.8	121.04
Other feed stuffs (lb)	2,700.1	116.84	3,342.1	174.68	2,036.7	91.73
Breeding fees		45.85		47.34		54.11
Veterinary		105.43		103.80		100.62
Supplies		345.01		380.25		322.56
Fuel & oil		85.79		113.47		78.21
Repairs		139.24		133.76		138.97
Custom hire		61.97		46.02		81.17
Hired labor		294.86		295.92		173.89
Hauling and trucking		70.11		81.37		67.91
Total direct expenses		3,081.14		3,110.61		2,962.63
Return over direct expense		585.87		580.56		1,213.85
Overhead Expenses						
Hired labor		154.40		210.96		283.45
Utilities		66.32		63.75		84.04
Interest		93.11		94.84		98.77
Mach & bldg depreciation		164.37		166.43		181.35
Miscellaneous		145.88		177.35		121.70
Total overhead expenses		624.08		713.33		769.32
Total dir & ovhd expenses		3,705.21		3,823.94		3,731.95
Net return		-38.21		-132.77		444.53
Labor & management charge		170.49		129.13		192.53
Net return over lbr & mgt		-208.70		-261.90		252.00
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		12.85		12.78		11.85
Total dir & ovhd expense per unit		15.45		15.71		14.93
With other revenue adjustments		16.58		16.87		15.40
With labor and management		17.29		17.40		16.17
Est. labor hours per unit		39.26		42.94		38.16
Other Information						
Number of cows		227.5		252.1		300.1
Milk produced per cow		23,974		24,339		24,992
Total milk sold		5,413,819		6,092,062		7,449,084
Lb. of milk sold per FTE		1,697,258		1,575,705		1,821,607
Culling percentage		30.6		32.9		29.4
Turnover rate		37.1		39.3		35.3
Cow death loss percent		6.2		6.0		5.6
Percent of barn capacity		114.5		113.8		114.3
Feed cost per day		5.30		5.23		5.33
Feed cost per cwt. of milk		8.06		7.84		7.78
Feed cost per cow		1,932.89		1,908.68		1,945.19
Hired labor per cow		449.25		506.88		457.34
Avg. milk price per cwt.		16.44		16.35		17.21
Milk price / feed margin		8.37		8.51		9.42

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

Dairy -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>33 - 66%</u>		<u>High 34%</u>	
	15		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	15,197.1	4,434.12	15,871.4	4,623.79	15,719.3	4,676.58
Dairy Calves sold (hd)	0.2	33.36	0.1	19.67	0.3	37.07
Transferred out (hd)	0.6	10.63	0.7	11.80	0.5	5.45
Cull sales (hd)	0.3	217.34	0.3	183.48	0.3	249.43
Insurance income		19.98		7.79		39.26
Government payments		33.02		41.01		37.70
Other income		119.26		52.89		185.03
Purchased (hd)	0.0	-9.56	0.0	-23.17	-	-
Transferred in (hd)	0.3	-20.79	0.3	-10.86	0.3	-3.64
Inventory change (hd)	0.0	-10.18	0.0	24.51	0.0	-48.04
Dairy repl net cost		-718.17		-663.91		-656.23
Gross margin		4,109.03		4,267.02		4,522.61
Direct Expenses						
Protein Vit Minerals (lb.)	800.6	314.82	768.8	390.35	623.5	253.41
Complete Ration (lb.)	206.6	72.57	75.1	37.78	411.2	133.42
Haylage, Alfalfa (lb.)	5,466.9	215.25	10,733.3	427.33	2,433.6	91.26
Corn, Organic (bu.)	43.6	373.77	54.9	508.64	42.5	326.45
Corn Silage, Organic (lb.)	9,088.7	270.29	10,172.9	288.95	8,134.3	225.61
Hay, Alfalfa, Organic (lb.)	3,346.8	232.60	1,796.5	92.26	3,575.0	302.65
Flax, Organic (bu.)	0.2	65.63	-	-	0.4	153.67
Other feed stuffs (lb)	6,499.9	403.67	5,323.7	404.55	4,041.3	374.48
Breeding fees		36.54		35.43		35.64
Supplies		356.46		416.76		314.85
Fuel & oil		76.39		60.60		99.16
Repairs		129.42		122.31		146.03
Hired labor		267.34		402.97		222.75
Hauling and trucking		70.58		102.43		52.42
Total direct expenses		2,885.34		3,290.34		2,731.80
Return over direct expense		1,223.69		976.68		1,790.81
Overhead Expenses						
Hired labor		183.16		92.56		299.56
Interest		88.92		72.90		90.66
Mach & bldg depreciation		139.70		109.67		172.46
Miscellaneous		202.40		127.32		256.84
Total overhead expenses		614.18		402.45		819.53
Total dir & ovhd expenses		3,499.52		3,692.79		3,551.33
Net return		609.50		574.23		971.28
Labor & management charge		267.09		163.59		349.05
Net return over lbr & mgt		342.41		410.63		622.24
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		18.38		20.48		16.71
Total dir & ovhd expense per unit		22.30		22.98		21.73
With other revenue adjustments		25.09		25.48		23.77
With labor and management		26.79		26.49		25.91
Est. labor hours per unit		36.70		33.42		39.89
Other Information						
Number of cows		111.6		138.1		119.2
Milk produced per cow		15,694		16,068		16,344
Total milk sold		1,696,053		2,192,030		1,873,222
Lb. of milk sold per FTE		1,159,355		1,329,759		1,103,443
Culling percentage		27.8		25.1		28.8
Turnover rate		32.9		30.7		33.7
Cow death loss percent		4.5		4.6		4.9
Percent of barn capacity		104.2		113.2		96.6
Feed cost per day		5.34		5.89		5.10
Feed cost per cwt. of milk		12.42		13.38		11.39
Feed cost per cow		1,948.62		2,149.85		1,860.94
Hired labor per cow		450.50		495.53		522.31
Avg. milk price per cwt.		29.18		29.13		29.75
Milk price / feed margin		16.76		15.75		18.36

Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Organic and 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	29		104		97		64		32	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	15,739.1	2,467.50	20,807.1	3,303.20	22,173.0	3,534.39	24,240.1	3,971.37	25,297.4	4,250.31
Dairy Calves sold (hd)	0.2	45.04	0.2	34.26	0.3	28.98	0.3	34.22	0.3	29.05
Transferred out (hd)	0.7	30.05	0.7	55.61	0.7	40.00	0.7	36.86	0.7	17.69
Cull sales (hd)	0.3	149.97	0.3	202.67	0.3	202.51	0.3	208.37	0.3	228.28
Insurance income		19.01		3.68		10.43		21.64		10.81
Government payments		53.86		84.55		77.89		59.58		25.97
Other income		35.22		49.10		29.77		64.69		54.12
Purchased (hd)	0.1	-96.73	0.1	-87.47	0.1	-63.37	0.0	-20.01	0.0	-10.44
Transferred in (hd)	0.3	-61.95	0.4	-93.70	0.4	-49.54	0.4	-37.28	0.4	-28.14
Inventory change (hd)	0.0	-24.69	0.1	45.96	0.0	23.25	0.1	47.10	0.1	108.64
Dairy repl net cost		-372.65		-536.30		-589.72		-621.91		-688.29
Gross margin		2,244.61		3,061.56		3,244.59		3,764.65		3,998.01
Direct Expenses										
Protein Vit Minerals (lb.)	1,733.5	377.20	3,005.0	646.02	3,010.2	649.62	2,697.2	631.57	3,726.1	736.93
Complete Ration (lb.)	888.8	143.50	826.2	165.96	1,782.5	290.26	2,652.7	406.93	1,359.1	350.87
Corn (bu.)	55.1	169.59	71.8	224.98	63.0	201.84	67.3	214.92	69.9	225.70
Corn Silage (lb.)	14,690.1	222.07	17,285.4	258.92	17,380.2	264.52	19,219.5	311.75	20,573.7	335.67
Hay, Alfalfa (lb.)	4,800.9	297.68	4,206.2	296.06	3,203.6	207.90	1,710.1	103.74	1,941.2	113.23
Haylage, Alfalfa (lb.)	2,049.5	65.11	2,802.5	95.64	2,654.7	88.42	5,923.0	204.05	4,004.5	118.31
Other feed stuffs (lb)	2,703.9	159.15	2,233.3	100.04	2,823.6	121.95	2,110.2	99.22	3,174.5	129.54
Breeding fees		32.49		41.03		35.25		39.48		56.80
Veterinary		62.95		96.00		95.52		111.93		109.39
Supplies		302.30		288.40		286.57		331.60		363.28
Fuel & oil		68.63		62.74		74.83		81.01		100.62
Repairs		131.28		115.34		125.71		139.95		151.28
Hired labor		11.48		39.18		109.55		333.93		427.58
Hauling and trucking		92.92		90.13		69.44		68.45		65.58
Bedding		39.28		49.67		57.94		91.01		81.20
Total direct expenses		2,175.62		2,570.11		2,679.32		3,169.55		3,365.97
Return over direct expense		68.99		491.45		565.28		595.10		632.04
Overhead Expenses										
Hired labor		25.39		93.23		120.03		167.99		180.95
Utilities		93.58		109.93		74.60		60.40		54.48
Interest		105.23		93.57		114.10		104.89		74.84
Mach & bldg depreciation		110.86		152.73		181.60		166.01		160.40
Miscellaneous		148.21		132.91		145.19		151.80		145.32
Total overhead expenses		483.26		582.38		635.52		651.10		615.99
Total dir & ovhd expenses		2,658.88		3,152.48		3,314.84		3,820.65		3,981.96
Net return		-414.27		-90.93		-70.24		-56.00		16.05
Labor & management charge		369.28		290.01		212.42		155.84		123.72
Net return over lbr & mgt		-783.55		-380.94		-282.66		-211.84		-107.67
Cost of Production Per Cwt. Of Milk										
Total direct expense per unit		13.71		12.25		12.03		12.96		13.21
Total dir & ovhd expense per unit		16.75		15.02		14.88		15.63		15.63
With other revenue adjustments		18.26		16.30		16.24		16.59		16.72
With labor and management		20.58		17.68		17.19		17.23		17.20
Est. labor hours per unit		46.00		33.30		32.67		40.24		42.85
Other Information										
Number of cows		38.6		75.0		141.6		330.1		949.0
Milk produced per cow		15,874		20,982		22,278		24,448		25,479
Total milk sold		606,943		1,559,940		3,140,679		8,002,800		24,007,646
Lb. of milk sold per FTE		958,124		1,749,303		1,900,199		1,686,848		1,652,886
Culling percentage		25.9		29.2		30.0		29.4		32.1
Turnover rate		37.3		37.6		37.1		36.3		37.6
Cow death loss percent		9.6		7.2		6.4		6.5		5.4
Percent of barn capacity		91.1		105.0		113.0		118.6		116.3
Feed cost per day		3.93		4.90		5.00		5.40		5.51
Feed cost per cwt. of milk		9.04		8.52		8.19		8.07		7.89
Feed cost per cow		1,434.29		1,787.61		1,824.50		1,972.20		2,010.25
Hired labor per cow		36.86		132.42		229.58		501.93		608.53
Avg. milk price per cwt.		15.68		15.88		15.94		16.38		16.80
Milk price / feed margin		6.64		7.36		7.75		8.32		8.91

Livestock Enterprise Analysis
Farm Business Management Statewide Data
Excluding Organic & 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>	
Number of farms	284		57		57	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	24,018.9	3,951.23	24,438.2	4,026.76	25,243.5	4,357.47
Dairy Calves sold (hd)	-	55.72	-	48.96	-	63.89
Transferred out (hd)	-	22.00	-	14.41	-	42.34
Cull sales (hd)	-	223.84	-	251.22	-	219.15
Insurance income		13.86		19.80		8.74
Government payments		50.97		43.93		51.24
Other income		55.19		50.84		70.45
Purchased (hd)	-	-35.31	-	-30.25	-	-15.33
Transferred in (hd)	-	-11.23	-	-12.79	-	-4.44
Inventory change (hd)	-	84.47	-	69.15	-	173.31
Gross margin		4,410.74		4,482.05		4,966.81
Direct Expenses						
Protein Vit Minerals (lb.)	3,488.4	740.41	2,356.3	568.60	5,000.3	1,002.81
Complete Ration (lb.)	2,097.6	398.01	2,384.7	530.57	1,231.5	190.09
Corn (bu.)	74.0	236.79	72.1	225.85	81.6	260.73
Corn Silage (lb.)	23,366.9	371.08	23,842.4	404.24	25,264.5	380.61
Hay, Alfalfa (lb.)	3,204.9	196.11	1,762.8	107.80	3,157.6	196.42
Haylage, Alfalfa (lb.)	4,905.0	155.03	4,605.5	136.28	3,785.7	127.28
Other feed stuffs (lb)	4,645.0	203.29	6,046.7	279.94	3,537.2	190.44
Breeding fees		62.06		65.11		73.33
Veterinary		122.44		117.50		120.42
Supplies		421.87		456.97		402.52
Contract production exp.		112.78		154.87		73.32
Fuel & oil		99.47		127.40		93.19
Repairs		161.91		152.55		168.48
Hired labor		337.58		364.52		200.76
Bedding		95.14		101.48		106.00
Total direct expenses		3,713.97		3,793.70		3,586.41
Return over direct expense		696.77		688.35		1,380.41
Overhead Expenses						
Hired labor		176.05		195.84		346.68
Interest		105.65		97.05		113.97
Mach & bldg depreciation		188.12		189.72		214.02
Miscellaneous		243.47		279.04		239.01
Total overhead expenses		713.29		761.66		913.67
Total dir & ovhd expenses		4,427.26		4,555.35		4,500.08
Net return		-16.52		-73.31		466.73
Labor & management charge		193.27		141.42		221.24
Net return over lbr & mgt		-209.79		-214.73		245.49
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		15.35		15.42		14.10
Total dir & ovhd expense per unit		18.30		18.52		17.69
With other revenue adjustments		16.50		16.75		15.40
With labor and management		17.30		17.33		16.27
Est. labor hours per unit		45.83		47.42		46.22
Other Information						
Number of cows		238.7		279.5		299.5
Milk produced per cow		24,196		24,598		25,440
Total milk sold		5,732,458		6,829,820		7,559,796
Lb. of milk sold per FTE		1,467,354		1,443,142		1,529,238
Culling percentage		30.6		33.1		29.4
Turnover rate		37.1		39.2		35.0
Cow death loss percent		6.1		5.7		5.3
Percent of barn capacity		114.6		112.4		115.2
Feed cost per day		6.30		6.17		6.43
Feed cost per cwt. of milk		9.51		9.16		9.23
Feed cost per cow		2,300.72		2,253.29		2,348.39
Hired labor per cow		513.63		560.36		547.44
Avg. milk price per cwt.		16.45		16.48		17.26
Milk price / feed margin		6.94		7.32		8.03

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

Dairy Replacement Heifers -- Average Per Head

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
Number of farms	302		61		61	
	Quantity	Value	Quantity	Value	Quantity	Value
Replacements sold (hd)	0.1	37.35	0.0	23.50	0.1	60.25
Transferred out (hd)	0.4	544.87	0.5	550.00	0.4	677.46
Cull sales (hd)	0.0	3.96	0.0	4.75	0.0	5.89
Other income		1.10		1.64		0.75
Purchased (hd)	0.0	-14.93	0.0	-6.03	0.1	-27.99
Transferred in (hd)	0.6	-105.02	0.6	-94.10	0.6	-112.80
Inventory change (hd)	0.1	22.91	0.0	9.33	0.1	67.02
Gross margin		490.24		489.10		670.59
Direct Expenses						
Protein Vit Minerals (lb.)	485.5	87.98	379.4	102.98	301.5	50.06
Milk Replacer (lb.)	14.7	18.23	8.9	11.52	22.1	27.44
Creep / Starter (lb.)	107.3	9.23	127.9	20.37	68.2	13.21
Complete Ration (lb.)	307.4	52.72	214.3	41.26	321.1	57.17
Corn (bu.)	6.7	20.98	9.9	31.33	3.5	11.81
Corn Silage (lb.)	4,608.8	71.06	4,451.3	71.17	3,937.8	57.65
Hay, Alfalfa (lb.)	838.9	47.19	1,205.5	62.53	570.9	31.19
Hay, Grass (lb.)	501.8	18.32	348.8	14.13	728.4	24.90
Haylage, Alfalfa (lb.)	945.9	30.85	355.2	9.82	526.7	14.64
Other feed stuffs (lb)	1,466.6	48.39	1,883.5	66.11	1,578.8	43.86
Breeding fees		15.48		16.48		17.11
Veterinary		17.88		17.61		21.59
Supplies		41.46		32.33		33.01
Contract production exp.		85.18		80.20		67.79
Repairs		22.90		21.01		24.20
Hired labor		36.05		29.44		40.70
Bedding		19.65		16.58		20.55
Total direct expenses		643.53		644.87		556.88
Return over direct expense		-153.29		-155.77		113.71
Overhead Expenses						
Hired labor		29.41		30.40		48.63
Interest		16.98		14.43		21.15
Mach & bldg depreciation		28.43		26.38		26.64
Miscellaneous		34.25		33.90		34.91
Total overhead expenses		109.07		105.10		131.33
Total dir & ovhd expenses		752.61		749.98		688.21
Net return		-262.37		-260.88		-17.62
Labor & management charge		29.12		25.48		24.55
Net return over lbr & mgt		-291.49		-286.36		-42.17
Cost of Production Per Head Per Day						
Total direct expense per unit		2.02		2.00		1.71
Total dir & ovhd expense per unit		2.31		2.29		2.07
With other revenue adjustments		2.31		2.29		2.07
With labor and management		2.39		2.36		2.14
Est. labor hours per unit		6.36		5.88		7.35
Other Information						
No. purchased or trans in		132		139		179
Number sold or trans out		109		120		134
Average number of head		202		230		255
Percentage death loss		8.2		6.7		6.5
Feed cost per average head		404.94		431.21		331.94
Hired labor per average head		65.46		59.83		89.33
Feed cost/head sold/trans		749.64		829.34		633.01
Total cost/head sold/trans		1,617.45		1,653.74		1,487.26
Feed cost per head per day		1.11		1.18		0.91
Avg. purch price / head		484.25		1,113.95		366.88
Avg. sales price / head		378.72		706.94		732.98

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

Dairy Feeder -- Average Per Cwt. Produced

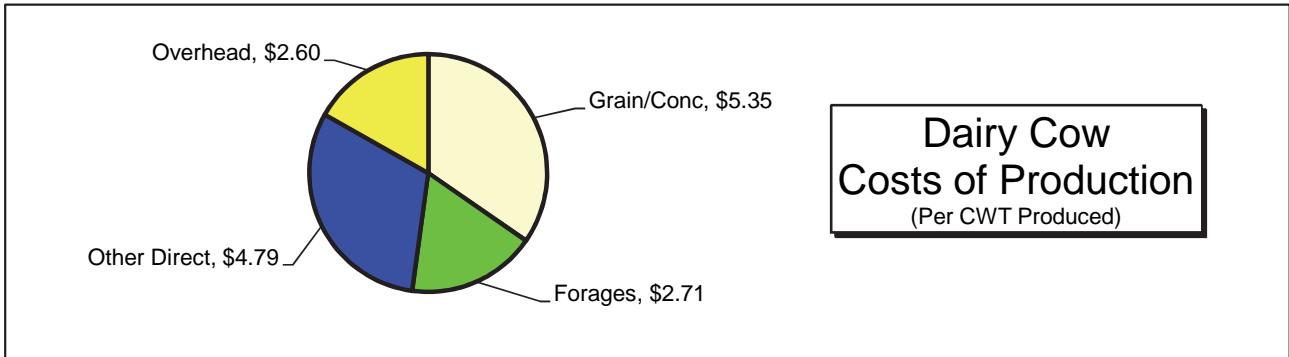
	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	19		4		4	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Dairy Feeder sold (lb)	136.95	152.48	142.70	167.25	142.25	210.73
Transferred out (lb)	0.43	0.68	-	-	3.03	4.85
Other income		1.43		-		4.11
Purchased (lb)	-24.34	-32.20	-46.78	-69.39	-43.54	-53.47
Transferred in (lb)	-13.62	-17.24	-2.67	-2.67	-7.94	-7.33
Inventory change (lb)	-0.64	-7.15	6.75	-4.13	3.63	2.57
Gross margin		98.00		91.06		161.45
Direct Expenses						
Protein Vit Minerals (lb.)	20.39	3.53	31.82	4.22	31.11	3.85
Milk Replacer (lb.)	14.12	18.47	10.02	12.99	28.41	42.26
Milk (lb.)	85.69	8.09	18.33	2.75	51.11	6.59
Creep / Starter (lb.)	55.46	9.98	34.37	6.17	-	-
Complete Ration (lb.)	142.77	20.61	190.28	30.06	260.23	26.13
Corn (bu.)	2.72	8.34	2.70	8.11	3.58	12.23
Other feed stuffs (lb)	88.86	2.91	61.17	3.25	-	-
Veterinary		2.70		3.20		0.12
Supplies		2.49		1.98		0.26
Fuel & oil		3.05		0.60		8.55
Repairs		5.03		4.39		9.99
Bedding		3.44		2.31		0.75
Operating interest		1.37		2.53		3.01
Total direct expenses		90.02		82.59		113.73
Return over direct expense		7.98		8.47		47.73
Overhead Expenses						
Hired labor		7.16		0.19		0.43
Farm insurance		1.49		0.37		3.17
Utilities		3.40		1.49		9.93
Interest		3.65		2.14		5.41
Mach & bldg depreciation		6.22		9.11		7.33
Miscellaneous		3.02		3.50		4.33
Total overhead expenses		24.94		16.81		30.60
Total dir & ovhd expenses		114.96		99.40		144.33
Net return		-16.96		-8.34		17.12
Labor & management charge		8.23		9.98		9.81
Net return over lbr & mgt		-25.19		-18.32		7.32
Cost of Production Per Cwt. Produced						
Total direct expense per unit		105.68		111.27		115.54
Total dir & ovhd expense per unit		123.83		123.05		136.60
With other revenue adjustments		123.83		123.05		136.60
With labor and management		129.82		130.05		143.35
Est. labor hours per unit		1.20		0.95		1.13
Other Information						
No. purchased or trans in		129		145		127
Number sold or trans out		123		132		116
Percentage death loss		5.9		7.0		10.1
Avg. daily gain (lb.)		1.92		2.18		2.19
Lb. of conc / lb. of gain		3.77		4.15		4.92
Lb. of feed / lb. of gain		5.26		5.04		5.71
Feed cost per cwt. of gain		71.94		67.57		91.05
Feed cost per head		199.39		189.21		217.84
Hired labor per head		20.79		0.54		1.24
Average purchase weight		109		136		85
Avg wgt / Dairy Feeder sold		357		425		271
Avg purch price / head		143.88		202.29		104.38
Avg sales price / cwt.		111.34		117.21		148.14

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

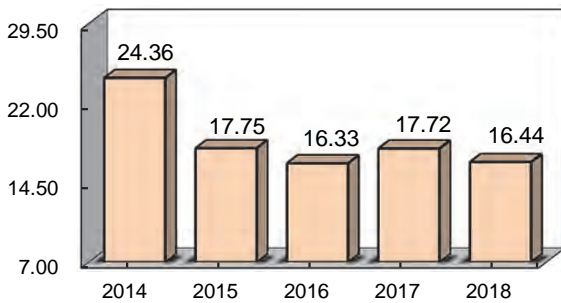
Dairy Finishing -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
Number of farms	105		21		21	
	Quantity	Value	Quantity	Value	Quantity	Value
Dairy Finish sold (lb)	132.79	125.83	134.18	131.02	124.62	125.50
Transferred out (lb)	0.07	0.07	0.03	0.03	0.21	0.18
Other income		1.16		1.89		0.44
Purchased (lb)	-32.53	-36.96	-28.16	-32.66	-27.88	-33.23
Transferred in (lb)	-1.91	-2.57	-1.82	-1.91	-2.96	-4.68
Inventory change (lb)	0.67	-0.24	-5.21	-9.08	5.55	7.53
Gross margin		87.29		89.29		95.73
Direct Expenses						
Protein Vit Minerals (lb.)	56.49	11.96	53.05	10.96	52.93	10.31
Milk (lb.)	3.69	0.61	-	-	13.14	2.19
Complete Ration (lb.)	34.90	5.34	73.59	9.62	28.77	3.32
Corn (bu.)	10.36	31.83	10.13	32.64	9.20	26.84
Corn Silage (lb.)	161.27	2.58	270.56	4.77	74.45	1.15
DDGS, wet (lb.)	53.12	1.57	-	-	67.74	2.30
Other feed stuffs (lb)	94.74	4.88	76.64	3.58	40.89	1.80
Veterinary		2.26		2.81		0.92
Supplies		4.87		6.57		3.99
Contract production exp.		0.42		-		1.49
Fuel & oil		1.62		1.60		1.19
Repairs		2.69		2.60		1.65
Bedding		0.91		1.69		0.67
Operating interest		1.84		3.27		0.69
Total direct expenses		73.40		80.11		58.52
Return over direct expense		13.89		9.17		37.21
Overhead Expenses						
Hired labor		1.10		0.64		1.72
Interest		1.73		2.81		1.09
Mach & bldg depreciation		3.89		5.86		2.15
Miscellaneous		4.24		4.12		3.44
Total overhead expenses		10.97		13.44		8.39
Total dir & ovhd expenses		84.37		93.55		66.91
Net return		2.92		-4.26		28.82
Labor & management charge		4.51		4.14		3.72
Net return over lbr & mgt		-1.59		-8.40		25.10
Cost of Production Per Cwt. Produced						
Total direct expense per unit		84.52		91.51		70.87
Total dir & ovhd expense per unit		92.77		101.52		77.59
With other revenue adjustments		92.56		100.83		77.59
With labor and management		95.96		103.91		80.57
Est. labor hours per unit		0.50		0.41		0.46
Other Information						
No. purchased or trans in		192		203		252
Number sold or trans out		175		187		220
Percentage death loss		3.7		6.3		2.3
Avg. daily gain (lb.)		2.53		2.25		2.87
Lb. of conc / lb. of gain		7.57		7.12		6.66
Lb. of feed / lb. of gain		8.68		8.52		7.42
Feed cost per cwt. of gain		58.77		61.57		47.91
Feed cost per head		630.55		664.61		554.21
Hired labor per head		21.54		21.38		33.90
Average purchase weight		385		304		459
Avg wgt / Dairy Finish sold		1,384		1,387		1,350
Avg purch price / head		437.97		353.17		547.32
Avg sales price / cwt.		94.76		97.65		100.71

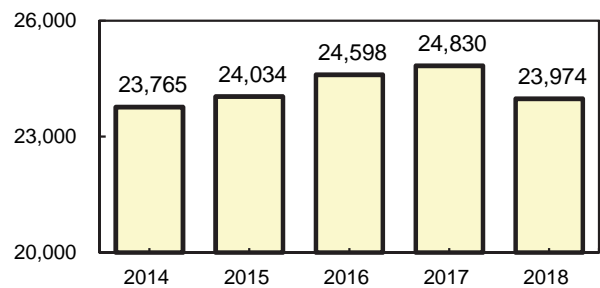
Summary of Selected Dairy Enterprise Factors



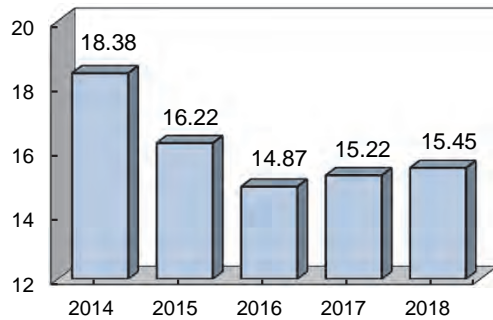
Ave Milk Price Recv'd



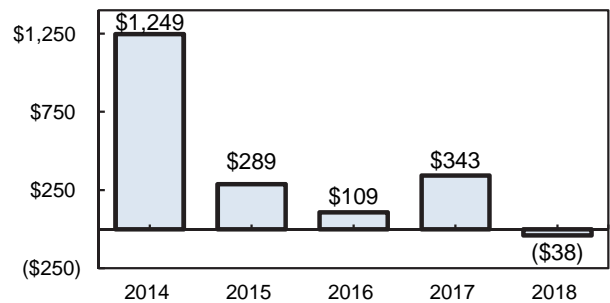
Milk Production per Cow



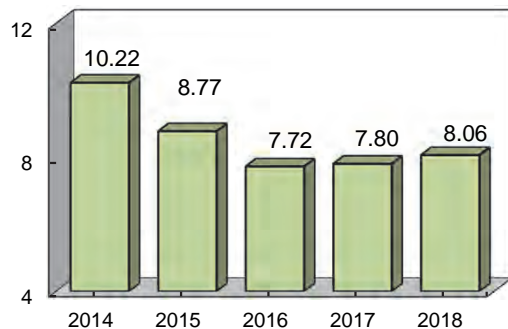
Dir & Ovhd Exp per CWT



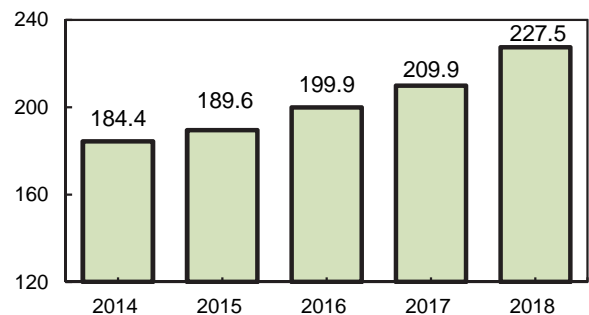
Net Return per Cow



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>	
	101		20		21	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms		101		20		21
Beef Calves sold (lb)	243.4	369.29	184.7	311.12	236.4	365.04
Transferred out (lb)	185.9	304.82	236.6	384.07	198.4	285.96
Cull sales (lb)	70.3	85.22	28.9	71.44	85.6	103.85
Other income		4.94		2.63		10.06
Purchased (lb)	-38.3	-120.63	-30.6	-114.92	-39.0	-159.33
Transferred in (lb)	-33.7	-65.42	-27.7	-93.16	-47.5	-69.71
Inventory change (lb)	42.8	113.60	19.4	141.25	108.3	379.04
Gross margin		691.82		702.44		914.92
Direct Expenses						
Protein Vit Minerals (lb.)	279.9	43.53	211.7	48.32	171.3	35.07
Corn Silage (lb.)	4,085.4	62.22	4,381.1	68.61	1,970.2	31.62
Hay, Alfalfa (lb.)	932.8	48.26	559.9	30.68	1,485.7	50.35
Hay, Grass (lb.)	2,565.6	88.30	2,254.3	72.09	1,566.7	51.59
Haylage, Alfalfa (lb.)	184.9	6.06	31.8	0.80	928.7	30.35
Pasture (aum)	3.0	43.98	3.2	35.83	1.6	29.75
Hay (lb.)	2,038.3	72.96	3,040.4	108.48	2,208.4	77.14
Other feed stuffs (lb)	4,304.3	57.41	3,465.5	84.25	1,223.5	52.51
Veterinary		30.08		40.13		23.51
Supplies		41.46		53.21		34.95
Fuel & oil		31.52		22.82		27.97
Repairs		46.33		38.39		33.32
Custom hire		5.42		14.66		0.33
Operating interest		17.09		15.03		11.56
Total direct expenses		594.61		633.28		490.01
Return over direct expense		97.21		69.15		424.90
Overhead Expenses						
Farm insurance		14.30		16.34		11.32
Utilities		15.07		15.44		13.89
Interest		46.87		19.79		43.28
Mach & bldg depreciation		42.53		25.98		40.74
Miscellaneous		32.76		24.90		25.73
Total overhead expenses		151.52		102.45		134.97
Total dir & ovhd expenses		746.13		735.74		624.98
Net return		-54.31		-33.30		289.93
Labor & management charge		89.22		104.83		90.56
Net return over lbr & mgt		-143.53		-138.13		199.38
Cost of Production Per Cwt. Produced						
Total direct expense per unit		125.58		153.47		89.12
Total dir & ovhd expense per unit		157.58		178.30		113.67
With other revenue adjustments		157.97		177.25		79.34
With labor and management		176.82		202.66		95.81
Est. labor hours per unit		8.91		8.75		8.23
Other Information						
Number of cows		74.3		84.9		58.1
Pregnancy percentage		95.2		90.2		98.3
Pregnancy loss percentage		1.8		2.5		0.5
Culling percentage		9.5		8.9		9.7
Calving percentage		93.5		88.0		97.8
Weaning percentage		85.0		81.3		93.8
Calves sold per cow		0.80		0.83		0.77
Calf death loss percent		8.7		7.3		3.0
Cow death loss percent		3.0		2.8		3.9
Cows per FTE		314.2		320.1		340.1
Average weaning weight		545		516		556
Lb. weaned/exposed female		464		420		522
Feed cost per cow		422.72		449.05		358.38
Avg wgt/ Beef Calves sold		588		548		575
Avg price / cwt.		151.73		168.48		154.45

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>40 - 60%</u>		<u>High 20%</u>	
	36		7		8	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Beef Calves sold (lb)	435.8	623.07	250.0	371.32	633.6	882.59
Transferred out (lb)	78.9	124.49	221.1	332.82	-	6.42
Cull sales (lb)	160.6	175.09	108.2	106.20	78.5	119.69
Other income		13.10		6.85		1.10
Purchased (lb)	-59.2	-112.66	-	-3.41	-212.2	-328.82
Transferred in (lb)	-	-10.34	-	-46.79	-	-
Inventory change (lb)	-45.4	-48.20	-17.3	-85.83	151.8	321.98
Gross margin		764.56		681.17		1,002.96
Direct Expenses						
Beet Pulp (dry) (lb.)	1,206.3	12.32	2,247.4	29.64	1,607.0	9.40
Protein Vit Minerals (lb.)	594.0	54.52	95.5	29.84	865.9	90.03
Corn Silage (lb.)	4,042.2	58.81	2,562.8	35.66	5,405.0	81.08
Hay, Alfalfa (lb.)	1,220.4	59.52	1,710.7	73.64	180.0	13.50
Hay, Grass (lb.)	1,983.8	58.30	1,240.6	37.22	3,067.0	94.78
Oatlage (lb.)	345.5	12.54	-	-	1,207.5	45.28
Pasture (aum)	5.0	71.29	4.9	75.38	5.0	83.02
Hay (lb.)	3,923.0	138.74	2,513.1	82.31	2,946.2	95.24
Other feed stuffs (lb)	521.9	22.56	18.8	19.66	42.2	9.84
Veterinary		40.28		28.49		39.77
Supplies		54.19		64.58		25.16
Fuel & oil		25.47		18.42		26.98
Repairs		45.57		34.12		45.90
Livestock leases		6.17		26.74		-
Marketing		16.14		12.69		14.55
Total direct expenses		676.45		568.40		674.52
Return over direct expense		88.11		112.77		328.44
Overhead Expenses						
Utilities		14.31		15.23		8.03
Interest		48.54		26.02		63.99
Mach & bldg depreciation		40.42		17.69		46.66
Miscellaneous		53.28		37.31		49.76
Total overhead expenses		156.55		96.25		168.45
Total dir & ovhd expenses		832.99		664.65		842.97
Net return		-68.44		16.52		160.00
Labor & management charge		95.87		91.83		110.85
Net return over lbr & mgt		-164.31		-75.31		49.14
Cost of Production Per Cwt. Produced						
Total direct expense per unit		117.45		99.47		102.26
Total dir & ovhd expense per unit		144.63		116.31		127.80
With other revenue adjustments		138.26		126.03		119.09
With labor and management		154.90		142.10		135.90
Est. labor hours per unit		8.01		6.08		11.41
Other Information						
Number of cows		94.1		106.9		113.9
Pregnancy percentage		94.7		95.9		96.9
Pregnancy loss percentage		1.0		0.8		0.3
Culling percentage		15.4		11.6		12.8
Calving percentage		93.7		95.1		96.6
Weaning percentage		89.4		93.0		91.5
Calves sold per cow		0.81		0.83		0.89
Calf death loss percent		5.4		4.7		4.2
Cow death loss percent		3.6		2.9		2.2
Cows per FTE		349.7		460.4		245.4
Average weaning weight		559		547		576
Lb. weaned/exposed female		500		509		527
Feed cost per cow		488.61		383.35		522.16
Avg wgt/ Beef Calves sold		708		621		750
Avg price / cwt.		142.96		148.55		139.29

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>	
	101		50		32		16	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms								
Beef Calves sold (lb)	243.4	369.29	198.4	324.91	233.4	355.14	159.9	244.71
Transferred out (lb)	185.9	304.82	168.9	236.97	191.2	292.98	264.8	478.19
Cull sales (lb)	70.3	85.22	83.2	124.24	82.6	81.89	95.0	87.51
Other income		4.94		8.86		3.26		5.46
Purchased (lb)	-38.3	-120.63	-56.3	-138.60	-15.7	-102.17	-77.3	-185.12
Transferred in (lb)	-33.7	-65.42	-48.1	-67.66	-36.8	-72.80	-43.0	-71.46
Inventory change (lb)	42.8	113.60	99.3	162.22	28.1	153.64	65.1	91.42
Gross margin		691.82		650.94		711.93		650.72
Direct Expenses								
Protein Vit Minerals (lb.)	279.9	43.53	287.1	56.65	197.7	37.42	454.7	47.87
Complete Ration (lb.)	2,489.5	13.27	115.7	13.95	7,617.1	25.33	64.2	8.25
Corn Silage (lb.)	4,085.4	62.22	3,566.7	55.80	2,945.5	43.64	5,314.5	82.03
Hay, Alfalfa (lb.)	932.8	48.26	1,312.2	63.74	1,449.7	71.72	721.7	43.90
Hay, Grass (lb.)	2,565.6	88.30	2,996.8	102.46	2,694.1	91.04	1,804.3	73.52
Pasture (aum)	3.0	43.98	2.6	41.48	2.1	31.53	2.7	41.35
Straw (lb.)	136.4	3.63	-	-	59.5	2.16	-	-
Hay (lb.)	2,038.3	72.96	2,222.7	82.90	1,537.5	53.15	1,343.6	56.70
Other feed stuffs (lb)	1,863.3	46.57	923.0	37.60	2,681.3	62.47	2,332.9	52.58
Veterinary		30.08		33.12		39.54		24.53
Supplies		46.88		54.71		52.07		48.46
Fuel & oil		31.52		31.59		30.52		32.39
Repairs		46.33		47.23		39.64		49.96
Operating interest		17.09		16.31		15.72		22.04
Total direct expenses		594.61		637.53		595.93		583.56
Return over direct expense		97.21		13.41		116.00		67.15
Overhead Expenses								
Utilities		15.07		27.60		9.88		17.07
Dues & professional fees		8.29		9.81		3.79		3.61
Interest		46.87		50.46		33.77		33.39
Mach & bldg depreciation		42.53		66.64		40.53		46.30
Miscellaneous		38.76		52.88		41.91		37.12
Total overhead expenses		151.52		207.40		129.88		137.49
Total dir & ovhd expenses		746.13		844.93		725.81		721.05
Net return		-54.31		-193.99		-13.88		-70.34
Labor & management charge		89.22		137.58		87.95		68.91
Net return over lbr & mgt		-143.53		-331.57		-101.83		-139.25
Cost of Production Per Cwt. Produced								
Total direct expense per unit		125.58		141.78		123.01		124.17
Total dir & ovhd expense per unit		157.58		187.90		149.82		153.43
With other revenue adjustments		157.97		180.54		140.44		169.66
With labor and management		176.82		211.14		158.60		184.32
Est. labor hours per unit		8.91		12.57		8.05		8.38
Other Information								
Number of cows		74.3		29.7		75.3		134.3
Pregnancy percentage		95.2		95.5		97.1		95.8
Pregnancy loss percentage		1.8		2.6		2.0		0.8
Culling percentage		9.5		12.5		9.0		9.4
Calving percentage		93.5		93.0		95.2		95.0
Weaning percentage		85.0		87.3		88.3		88.8
Calves sold per cow		0.80		0.71		0.78		0.85
Calf death loss percent		8.7		8.0		7.5		4.6
Cow death loss percent		3.0		5.0		2.1		3.5
Cows per FTE		314.2		222.8		348.0		334.1
Average weaning weight		545		533		541		549
Lb. weaned/exposed female		464		465		478		487
Feed cost per cow		422.72		454.57		418.44		406.19
Avg wgt/ Beef Calves sold		588		512		568		601
Avg price / cwt.		151.73		163.79		152.14		152.99

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>	
	75		15		15	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Finish Beef sold (lb)	195.55	227.05	191.19	219.26	147.53	164.63
Transferred out (lb)	1.07	1.25	-	-	1.94	2.62
Insurance income		0.02		-		-
Other income		1.77		0.40		4.59
Purchased (lb)	-100.80	-154.09	-102.67	-159.08	-48.40	-69.21
Transferred in (lb)	-6.14	-9.10	-1.47	-2.02	-11.77	-16.26
Inventory change (lb)	9.16	9.47	12.49	12.84	7.24	9.19
Gross margin		76.37		71.41		95.57
Direct Expenses						
Protein Vit Minerals (lb.)	182.18	9.52	102.04	9.35	28.04	4.98
Complete Ration (lb.)	20.05	1.71	-	-	64.40	7.72
Corn (bu.)	7.24	22.83	7.61	24.85	6.13	19.38
Corn Silage (lb.)	331.38	5.18	380.48	5.66	474.19	7.29
Hay, Alfalfa (lb.)	45.68	2.23	61.21	2.70	52.25	2.35
Hay, Grass (lb.)	30.43	1.38	21.51	1.07	55.25	2.65
DDGS, dry (lb.)	90.88	4.25	108.07	4.85	-	-
Other feed stuffs (lb)	205.40	5.39	57.13	1.31	100.06	4.03
Veterinary		2.01		2.09		0.98
Supplies		3.28		2.86		2.53
Fuel & oil		2.75		1.67		1.11
Repairs		2.89		3.80		1.67
Hauling and trucking		2.28		1.98		0.61
Operating interest		2.76		2.46		0.75
Total direct expenses		68.47		64.67		56.04
Return over direct expense		7.90		6.74		39.53
Overhead Expenses						
Hired labor		2.14		2.61		0.30
Farm insurance		1.22		1.65		1.03
Utilities		0.88		0.91		1.24
Mach & bldg depreciation		4.80		3.86		2.47
Miscellaneous		3.05		3.62		2.18
Total overhead expenses		12.09		12.65		7.22
Total dir & ovhd expenses		80.56		77.32		63.26
Net return		-4.19		-5.91		32.31
Labor & management charge		5.21		4.36		4.50
Net return over lbr & mgt		-9.40		-10.27		27.80
Cost of Production Per Cwt. Produced						
Total direct expense per unit		112.33		111.08		85.45
Total dir & ovhd expense per unit		118.48		117.69		90.28
With other revenue adjustments		118.24		117.77		90.28
With labor and management		120.90		120.05		93.30
Est. labor hours per unit		0.36		0.39		0.41
Other Information						
No. purchased or trans in		243		430		55
Number sold or trans out		228		398		50
Percentage death loss		1.0		0.9		1.2
Avg. daily gain (lb.)		2.79		3.17		2.27
Lb. of conc / lb. of gain		7.78		6.84		4.60
Lb. of feed / lb. of gain		10.09		9.00		7.92
Feed cost per cwt. of gain		52.49		49.80		48.39
Feed cost per head		359.52		364.14		406.07
Hired labor per head		16.66		22.15		2.50
Average purchase weight		743		767		598
Avg wgt / Finish Beef sold		1,417		1,506		1,396
Avg purch price / cwt.		152.87		154.94		143.00
Avg sales price / cwt.		116.11		114.68		111.59

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>	
	26		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Wean-Fin Pig sold (lb)	278.4	138.52	284.4	140.47	291.6	151.11
Transferred out (lb)	0.0	0.01	-	-	-	-
Cull sales (lb)	2.0	0.41	5.4	1.13	0.7	0.12
Government payments		1.49		1.50		1.89
Other income		3.93		4.70		5.82
Purchased (lb)	-16.8	-48.04	-16.2	-48.89	-18.0	-50.43
Transferred in (lb)	-0.5	-1.49	-1.4	-4.44	-	-
Inventory change (lb)	0.6	0.28	-3.6	-4.80	-10.8	0.15
Gross margin		95.11		89.66		108.66
Direct Expenses						
Protein Vit Minerals (lb.)	147.5	27.81	192.9	33.78	146.3	27.43
Complete Ration (lb.)	87.8	9.98	37.5	3.81	125.9	11.69
Corn (bu.)	6.9	22.72	6.9	22.20	6.4	21.54
DDGS, dry (lb.)	70.9	5.08	92.2	6.79	85.0	5.81
Other feed stuffs (lb)	7.2	1.18	0.6	0.34	4.1	0.45
Veterinary		3.86		5.05		2.66
Supplies		2.68		4.32		1.62
Contract production exp.		2.90		-		3.49
Fuel & oil		1.01		0.37		1.36
Repairs		1.52		0.74		1.50
Custom hire		2.05		3.89		1.31
Hired labor		1.19		0.57		2.28
Hauling and trucking		1.83		2.64		1.82
Operating interest		1.28		0.91		0.75
Total direct expenses		85.10		85.42		83.72
Return over direct expense		10.00		4.25		24.94
Overhead Expenses						
Hired labor		2.26		2.15		0.77
Building leases		9.80		13.37		13.41
Interest		1.14		1.46		0.45
Mach & bldg depreciation		1.99		1.98		2.20
Miscellaneous		3.09		2.38		2.82
Total overhead expenses		18.27		21.33		19.65
Total dir & ovhd expenses		103.38		106.75		103.36
Net return		-8.27		-17.09		5.30
Labor & management charge		3.21		1.39		3.56
Net return over lbr & mgt		-11.48		-18.47		1.74
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		64.99		67.71		62.08
Total dir & ovhd expense per unit		73.85		77.85		71.19
With other revenue adjustments		71.23		74.91		67.62
With labor and management		72.79		75.57		69.27
Est. labor hours per unit		0.27		0.18		0.20
Other Information						
No. purchased or trans in		17,020		29,014		28,100
Number sold or trans out		15,366		25,791		26,758
Percentage death loss		6.3		10.6		4.1
Percent substandard hogs		2		3		2
Avg. daily gain (lb.)		1.57		1.65		1.46
Lb. of feed / lb. of gain		2.62		2.63		2.73
Feed cost per cwt. of gain		25.31		24.90		25.40
Feed cost per head		66.77		66.92		66.92
Hired labor per head		3.45		2.72		3.05
Average purchase weight		15		15		15
Avg wgt / Wean-Fin Pig sold		266		276		255
Avg purch price / head		42.60		46.15		41.91
Avg sales price / cwt.		49.75		49.39		51.82
Average carcass weight		201		209		191
Average price / cwt. carcass		66.78		66.25		69.65

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

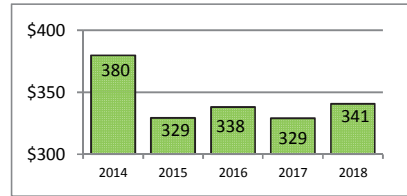
Hogs, Finish Feeder Pigs -- Average Per Cwt. Carcass Sold

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	24		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Finish Hogs sold (lb)	135.17	67.08	136.73	65.68	135.23	71.93
Transferred out (lb)	0.24	0.15	1.45	0.87	-	-
Cull sales (lb)	0.68	0.13	-	-	1.68	0.32
Government payments		1.02		1.59		1.25
Other income		0.77		0.09		0.46
Purchased (lb)	-17.65	-23.29	-8.93	-9.52	-18.33	-25.55
Transferred in (lb)	-1.54	-3.47	-7.88	-19.32	-0.51	-0.51
Inventory change (lb)	-1.22	-2.28	-4.09	-2.55	0.71	-0.86
Gross margin		40.10		36.83		47.03
Direct Expenses						
Protein Vit Minerals (lb.)	65.32	12.23	50.10	9.25	76.23	14.28
Complete Ration (lb.)	94.08	5.69	327.83	10.00	10.67	0.84
Corn (bu.)	3.32	10.99	3.05	10.12	4.00	13.21
Other feed stuffs (lb)	6.47	0.53	4.11	0.55	9.17	0.72
Veterinary		0.56		0.60		0.45
Supplies		1.13		0.97		0.66
Contract production exp.		1.63		-		-
Fuel & oil		0.38		0.91		0.24
Repairs		0.53		0.90		0.46
Livestock leases		0.19		1.10		-
Hauling and trucking		0.88		0.05		1.45
Operating interest		0.51		0.28		0.42
Total direct expenses		35.25		34.75		32.73
Return over direct expense		4.85		2.08		14.30
Overhead Expenses						
Hired labor		0.77		1.72		0.88
Building leases		2.87		0.57		6.67
Farm insurance		0.40		0.62		0.37
Utilities		0.47		1.38		0.34
Interest		0.50		0.61		0.56
Mach & bldg depreciation		1.33		1.48		1.31
Miscellaneous		0.53		0.56		0.61
Total overhead expenses		6.87		6.94		10.73
Total dir & ovhd expenses		42.13		41.69		43.46
Net return		-2.03		-4.86		3.57
Labor & management charge		1.33		2.10		0.57
Net return over lbr & mgt		-3.36		-6.96		3.00
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		64.12		66.06		59.31
Total dir & ovhd expense per unit		70.99		73.00		70.04
With other revenue adjustments		69.25		71.40		68.36
With labor and management		70.58		73.50		68.93
Est. labor hours per unit		0.12		0.19		0.08
Other Information						
No. purchased or trans in		8,876		8,224		17,026
Number sold or trans out		8,767		7,546		16,826
Percentage death loss		4.5		5.6		4.0
Percent substandard hogs		2		3		2
Avg. daily gain (lb.)		1.69		1.58		1.65
Lb. of feed / lb. of gain		2.72		2.85		2.70
Feed cost per cwt. of gain		25.43		25.48		24.44
Feed cost per head		61.06		56.00		63.37
Hired labor per head		1.93		3.23		1.92
Average purchase weight		41		48		38
Avg wgt / Finish Hogs sold		276		266		280
Avg purch price / head		54.40		51.66		53.37
Avg sales price / cwt.		49.62		48.03		53.19
Average carcass weight		208		200		211
Average price / cwt. carcass		66.67		64.72		71.53

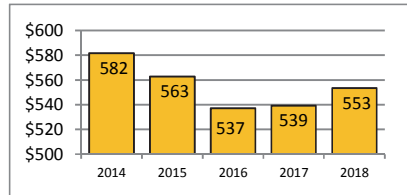
Selected Crop & Livestock Enterprise Trend Summary
Northern Minnesota Farm Business Management Data

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
<u>Alfalfa Hay</u>					
Yield per Acre	4.0	3.9	5.0	4.5	4.1
Value per Ton	\$176.49	\$153.84	\$110.40	\$108.87	\$134.75
Fuel, Oil, Repairs per Acre	\$114.57	\$83.10	\$79.40	\$82.42	\$93.70
Total Dir & Ovhd Exp per Acre	\$379.84	\$329.25	\$338.03	\$328.96	\$340.55
Net Return per Acre	\$337.71	\$292.23	\$209.56	\$167.85	\$210.75
Total Direct Expenses per Ton	\$48.66	\$42.09	\$32.55	\$35.05	\$39.82
Total Dir & Ovhd Exp per Ton	\$94.13	\$84.09	\$68.35	\$73.25	\$83.41

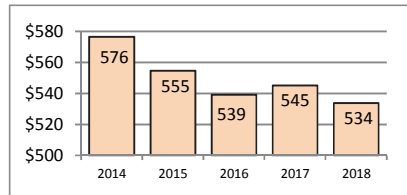
Total Dir&Ovhd Expense



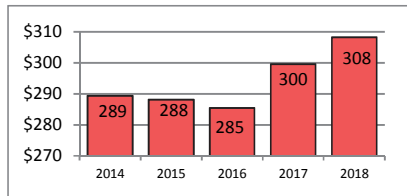
<u>Corn</u>					
Yield per Acre	118.8	164.2	179.5	164.6	179.0
Value per Bushel	\$3.42	\$3.30	\$2.95	\$3.08	\$3.22
Fuel, Oil, Repairs per Acre	\$87.92	\$80.80	\$71.55	\$74.43	\$82.18
Total Dir & Ovhd Exp per Acre	\$581.67	\$562.75	\$537.05	\$539.30	\$553.48
Net Return per Acre	-\$75.40	-\$0.05	\$1.65	-\$14.68	\$38.76
Total Direct Expenses per Bu.	\$3.43	\$2.40	\$1.98	\$2.17	\$2.11
Total Dir & Ovhd Exp per Bushel	\$4.90	\$3.43	\$2.99	\$3.28	\$3.09



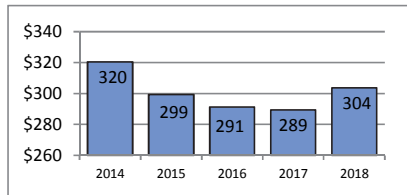
<u>Corn Silage</u>					
Yield per Acre	14.3	19.5	19.4	19.8	20.6
Value per Ton	\$35.05	\$34.46	\$33.91	\$30.45	\$29.98
Fuel, Oil, Repairs per Acre	\$122.88	\$93.91	\$88.07	\$93.48	\$95.29
Total Dir & Ovhd Exp per Acre	\$576.47	\$554.58	\$539.19	\$545.06	\$533.70
Net Return per Acre	\$9.68	\$120.30	\$119.00	\$68.81	\$86.46
Total Direct Expenses per Ton	\$27.70	\$19.47	\$18.88	\$18.82	\$17.55
Total Dir & Ovhd Exp per Ton	\$40.28	\$28.43	\$27.80	\$27.48	\$25.94



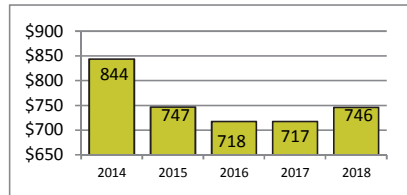
<u>Soybeans</u>					
Yield per Acre	33.0	38.1	46.7	35.2	41.0
Value per Bushel	\$9.73	\$8.33	\$9.27	\$9.05	\$8.38
Fuel, Oil, Repairs per Acre	\$46.04	\$38.24	\$38.23	\$39.35	\$44.13
Total Dir & Ovhd Exp per Acre	\$289.37	\$288.14	\$285.42	\$299.63	\$308.24
Net Return per Acre	\$52.87	\$43.58	\$151.42	\$38.07	\$118.57
Total Direct Expenses per Bu.	\$5.81	\$4.94	\$3.80	\$5.55	\$4.95
Total Dir & Ovhd Exp per Bushel	\$8.76	\$7.57	\$6.12	\$8.51	\$7.52



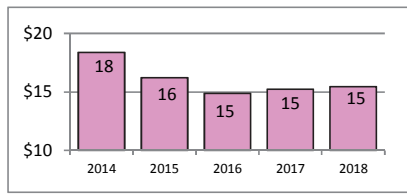
<u>Spring Wheat</u>					
Yield per Acre	60.2	66.0	66.0	72.3	65.8
Value per Bushel	\$5.62	\$4.96	\$4.95	\$5.90	\$5.47
Fuel, Oil, Repairs per Acre	\$43.17	\$38.15	\$35.53	\$39.62	\$45.25
Total Dir & Ovhd Exp per Acre	\$320.40	\$299.33	\$291.26	\$289.47	\$303.60
Net Return per Acre	\$32.83	\$40.40	\$39.56	\$146.74	\$80.69
Total Direct Expenses per Bu.	\$3.77	\$3.19	\$2.92	\$2.73	\$3.19
Total Dir & Ovhd Exp per Bushel	\$5.32	\$4.54	\$4.41	\$4.00	\$4.62



<u>Beef Cow Calf</u>					
Price Recv'd/Cwt Calf Sold	\$212.33	\$206.46	\$156.42	\$147.47	\$151.73
Total Feed Cost/Cow	\$508.48	\$438.89	\$412.74	\$395.34	\$422.72
Return over Feed/Cow	\$786.66	\$425.07	\$220.55	\$302.85	\$269.10
Net Return/Cow	\$451.63	\$117.23	-\$84.29	-\$19.01	-\$54.31
Total Direct & Ovhd Expenses	\$843.51	\$746.72	\$717.58	\$717.20	\$746.13



<u>Dairy Cows</u>					
Production/Cow	23,765	24,034	24,598	24,830	23,974
Price Recv'd/Cwt Milk	\$24.36	\$17.75	\$16.33	\$17.72	\$16.44
Total Feed Cost/Cwt Milk	\$10.22	\$8.77	\$7.72	\$7.80	\$8.06
Return over Feed/Cwt Milk	\$13.42	\$8.65	\$8.61	\$9.92	\$8.38
Net Return/Cwt Milk	\$5.26	\$1.20	\$0.44	\$1.38	-\$0.16
Total Direct & Ovhd Expenses	\$18.38	\$16.22	\$14.87	\$15.22	\$15.45



Minnesota 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*
-

MnSCU 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



MINNESOTA STATE
Agricultural Centers of Excellence

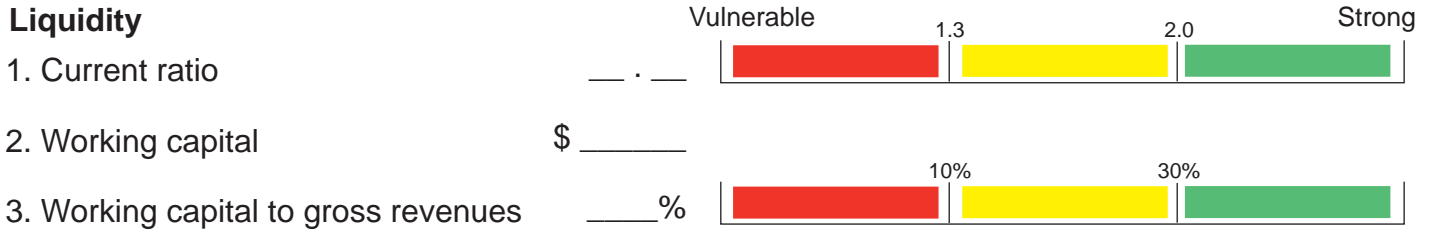


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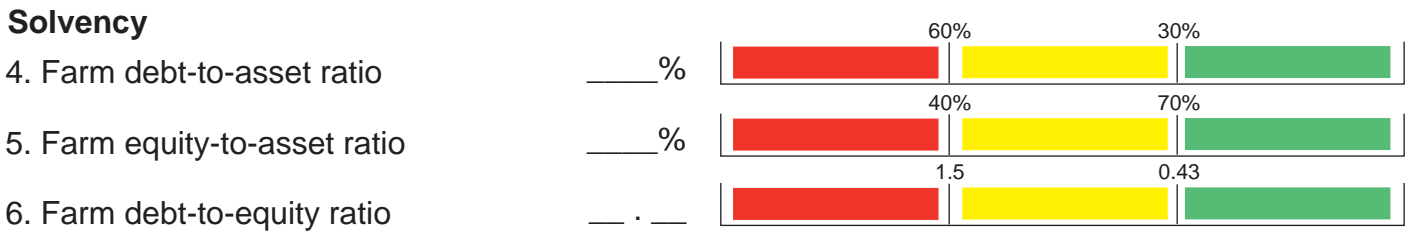
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Farm Finance Scorecard

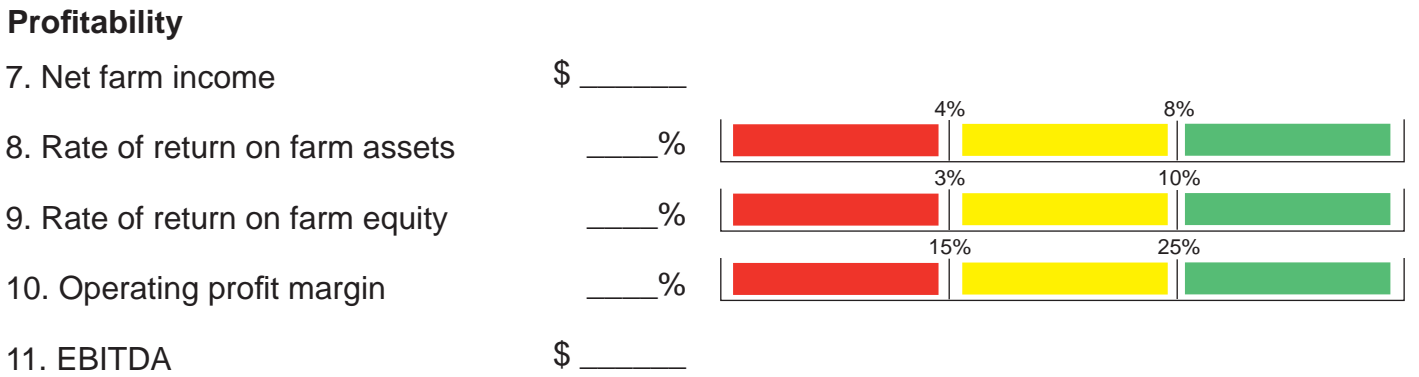
Liquidity



Solvency



Profitability



Repayment capacity



Financial efficiency

