



# FARM BUSINESS MANAGEMENT

## Northern Minnesota 2023 ANNUAL REPORT



April, 2024



MINNESOTA STATE



[www.agcentric.org](http://www.agcentric.org)

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



## MINNESOTA STATE



### Central Lakes



**Beth Berlin**  
Staples  
(320) 232-9039



**Nicole (Niki) Brixius**  
Pierz  
(320) 293-8020



**Nate Converse**  
Little Falls  
(218) 296-1272



**Narayan Dhakal**  
Urban FBM-Metro  
(651) 500-1096



**Erik Heimark**  
Specialty Crop-  
Statewide  
(218) 232-1303



**Kathy Hommerding**  
Belgrade  
(320) 333-4750



**Ben Olander**  
Melrose  
(218) 296-2273



**Ed Uhlenkamp**  
Staples  
(320) 360-2747



**Jim Velve**  
Detroit Lakes  
(218) 234-3981

### Northland



**Greg Dvergsten**  
Thief River Falls  
(218) 686-7273



**Ron Dvergsten**  
Thief River Falls  
(218) 686-5448



**Doug Fjerstad**  
Fosston  
(218) 280-8843



**Bill Gass**  
Fergus Falls  
(320) 905-8057



**Betsy Jensen**  
East Grand Forks  
(218) 689-5375



**Kelly Klinkhammer**  
Fosston  
(218) 766-9176



**Josh Tjosaas**  
Moorhead  
(320) 583-5056



**James Widner**  
Thief River Falls  
(218) 991-2210

### St. Cloud



**Jim Kocherer**  
Mora  
(763) 218-7030



**Jim Molenaar**  
St. Cloud  
(320) 308-5074



**Ken Thiesen**  
St. Cloud  
(320) 309-3293

### Alexandria



**Craig Will**  
Alexandria  
(320) 250-0354

### Minnesota West



**Deron Erickson**  
Barrett  
(320) 808-5187

**TABLE OF CONTENTS**

<b>Description</b>	<b>Page Number</b>	
Table of Contents	1	
Rural Mental Health program overview and AgCentric information	2	
Executive Summary	3	
Northern Minnesota Financial Information	5-Year Financial Trend Summary	4
	Year at a Glance	5
	Financial Summary: Selected Factors sorted by Type of Farm with graphs	6 - 7
	Average Money Spent Chart and Report Overview	8
	Financial Summary: Selected Factors sorted by Years Farming	9
	Financial Summary: Selected Factors sorted by Gross Income	10
	Financial Summary: Selected Factors sorted by Total Crop Acres	11
	Farm Income Statement	12 - 13
	Balance Sheet - "Cost Value Basis" and "Market Value Basis"	14 - 15
	Definitions of Financial Standards Measures	16 - 18
	Graphic Summary of Selected Financial Guideline Measures	19
	Financial Standards Measures and "How does your Farm Stack Up?"	20 - 21
	Liquidity and Repayment Capacity Measures	22
	Operator and Labor Information	23
	Household & Personal Expense Reported	24
Nonfarm Summary	25	
Crop Production and Marketing Summary	26	
Financial Summary: Specialty Crop Producers	27	
Overview of Enterprise Tables and Machine Cost per Acre	28	
Five Year Graphic History of Selected Crop Data	29	
Northern Minnesota Crop Enterprises	Corn	30-31
	Soybeans	32-33
	Spring Wheat	34-35
	Corn Silage	36-37
	Hay, Alfalfa	38-39
	Hay, Mixed & Hay, Grass	40
	Establish Alfalfa Hay, Oatlage, Sorghum Silage, & Perennial Rye Grass Seed	41
	Irrigated Crops: Corn, Corn Silage, Potatoes, Soybeans & Dark Red Kidney Beans	42
	Small Grains: Barley, Oats, Rye, & Winter Wheat	43
	Edible Beans & Other: Navy Beans, Black Turtle Beans, Canola, & Seed Soybeans	44
	Organic Crops: Corn, Corn Silage, Alfalfa, & Pasture	45
	Corn Grown after Cover Crop	46
Soybeans Grown after Cover Crop	47	
Alexandria and Northland Technical & Community College information	48	
St. Cloud Technical & Community College and Central Lakes College information	49	
Statewide Livestock Enterprises	Dairy Cows - excluding Organic & Organic Transition	50-51
	Dairy Cows - Sorted by Herd Size	52
	Dairy Cows - Organic Production	53
	Dairy Cows and Dairy Replacements Combined	54
	Graphic Summary of Selected Dairy Factors	55
	Dairy Replacement Heifers	56
	Dairy Finishing and Dairy Feeders	57
	Beef Cow-Calf - excluding Backgrounding	58
	Beef Cow-Calf - with Backgrounding	59
	Beef Cow-Calf - Sorted by Herd Size	60
	Beef Finishing & Beef Backgrounding	61
	Sheep, Market Lamb Production	62
	Hogs, Finish Feeder Pigs & Weaning to Finish	63
Selected Crop & Livestock Enterprise Trend Summary	64	

# AGRICULTURAL MENTAL HEALTH & WELLNESS

The purpose of this program is to offer support to people who work in agriculture, providing ways to cope with and manage stress.

*You matter.  
No concern is too small.*

Experienced agricultural-focused mental health providers provide counseling services to farm individuals, couples, and/or families anywhere in the state – in person, via telephone, or Zoom,



**Ted Matthews, M.S.**

(320) 266-2390 | [tdmatt@info-link.net](mailto:tdmatt@info-link.net) | [farmcounseling.org](http://farmcounseling.org)  
Ted is a veteran and has worked with rural issues in counseling for over 45 years. He has been director of mental health services during two natural disasters in the 1990s. Ted also has extensive counseling experiences in the areas of crisis intervention, family issues, suicidology and domestic abuse.



**Monica McConkey, MA, LPC**

(218) 280-7785 | [monicamariem@yahoo.com](mailto:monicamariem@yahoo.com) | [eyesonthehorizon.org](http://eyesonthehorizon.org)  
Monica has worked in the mental health sector for the past 25 years. Her background includes work with youth and adults and covers a wide range of emotional challenges. Her recent work focuses on emotional stress of farmers and consulting with agriculture industry groups.

*Supported in Partnership with:*



Minnesota Farm and Rural Helpline  
1-833-600-2670  
Available 24/7



Serving Minnesota's Farmers Through  
Farm Business Management

## 2023 Annual Report – Executive Summary

The 2023 farm year was the lowest net farm income in the past 4 years. Weather again played a major factor for many Northern Minnesota producers in production and profitability. Additionally, lower prices for most commodities and other crops were negative for many producers while another year of increasing input costs and overhead costs provided an increased challenge for operations to pursue profitable marketing strategies. The decreased cost of commodity crops at the end of the year did provide an advantage to many livestock producers when purchasing feeds and forages.

In 2023, Average Net Farm Income for the 581 farms in the Northern Minnesota database was \$82,849. This was down from the \$243,910 reported in 2022 and the lowest number since 2019. Median Net Farm Income was down as well, decreasing to \$40,629 in 2023, compared to \$135,642 in 2022.

Financial Factors	2016	2017	2018	2019	2020	2021	2022	2023
Average Net Farm Income	\$59,480	\$54,021	\$59,306	\$72,208	\$156,941	\$189,843	\$243,910	\$82,849
Median Net Farm Income	\$25,654	\$23,489	\$25,857	\$29,325	\$85,468	\$100,804	\$135,642	\$40,629

Most key financial measures showed decreases compared to 2022. Working Capital decreased in 2023 to \$317,100 at the end of 2023 compared to \$411,782 at the end of 2022; a decrease of 23.0%. Working Capital represents the dollar amount remaining after subtracting current liabilities from current assets. The 2023 Northern Minnesota term debt coverage average was 1.35 compared to 2.79 in 2022. 2023 brought lower prices for most producers, the Operating Expense Ratio came significantly higher in 2023 at 80.5% compared to 69.4% in 2022.

The Dairy industry showed some large decreases in net return per cow due to lower average milk price in 2023. However, they did have a lower cost of production compared to 2022. The Beef Cow Calf producers saw the highest net return per cow since 2015 with an average net return of \$98. The main reason for the positive net return was the average price received for the sale of calves, especially the second half of 2023.

Statewide FBM Data	Dairy (Excluding Organic & Organic Transition)			Beef Cow-Calf (Excluding backgrounding)		
	2021	2022	2023	2021	2022	2023
Feed Cost / Cow	\$2,424	\$2,908	\$2,780	\$550	\$640	\$624
Dir & Ovhd Expense/Cow	\$4,316	\$5,054	\$5,000	\$930	\$1,051	\$1,044
Net Return / Cow	\$208	\$686	\$37	(\$166)	(\$236)	\$98
Average Milk Price	\$18.41	\$24.24	\$19.14	xxx	xxx	xxx
Cost of Prod per CWT w/LaborMgmt	\$18.23	\$22.23	\$19.71	xxx	xxx	xxx
Average Price per CWT Calf Sold	xxx	xxx	xxx	\$153.79	\$180.23	\$223.17

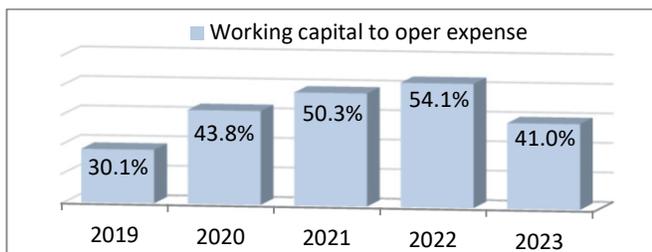
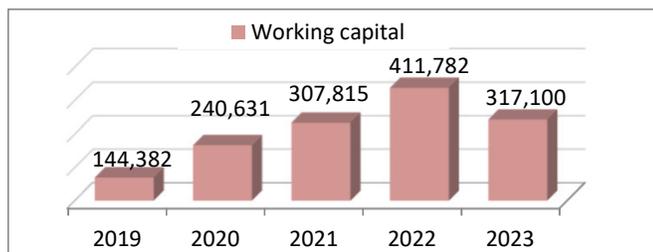
2023 showed a decrease in yields for the northern half of Minnesota for corn and soybeans, while spring wheat saw the highest yield since 2017. The three major commodity crops had average yields per acre of 159.3 bushels for corn, 39.4 bushels for soybeans, and 67.4 bushels for spring wheat. Net returns were positive on all three crops for the fifth consecutive year. The chart below displays the 3-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	2021	124.6	\$5.30	\$760.77	\$595.92	\$164.85	\$4.78
	2022	169.4	\$6.06	\$1,039.01	\$779.41	\$259.60	\$4.60
	2023	159.3	\$4.69	\$827.02	\$774.29	\$52.74	\$4.86
Soybeans	2021	30.3	\$12.21	\$433.62	\$350.45	\$83.17	\$11.54
	2022	39.9	\$13.89	\$571.32	\$420.41	\$150.91	\$9.02
	2023	39.4	\$12.44	\$515.79	\$442.87	\$72.92	\$11.24
Spring Wheat	2021	49.5	\$8.55	\$471.75	\$344.24	\$127.50	\$6.96
	2022	64.9	\$9.18	\$610.33	\$477.43	\$132.91	\$7.36
	2023	67.4	\$7.36	\$522.42	\$481.84	\$40.59	\$7.15

Trend information for the 2019-2023 Financial Summary can be found on page 4 of this report. A quick look at 2023 can be found on page 5 as the “Year at a Glance”. The impact of spending on the farm economy of Northern Minnesota by the average farmer can be found on page 8.

**Financial Trend Summary**  
**Northern Minnesota Farm Business Management Data**

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
<b>Income Statement</b>					
Gross Cash Farm Income	605,725	756,236	827,310	995,003	936,512
Total Cash Farm Expense	511,025	613,229	659,356	813,509	798,952
Net Cash Farm Income	94,700	143,007	167,954	181,494	137,560
Inventory change	16,031	60,809	70,834	115,164	3,823
Depreciation	-45,887	-49,447	-51,218	-58,105	-61,240
Net Farm Income From Operations	64,844	154,368	187,570	238,553	80,142
Gain or loss on capital sales	7364	2,573	2,272	5,357	2,707
Average Net Farm Income	72,208	156,941	189,843	243,910	82,849
Median Net Farm Income	29,325	85,468	100,804	135,642	40,629
<b>Profitability (Cost)</b>					
Rate of Return on Assets	3.4%	7.5%	8.6%	9.4%	3.00%
Rate of Return on Equity	2.4%	10.4%	12.6%	13.7%	1.70%
Operating Profit Margin	10.9%	21.6%	23.3%	23.4%	8.80%
Asset Turnover Rate	30.8%	34.8%	37.1%	40.0%	33.80%
<b>Liquidity &amp; Repayment (end of year)</b>					
Current Assets	414,578	508,521	565,640	709,502	641,890
Current Liabilities	270,196	267,890	257,825	297,720	324,790
Current Ratio	1.53	1.90	2.19	2.38	1.98
Working capital	144,382	240,631	307,815	411,782	317,100
Change in working capital	11,194	88,962	89,894	106,221	-52,284
Working capital to oper expense	30.1%	43.8%	50.3%	54.1%	41.0%
Term Debt Coverage Ratio	1.35	2.38	2.69	2.79	1.3
Replacement coverage ratio	1.07	1.87	2.11	2.13	1.06
Term debt to EBITDA	3.55	2.41	2.21	2.09	3.63
<b>Solvency (Market)</b>					
Number of Farms	572	577	572	541	581
Total Assets	2,290,635	2,572,803	2,779,321	3,177,907	3,170,008
Total Liabilities	1,029,465	1,128,308	1,205,480	1,372,057	1,381,327
Net Worth	1,261,170	1,444,495	1,573,841	1,805,850	1,788,681
Net Worth Change	57,514	169,349	210,368	245,330	128,902
Farm Debt to Asset Ratio	47%	46%	46%	45%	46%
Total Debt to Asset Ratio	45%	44%	43%	43%	44%
Change in total net worth %	5%	13%	15%	16%	8%
<b>Nonfarm Information</b>					
Net Nonfarm Income	33,283	39,596	40,553	36,341	39,600
Farms Reporting Liv Expenses	70	74	77	66	72
Total Family Living Expense	51,527	55,350	55,816	70,186	70,074
Total Living, Invest, & Cap Purch	74,591	62,491	86,705	96,112	95,297
<b>Crop Acres</b>					
Total Crop Acres	798	828	831	878	813
Total Crop Acres Owned	245	246	247	259	241
Total Crop Acres Cash Rented	545	576	575	613	567
Total Crop Acres Share Rent	8	7	8	6	5
Machinery value per crop acre	580	608	652	712	786



<u><b>Year at a Glance</b></u>			<b>State</b>		<b>Your</b>	<b>Your</b>
<i>Data for the Average Farm</i>	<b>Northern</b>	<b>FBM</b>	<b>Local</b>		<b>Farm</b>	<b>Farm</b>
	<b>Minnesota</b>	<b>Data</b>	<b>Area</b>		<b>Data</b>	<b>Goal</b>
	<b>581</b>	<b>2317</b>				
	<b><u>Farms</u></b>	<b><u>Farms</u></b>				
<b><u>Income Statement</u></b>						
Gross Cash Farm Income	\$936,512	\$1,099,812	_____	_____	_____	
Total Cash Operating Expense	\$798,952	\$904,500	_____	_____	_____	
Net Cash Farm Income	\$137,560	\$195,312	_____	_____	_____	
Net Operating Profit	\$141,383	\$155,020	_____	_____	_____	
Net Farm Income	\$82,849	\$93,936	_____	_____	_____	
Median Farm Income	\$40,629	\$44,596	_____	_____	_____	
<b><u>Balance Sheet (Market)</u></b>						
Total Assets - 12/31	\$3,170,008	\$3,889,238	_____	_____	_____	
Total Liabilities - 12/31	\$1,381,327	\$1,601,661	_____	_____	_____	
Net Worth - 12/31	\$1,788,681	\$2,287,577	_____	_____	_____	
Change in Net Worth	\$128,902	\$155,883	_____	_____	_____	
<b><u>Financial Standards Measures</u></b>						
Working Capital - 12/31	\$317,100	\$446,877	_____	_____	_____	
Debt to Asset Ratio - 12/31	45%	44%	_____	_____	_____	
Rate of Return on Farm Assets - Cost	3.0%	2.8%	_____	_____	_____	
Rate of Return on Farm Equity - Cost	1.7%	1.7%	_____	_____	_____	
Term Debt Coverage Ratio	1.35	1.38	_____	_____	_____	
Asset Turnover Rate	33.8%	33.6%	_____	_____	_____	
Operating Expense Ratio	80.5%	81.3%	_____	_____	_____	
Interest Expense Ratio	4.8%	4.3%	_____	_____	_____	
<b><u>Operator Information</u></b>						
Average Age of the Farmer	46.9	47.4	_____	_____	_____	
Average Years Farming	21.8	22.8	_____	_____	_____	
<b><u>Personal Spending &amp; Income</u></b>						
Total Cash Family Living Expense	\$69,097	\$77,476	_____	_____	_____	
Total Non Farm Income	\$39,600	\$42,436	_____	_____	_____	

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.

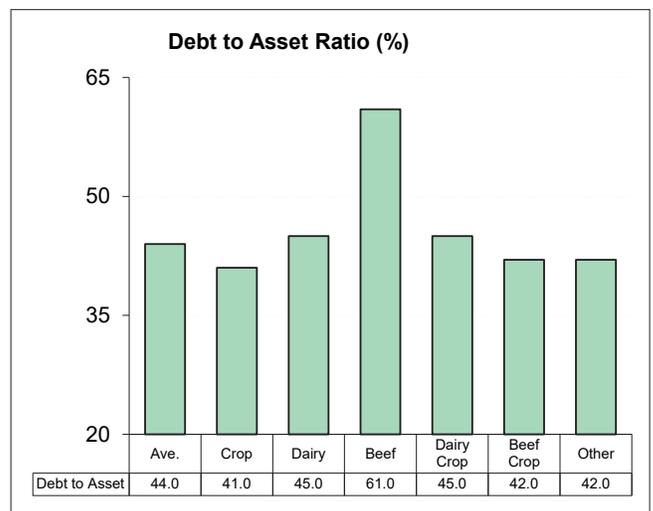
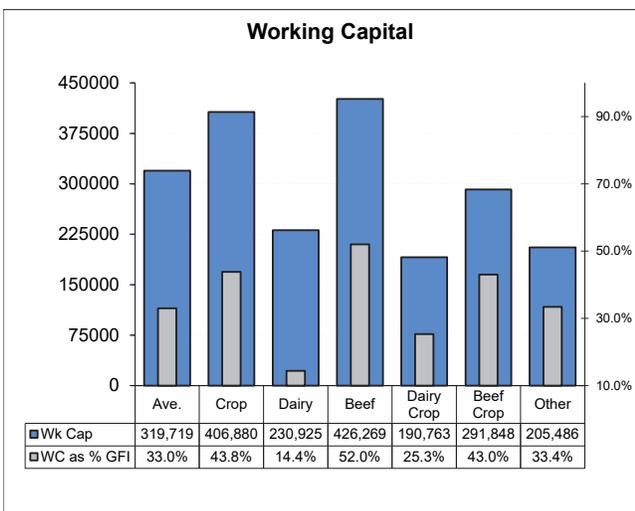
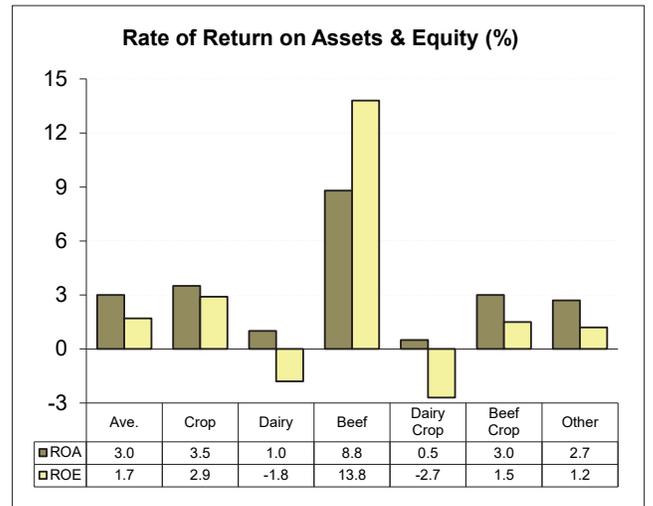
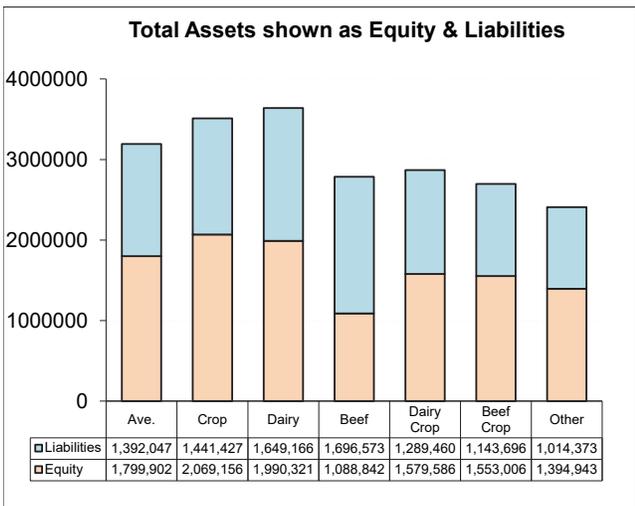
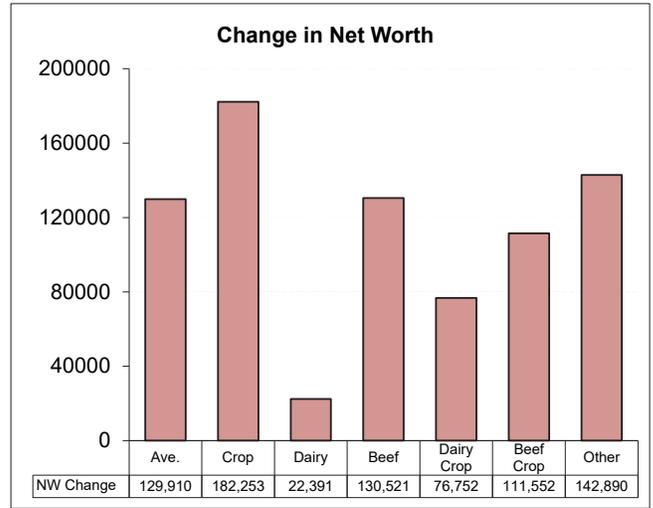
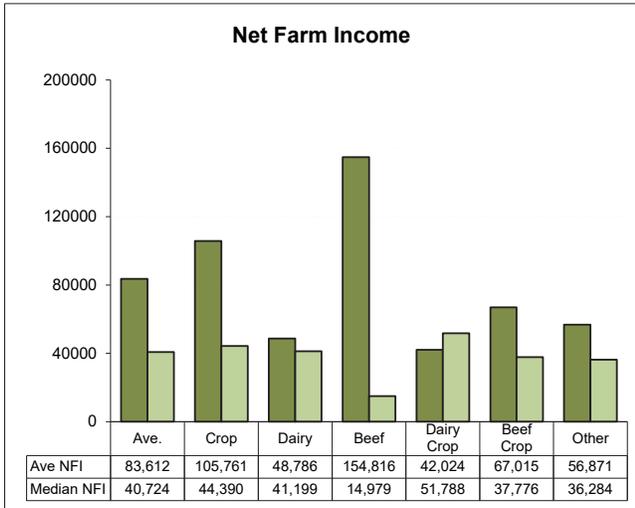
The following list shows expenses for the year:

		<u>Northern Minnesota</u>	<u>State Data</u>
Net Farm Income	(+)	\$82,849	\$93,936
Depreciation	(+)	\$61,240	\$66,032
Family Living (Excl Health/Med)	(-)	\$60,554	\$67,223
Social Security and Income Tax	(-)	\$9,835	\$21,360
Health and Medical Expense	(-)	\$8,543	\$10,253
Retirement Accounts	(-)	\$4,746	\$22,731
Principal Payments	(-)	\$80,007	\$80,237
Balance	(=)	<b>-\$19,596</b>	<b>-\$41,836</b>

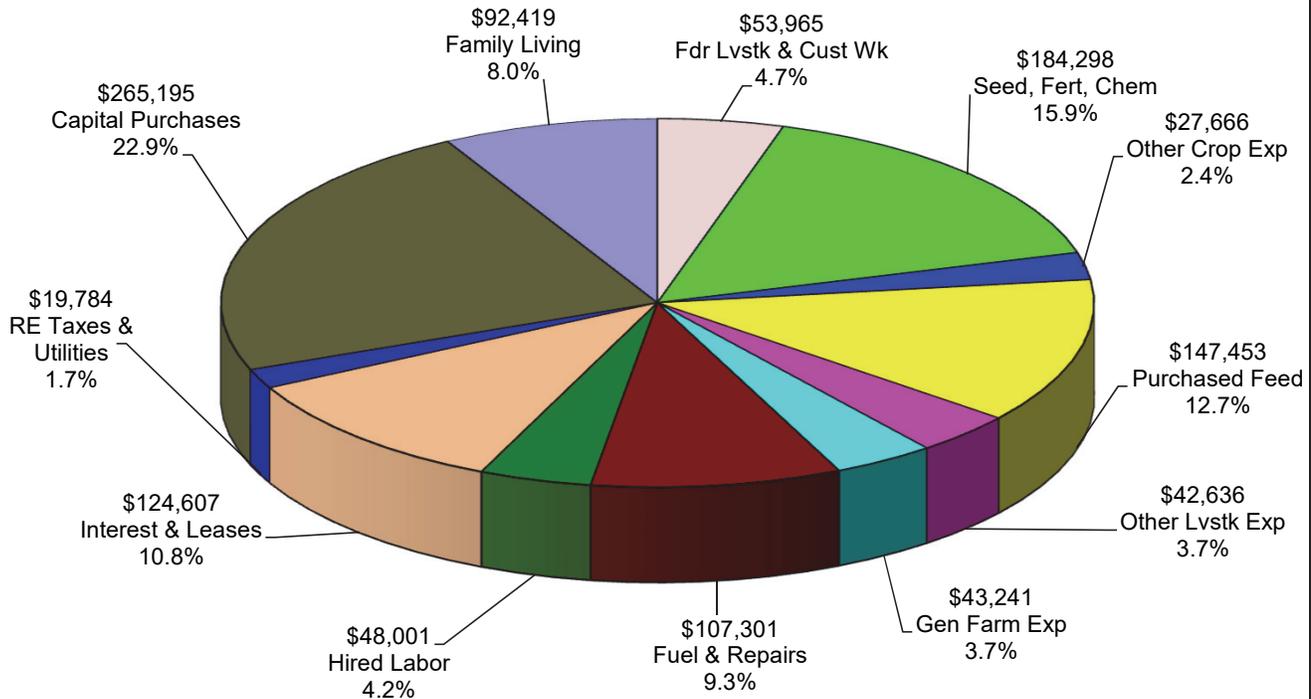
**Financial Summary**  
**Northern Minnesota Farm Business Management Data**  
**(Farms Sorted By Farm Type)**

	<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	576	256	111	41	25	42	95
<b>Income Statement</b>							
Gross cash farm income	944,395	912,445	1,618,287	623,686	794,617	656,463	591,202
Total cash farm expense	805,608	730,988	1,443,590	637,427	636,026	566,085	519,361
Net cash farm income	138,786	181,458	174,697	-13,742	158,591	90,378	71,841
Inventory change	3,815	-13,130	-38,600	195,163	-56,322	22,256	23,400
Depreciation	-61,720	-66,101	-86,518	-26,879	-69,263	-50,961	-41,475
Net farm income from operations	80,881	102,227	49,579	154,542	33,006	61,673	53,765
Gain or loss on capital sales	2,730	3,534	-793	274	9,018	5,342	3,106
Average net farm income	83,612	105,761	48,786	154,816	42,024	67,015	56,871
Median net farm income	40,724	44,390	41,199	14,979	51,788	37,776	36,284
<b>Profitability (cost)</b>							
Rate of return on assets	3.0 %	3.5 %	1.0 %	8.8 %	0.5 %	3.0 %	2.7 %
Rate of return on equity	1.7 %	2.9 %	-1.8 %	13.8 %	-2.7 %	1.5 %	1.2 %
Operating profit margin	8.8 %	9.3 %	2.9 %	33.0 %	2.0 %	11.5 %	9.9 %
Asset turnover rate	33.8 %	37.4 %	35.3 %	26.7 %	26.5 %	25.9 %	27.5 %
<b>Profitability (market)</b>							
Rate of return on assets	4.4 %	5.4 %	1.5 %	6.1 %	1.9 %	3.5 %	6.2 %
Rate of return on equity	5.0 %	7.0 %	-0.4 %	8.7 %	0.4 %	3.0 %	8.4 %
Operating profit margin	15.6 %	17.8 %	5.0 %	25.6 %	8.5 %	15.8 %	29.4 %
Asset turnover rate	28.2 %	30.5 %	30.8 %	23.7 %	22.8 %	22.2 %	21.2 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	647,263	784,128	500,217	1,019,039	368,940	599,296	411,054
Current liabilities	327,544	377,248	269,292	592,769	178,177	307,447	205,568
Current ratio	1.98	2.08	1.86	1.72	2.07	1.95	2.00
Working capital	319,719	406,880	230,925	426,269	190,763	291,848	205,486
Change in working capital	-52,749	-99,571	-87,012	161,585	-66,007	-18,814	8,214
Working capital to gross revenue	33.0 %	43.8 %	14.4 %	52.0 %	25.3 %	43.0 %	33.4 %
Working capital to oper expense	41.0 %	56.8 %	16.3 %	74.9 %	31.5 %	55.9 %	42.1 %
Debt coverage ratio	1.30	1.47	0.86	2.13	0.88	1.38	1.27
Term debt coverage ratio	1.35	1.54	0.85	2.61	0.88	1.49	1.30
Replacement coverage ratio	1.06	1.11	0.76	1.96	0.77	1.06	1.06
Term debt to EBITDA	3.63	2.99	4.93	2.70	5.72	3.88	4.12
<b>Solvency (end of year at cost)</b>							
Number of farms	576	256	111	41	25	42	95
Total assets	2,643,229	2,874,523	3,163,706	2,473,183	2,429,887	2,307,417	1,785,367
Total liabilities	1,119,857	1,125,540	1,379,470	1,405,434	1,075,584	966,937	797,263
Net worth	1,523,372	1,748,983	1,784,236	1,067,749	1,354,304	1,340,479	988,105
Net worth change	69,055	100,335	-14,769	168,336	33,012	79,287	49,479
Farm debt to asset ratio	45 %	42 %	46 %	59 %	46 %	44 %	46 %
Total debt to asset ratio	42 %	39 %	44 %	57 %	44 %	42 %	45 %
Change in earned net worth %	5 %	6 %	-1 %	19 %	2 %	6 %	5 %
<b>Solvency (end of year at market)</b>							
Number of farms	576	256	111	41	25	42	95
Total assets	3,191,949	3,510,583	3,639,487	2,785,415	2,869,046	2,696,702	2,409,316
Total liabilities	1,392,047	1,441,427	1,649,166	1,696,573	1,289,460	1,143,696	1,014,373
Net worth	1,799,903	2,069,156	1,990,321	1,088,842	1,579,586	1,553,006	1,394,943
Total net worth change	129,910	182,253	22,391	130,521	76,752	111,552	142,890
Farm debt to asset ratio	46 %	44 %	48 %	64 %	47 %	45 %	44 %
Total debt to asset ratio	44 %	41 %	45 %	61 %	45 %	42 %	42 %
Change in total net worth %	8 %	10 %	1 %	14 %	5 %	8 %	11 %
<b>Nonfarm Information</b>							
Net nonfarm income	39,567	50,068	12,324	58,609	16,404	34,704	43,630
Farms reporting living expenses	72	27	17	1	4	6	16
Total family living expense	70,074	76,438	66,235	-	-	73,952	64,999
Total living, invest, cap. purch	95,297	111,974	73,184	-	-	84,785	102,963
<b>Crop Acres</b>							
Total crop acres	820	1,292	477	346	509	629	351
Total crop acres owned	243	337	153	143	224	244	149
Total crop acres cash rented	572	944	324	201	286	383	202
Total crop acres share rented	5	12	-	1	-	2	1
Machinery value per crop acre	786	640	1,303	769	1,230	910	1,173

## Selected Factors by Type of Farm



**Each farmer, on average, spent \$1,156,566 in the Greater Community in 2023**



**Average Money Spent by Each Farmer in the Greater Community: \$1,156,566**

**Average Money Spent by Each Farmer in a 40 Yr Career: \$46,262,640**

**Money Spent in Community by 581 Farmers: \$671,964,846**

### 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 seven two-year colleges. The 2023 Northern Minnesota Annual Report includes data from Farm Business Management programs administered by: Northland Community & Technical College, Central Lakes College, Alexandria Technical & Community College, and St. Cloud Technical & Community Colleges.*

*This report was prepared under the direction of Ron Dvergsten, Josh Tjosaas, Nate Converse, and DelRay Lecy through AgCentric, the Northern Center of Excellence for Agriculture. A special thank you goes to Keith Olander, AgCentric Executive Director, 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	581	172	140	83	76	110
<b>Income Statement</b>						
Gross cash farm income	936,512	487,115	1,212,664	1,068,920	1,217,993	993,352
Total cash farm expense	798,952	416,876	1,066,374	954,700	983,204	811,203
Net cash farm income	137,560	70,239	146,291	114,221	234,789	182,148
Inventory change	3,823	13,692	7,043	83,398	-17,934	-60,721
Depreciation	-61,240	-29,889	-66,403	-72,657	-88,348	-76,347
Net farm income from operations	80,142	54,042	86,931	124,962	128,506	45,081
Gain or loss on capital sales	2,707	434	2,047	2,996	8,264	3,043
Average net farm income	82,849	54,476	88,978	127,957	136,770	48,123
Median net farm income	40,629	28,456	67,945	35,661	67,333	36,755
<b>Profitability (cost)</b>						
Rate of return on assets	3.0 %	3.4 %	3.0 %	4.5 %	3.5 %	0.9 %
Rate of return on equity	1.7 %	2.7 %	1.8 %	4.1 %	2.8 %	-1.4 %
Operating profit margin	8.8 %	9.0 %	7.7 %	14.2 %	11.2 %	3.0 %
Asset turnover rate	33.8 %	37.7 %	39.3 %	31.4 %	31.1 %	29.5 %
<b>Profitability (market)</b>						
Rate of return on assets	4.4 %	4.7 %	3.8 %	4.8 %	4.1 %	4.7 %
Rate of return on equity	5.0 %	6.1 %	4.0 %	5.8 %	4.4 %	5.5 %
Operating profit margin	15.6 %	14.0 %	11.2 %	18.6 %	15.5 %	21.1 %
Asset turnover rate	28.2 %	33.8 %	34.4 %	25.8 %	26.2 %	22.3 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	641,890	268,165	680,839	1,024,106	876,059	726,498
Current liabilities	324,790	151,544	387,246	580,712	338,762	313,437
Current ratio	1.98	1.77	1.76	1.76	2.59	2.32
Working capital	317,100	116,622	293,593	443,393	537,297	413,061
Change in working capital	-52,284	-15,141	-74,628	10,736	-97,211	-98,434
Working capital to gross revenue	33.0 %	23.0 %	23.3 %	38.0 %	43.8 %	43.7 %
Working capital to oper expense	41.0 %	29.0 %	27.9 %	49.4 %	56.3 %	53.2 %
Debt coverage ratio	1.30	1.58	1.23	1.46	1.37	0.98
Term debt coverage ratio	1.35	1.64	1.26	1.56	1.41	0.98
Replacement coverage ratio	1.06	1.34	1.06	1.23	1.04	0.71
Term debt to EBITDA	3.63	3.50	3.82	3.54	3.18	4.09
<b>Solvency (end of year at cost)</b>						
Number of farms	581	172	140	83	76	110
Total assets	2,624,660	1,271,333	2,887,597	3,416,674	3,761,114	3,023,327
Total liabilities	1,111,367	655,151	1,366,423	1,609,484	1,248,314	1,029,634
Net worth	1,513,293	616,181	1,521,174	1,807,191	2,512,800	1,993,693
Net worth change	68,337	53,776	78,544	119,839	132,701	-5,215
Farm debt to asset ratio	45 %	54 %	49 %	49 %	36 %	37 %
Total debt to asset ratio	42 %	52 %	47 %	47 %	33 %	34 %
Change in earned net worth %	5 %	10 %	5 %	7 %	6 %	0 %
<b>Solvency (end of year at market)</b>						
Number of farms	581	172	140	83	76	110
Total assets	3,170,008	1,472,127	3,292,651	4,159,215	4,456,600	4,033,467
Total liabilities	1,381,327	731,199	1,613,103	2,038,106	1,632,966	1,433,475
Net worth	1,788,681	740,928	1,679,548	2,121,109	2,823,634	2,599,992
Total net worth change	128,902	86,871	115,864	172,775	176,807	145,019
Farm debt to asset ratio	46 %	54 %	51 %	51 %	40 %	38 %
Total debt to asset ratio	44 %	50 %	49 %	49 %	37 %	36 %
Change in total net worth %	8 %	13 %	7 %	9 %	7 %	6 %
<b>Nonfarm Information</b>						
Net nonfarm income	39,600	44,714	37,218	45,317	32,630	35,140
Farms reporting living expenses	72	10	19	14	16	13
Total family living expense	70,074	81,372	68,560	76,150	68,405	59,109
Total living, invest, cap. purch	95,297	96,794	82,777	121,242	87,060	94,638
<b>Crop Acres</b>						
Total crop acres	813	400	996	843	1,035	1,051
Total crop acres owned	241	84	226	282	294	437
Total crop acres cash rented	567	315	770	550	738	597
Total crop acres share rented	5	1	0	11	3	16
Machinery value per crop acre	786	690	645	892	960	831

**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	581	79	95	120	119	108	60
<b>Income Statement</b>							
Gross cash farm income	936,512	49,027	179,808	373,708	705,865	1,379,867	4,088,164
Total cash farm expense	798,952	54,537	157,676	317,239	567,796	1,129,526	3,621,300
Net cash farm income	137,560	-5,510	22,132	56,469	138,070	250,341	466,863
Inventory change	3,823	8,108	7,597	13,891	-2,445	-62,303	103,524
Depreciation	-61,240	-7,963	-16,136	-29,816	-52,599	-93,293	-225,095
Net farm income from operations	80,142	-5,365	13,592	40,543	83,025	94,745	345,292
Gain or loss on capital sales	2,707	3,721	388	1,808	2,740	6,710	-432
Average net farm income	82,849	-1,644	13,980	42,352	85,766	101,455	344,860
Median net farm income	40,629	-2,612	14,064	35,801	84,961	106,582	225,599
<b>Profitability (cost)</b>							
Rate of return on assets	3.0 %	-4.0 %	0.5 %	1.7 %	3.0 %	2.6 %	4.4 %
Rate of return on equity	1.7 %	-11.6 %	-3.5 %	-0.3 %	2.1 %	0.9 %	4.2 %
Operating profit margin	8.8 %	-34.6 %	2.1 %	5.8 %	9.9 %	7.5 %	11.2 %
Asset turnover rate	33.8 %	11.7 %	21.9 %	29.7 %	30.7 %	34.2 %	39.5 %
<b>Profitability (market)</b>							
Rate of return on assets	4.4 %	1.4 %	2.4 %	3.5 %	6.1 %	4.2 %	4.5 %
Rate of return on equity	5.0 %	0.1 %	1.3 %	3.5 %	8.0 %	4.7 %	5.2 %
Operating profit margin	15.6 %	16.9 %	14.0 %	15.0 %	24.8 %	15.0 %	12.8 %
Asset turnover rate	28.2 %	8.2 %	17.3 %	23.1 %	24.6 %	28.1 %	35.3 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	641,890	46,728	146,238	279,463	514,024	978,239	2,583,325
Current liabilities	324,790	27,359	64,273	127,781	233,321	535,037	1,325,882
Current ratio	1.98	1.71	2.28	2.19	2.20	1.83	1.95
Working capital	317,100	19,369	81,965	151,682	280,704	443,202	1,257,443
Change in working capital	-52,284	5,384	6,090	-19,832	-38,336	-132,172	-169,408
Working capital to gross revenue	33.0 %	34.2 %	42.7 %	38.8 %	39.2 %	32.6 %	29.5 %
Working capital to oper expense	41.0 %	42.0 %	56.5 %	50.8 %	51.6 %	40.2 %	35.6 %
Debt coverage ratio	1.30	1.58	1.20	1.32	1.33	1.14	1.40
Term debt coverage ratio	1.35	1.60	1.21	1.35	1.37	1.17	1.47
Replacement coverage ratio	1.06	1.31	0.94	1.08	1.04	0.90	1.19
Term debt to EBITDA	3.63	15.62	6.62	4.22	3.55	3.71	2.94
<b>Solvency (end of year at cost)</b>							
Number of farms	581	79	95	120	119	108	60
Total assets	2,624,660	612,398	999,640	1,409,227	2,305,415	3,723,453	8,933,294
Total liabilities	1,111,367	261,552	453,249	606,422	894,504	1,638,100	3,764,188
Net worth	1,513,293	350,846	546,391	802,805	1,410,911	2,085,353	5,169,107
Net worth change	68,337	23,940	28,997	37,845	61,188	82,828	238,163
Farm debt to asset ratio	45 %	49 %	51 %	46 %	42 %	46 %	43 %
Total debt to asset ratio	42 %	43 %	45 %	43 %	39 %	44 %	42 %
Change in earned net worth %	5 %	7 %	6 %	5 %	5 %	4 %	5 %
<b>Solvency (end of year at market)</b>							
Number of farms	581	79	95	120	119	108	60
Total assets	3,170,008	913,054	1,234,945	1,819,152	2,885,473	4,535,672	10,013,360
Total liabilities	1,381,327	308,018	519,305	731,560	1,129,003	2,053,943	4,748,652
Net worth	1,788,681	605,035	715,640	1,087,592	1,756,470	2,481,729	5,264,708
Total net worth change	128,902	54,872	51,381	90,543	157,654	172,760	289,870
Farm debt to asset ratio	46 %	41 %	46 %	43 %	42 %	47 %	49 %
Total debt to asset ratio	44 %	34 %	42 %	40 %	39 %	45 %	47 %
Change in total net worth %	8 %	10 %	8 %	9 %	10 %	7 %	6 %
<b>Nonfarm Information</b>							
Net nonfarm income	39,600	64,644	54,539	44,870	24,100	28,595	22,987
Farms reporting living expenses	72	7	5	18	23	15	4
Total family living expense	70,074	59,183	50,419	61,071	78,653	76,436	-
Total living, invest, cap. purch	95,297	61,221	61,731	93,310	93,753	130,871	-
<b>Crop Acres</b>							
Total crop acres	813	106	266	463	731	1,311	2,581
Total crop acres owned	241	59	132	181	264	381	474
Total crop acres cash rented	567	46	133	280	456	917	2,106
Total crop acres share rented	5	1	1	1	11	13	-
Machinery value per crop acre	786	654	758	681	794	760	855

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

	<b>Avg. Of All Farms</b>	<b>Less than 100</b>	<b>101 - 250</b>	<b>251 - 500</b>	<b>501 - 1,000</b>	<b>1,001 - 1,500</b>	<b>1,501 - 2,000</b>	<b>2,001 - 5,000</b>	<b>5,001 - 10,000</b>
Number of farms	581	108	83	122	124	55	28	54	6
<b>Income Statement</b>									
Gross cash farm income	936,512	497,482	274,733	494,839	817,614	1,222,292	1,710,930	2,289,157	9,749,219
Total cash farm expense	798,952	458,024	227,282	406,500	669,891	1,002,268	1,424,199	1,945,569	9,261,742
Net cash farm income	137,560	39,458	47,451	88,339	147,722	220,024	286,731	343,588	487,476
Inventory change	3,823	25,530	-3,467	-5,295	-10,019	7,375	-103,164	52,986	101,490
Depreciation	-61,240	-25,134	-20,569	-37,381	-61,299	-94,209	-113,124	-154,953	-322,809
Net farm income from operations	80,142	39,854	23,414	45,663	76,404	133,190	70,444	241,622	266,157
Gain or loss on capital sales	2,707	-177	2,882	2,169	1,625	11,078	20,223	-3,336	-27,011
Average net farm income	82,849	39,677	26,296	47,831	78,030	144,267	90,667	238,285	239,146
Median net farm income	40,629	6,389	19,189	39,614	65,014	118,268	67,054	167,046	473,690
<b>Profitability (cost)</b>									
Rate of return on assets	3.0 %	2.0 %	1.4 %	2.0 %	2.4 %	3.7 %	1.6 %	4.2 %	2.9 %
Rate of return on equity	1.7 %	-0.3 %	-1.4 %	0.1 %	1.2 %	3.3 %	-0.2 %	3.6 %	1.1 %
Operating profit margin	8.8 %	6.4 %	5.8 %	7.5 %	7.6 %	11.6 %	4.8 %	11.3 %	5.6 %
Asset turnover rate	33.8 %	31.8 %	24.8 %	27.2 %	31.6 %	31.9 %	33.6 %	37.5 %	52.3 %
<b>Profitability (market)</b>									
Rate of return on assets	4.4 %	4.0 %	3.0 %	3.4 %	3.6 %	4.7 %	3.2 %	6.5 %	2.2 %
Rate of return on equity	5.0 %	4.5 %	2.4 %	3.3 %	3.8 %	6.0 %	2.9 %	8.9 %	-0.1 %
Operating profit margin	15.6 %	15.8 %	15.8 %	15.1 %	14.0 %	17.9 %	11.0 %	20.6 %	4.3 %
Asset turnover rate	28.2 %	25.5 %	19.0 %	22.3 %	25.9 %	26.5 %	28.9 %	31.4 %	49.6 %
<b>Liquidity &amp; Repayment (end of year)</b>									
Current assets	641,890	213,574	157,517	303,494	517,392	860,635	1,245,400	2,263,529	4,048,421
Current liabilities	324,790	137,382	65,740	130,246	208,735	405,518	619,867	1,251,820	2,644,048
Current ratio	1.98	1.55	2.40	2.33	2.48	2.12	2.01	1.81	1.53
Working capital	317,100	76,192	91,777	173,247	308,656	455,117	625,533	1,011,708	1,404,373
Change in working capital	-52,284	2,343	283	-20,469	-36,461	-40,164	-192,724	-228,490	-730,198
Working capital to gross revenue	33.0 %	14.6 %	33.7 %	35.0 %	38.1 %	36.2 %	37.9 %	41.3 %	13.8 %
Working capital to oper expense	41.0 %	17.5 %	43.8 %	45.1 %	48.4 %	46.9 %	44.9 %	52.9 %	15.1 %
Debt coverage ratio	1.30	1.36	1.24	1.33	1.35	1.35	1.02	1.38	0.83
Term debt coverage ratio	1.35	1.40	1.25	1.36	1.38	1.39	1.02	1.47	0.79
Replacement coverage ratio	1.06	1.14	1.03	1.11	1.05	1.12	0.80	1.10	0.72
Term debt to EBITDA	3.63	4.12	5.19	4.43	3.73	3.57	3.48	2.93	3.39
<b>Solvency (end of year at cost)</b>									
Number of farms	581	108	83	122	124	55	28	54	6
Total assets	2,624,660	1,135,164	1,062,701	1,653,086	2,376,072	3,894,298	4,679,508	6,702,697	14,957,336
Total liabilities	1,111,367	574,332	436,293	709,232	911,803	1,539,538	1,695,263	3,003,264	7,411,528
Net worth	1,513,293	560,831	626,408	943,854	1,464,269	2,354,760	2,984,245	3,699,433	7,545,808
Net worth change	68,337	32,932	29,924	47,478	57,275	111,719	182,463	156,409	-28,639
Farm debt to asset ratio	45 %	52 %	47 %	44 %	40 %	44 %	38 %	46 %	50 %
Total debt to asset ratio	42 %	51 %	41 %	43 %	38 %	40 %	36 %	45 %	50 %
Change in earned net worth %	5 %	6 %	5 %	5 %	4 %	5 %	7 %	4 %	0 %
<b>Solvency (end of year at market)</b>									
Number of farms	581	108	83	122	124	55	28	54	6
Total assets	3,170,008	1,478,738	1,356,561	2,007,419	2,910,861	4,638,353	5,463,126	8,110,815	15,747,228
Total liabilities	1,381,327	667,516	526,703	848,571	1,141,213	1,952,049	2,149,532	3,850,864	9,078,866
Net worth	1,788,681	811,223	829,858	1,158,848	1,769,648	2,686,304	3,313,594	4,259,951	6,668,363
Total net worth change	128,902	65,088	53,804	90,753	113,186	180,763	270,066	374,255	-118,699
Farm debt to asset ratio	46 %	49 %	44 %	46 %	41 %	46 %	41 %	49 %	58 %
Total debt to asset ratio	44 %	45 %	39 %	42 %	39 %	42 %	39 %	47 %	58 %
Change in total net worth %	8 %	9 %	7 %	8 %	7 %	7 %	9 %	10 %	-2 %
<b>Nonfarm Information</b>									
Net nonfarm income	39,600	42,103	49,566	37,162	40,446	32,859	34,705	36,504	6,461
Farms reporting living expenses	72	7	17	17	14	8	4	5	-
Total family living expense	70,074	62,623	66,283	64,951	76,352	75,858	-	88,805	-
Total living, invest, cap. purch	95,297	78,195	93,495	90,718	84,370	107,605	-	157,182	-
<b>Crop Acres</b>									
Total crop acres	813	22	183	376	723	1,258	1,733	2,843	6,248
Total crop acres owned	241	13	96	156	262	448	445	722	150
Total crop acres cash rented	567	8	85	218	461	806	1,239	2,100	6,098
Total crop acres share rented	5	-	1	2	0	4	49	22	-
Machinery value per crop acre	786	3,084	1,185	951	889	791	747	681	600

**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	581	116	116	117
<b>Sale of Crops</b>				
Barley	2,828	4,940	236	3,317
Beans, Edible	12,046	18,108	-	27,406
Corn	147,857	175,212	73,510	305,667
Corn Silage	3,299	11,354	388	3,095
Hay, Alfalfa	1,683	1,358	1,153	4,118
Hay, Other	5,250	3,333	3,369	9,089
Specialty Crop Enterprises	1,490	-	2,414	-
Potatoes	16,000	4,183	-	75,308
Soybeans	132,738	124,976	61,308	309,154
Canola	8,852	7,316	1,214	27,092
Sunflowers	1,967	1,524	-	1,464
Oats	2,357	620	438	6,444
Rye	1,917	2,336	899	4,211
Wheat, Spring	50,565	32,144	18,204	146,661
Grass Seed	13,448	3,818	1,559	53,295
Other Crop Enterprises	6,314	2,805	371	22,906
Miscellaneous crop income	2,306	1,510	1,888	4,210
<b>Total Crop Sales</b>	<b>410,917</b>	<b>395,537</b>	<b>166,951</b>	<b>1,003,437</b>
<b>Sale of Livestock</b>				
Beef Cow-Calf, Beef Calves	22,759	6,596	8,291	83,072
Beef, Backgrounding	13,891	2,863	6,439	43,967
Beef, Finishing	18,727	7,576	7,527	51,008
Other Beef Enterprises	3,286	171	86	-
Dairy, Milk	260,084	549,009	111,469	207,845
Dairy Calves	5,576	13,798	1,450	4,039
Dairy Heifers (for sale)	1,852	1,438	538	4,793
Dairy Feeders & Backgrounding	4,284	7,622	2,723	7,546
Dairy Finishing	28,564	44,239	12,465	65,315
Hog and Pig Sales	291	-	688	622
Other Livestock Enterprises	8,454	2,866	2,295	-
Cull breeding livestock	20,204	38,619	11,243	17,768
Misc. livestock income	2,205	3,296	1,281	1,551
<b>Total Livestock &amp; Product Sales</b>	<b>390,177</b>	<b>678,093</b>	<b>166,495</b>	<b>487,526</b>
<b>Other farm income</b>				
Crop government payments	371	987	155	551
Conservation govt payments	4,392	2,366	2,059	12,335
Livestock govt payments	17,405	22,644	11,213	19,378
Other government payments	13,426	6,024	14,164	27,564
Custom work income	12,732	11,268	15,887	21,040
Patronage dividends, cash	9,382	11,137	5,038	18,926
Insurance income	42,710	64,090	18,336	74,655
Contract livestock income	14,983	7,660	4,335	13,715
Other farm income	20,017	23,245	9,061	33,345
<b>Total Other Farm Income</b>	<b>135,418</b>	<b>149,421</b>	<b>80,248</b>	<b>221,509</b>
<b>Gross Cash Farm Income</b>	<b>936,512</b>	<b>1,223,051</b>	<b>413,694</b>	<b>1,712,472</b>

**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>
<b>Number of farms</b>	581	116	116	117
<b>Direct Crop Expense</b>				
Seed	51,789	61,703	27,747	105,120
Fertilizer	93,245	107,225	36,917	208,528
Crop chemicals	39,264	38,146	15,716	94,436
Crop insurance	16,137	18,231	6,664	35,425
Drying Expense	3,481	3,795	1,812	6,892
Other direct crop expenses	8,087	10,871	2,767	16,323
<b>Total Direct Crop Expense</b>	<b>212,003</b>	<b>239,971</b>	<b>91,623</b>	<b>466,724</b>
<b>Direct Livestock Expense</b>				
Feeder livestock purchase	32,885	21,497	11,711	98,345
Purchased feed	147,453	287,654	55,339	121,816
Breeding fees	4,048	7,849	1,655	4,687
Veterinary	8,251	13,239	3,132	12,634
Supplies	12,089	18,925	5,877	13,198
Contract production exp.	8,686	26,454	3,752	3,083
Livestock hauling and trucking	9,899	18,905	4,109	11,406
Livestock marketing	4,668	7,083	2,847	6,140
Bedding	6,327	14,352	1,900	4,334
Other livestock expenses	1,698	2,399	742	1,248
<b>Total Direct Livestock Expense</b>	<b>236,004</b>	<b>418,357</b>	<b>91,064</b>	<b>276,891</b>
<b>Other Farm Expense</b>				
Interest	42,503	64,470	21,558	74,090
Fuel & oil	37,831	48,442	18,409	69,512
Repairs	69,470	91,783	35,584	121,860
Custom hire	21,080	38,839	10,475	25,572
Hired labor	48,001	94,113	18,127	65,836
Land rent	70,625	80,492	25,661	167,519
Machinery & bldg leases	11,479	16,745	4,245	21,522
Real estate taxes	6,013	6,949	3,796	9,671
Farm insurance	14,584	18,191	8,136	26,315
Utilities	13,771	20,691	7,926	17,832
Dues & professional fees	5,015	5,856	3,101	8,395
Miscellaneous	10,573	13,006	5,053	21,236
<b>Total Other Farm Expense</b>	<b>350,945</b>	<b>499,577</b>	<b>162,071</b>	<b>629,360</b>
<b>Total cash expense</b>	<b>798,952</b>	<b>1,157,905</b>	<b>344,758</b>	<b>1,372,975</b>
<b>Net cash farm income</b>	<b>137,560</b>	<b>65,146</b>	<b>68,936</b>	<b>339,497</b>
<b>Inventory Changes</b>				
Prepays and supplies	-7,207	-14,259	-1,819	-10,922
Accounts receivable	6,601	8,970	3,219	15,433
Hedging acct. & Oth Cur Assets	2,859	6,761	-59	7,541
Crops and feed	-11,042	-63,990	-5,909	43,485
Market livestock	25,528	-3,006	6,538	107,048
Breeding livestock	-2,199	-6,021	-1,358	-499
Accounts payable	-8,538	-23,749	-419	-6,470
Accrued Interest & other assets	-2,180	-11,149	849	5,473
<b>Total inventory change</b>	<b>3,823</b>	<b>-106,443</b>	<b>-656</b>	<b>161,089</b>
<b>Net operating profit</b>	<b>141,383</b>	<b>-41,297</b>	<b>68,280</b>	<b>500,586</b>
<b>Depreciation</b>				
Machinery and equipment	-43,223	-61,704	-19,978	-82,710
Titled vehicles	-5,503	-8,165	-2,621	-8,682
Buildings and improvements	-12,514	-21,822	-9,505	-17,991
<b>Total depreciation</b>	<b>-61,241</b>	<b>-91,692</b>	<b>-32,105</b>	<b>-109,383</b>
<b>Net farm income from operations</b>	<b>80,142</b>	<b>-132,989</b>	<b>36,175</b>	<b>391,203</b>
Gain or loss on capital sales	2,707	774	3,218	8,491
<b>Net farm income</b>	<b>82,849</b>	<b>-132,215</b>	<b>39,393</b>	<b>399,694</b>

**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	581	116	116	117
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	51,626	25,462	27,353	120,326
Prepaid expenses & supplies	60,463	53,441	21,396	142,714
Growing crops	3,258	8,623	339	5,886
Accounts receivable	39,036	60,351	18,523	70,780
Hedging accounts	1,957	295	171	6,759
Crops held for sale or feed	374,720	360,900	139,665	912,204
Crops under government loan	-	-	-	-
Market livestock held for sale	109,821	55,578	32,074	360,416
Other current assets	1,008	2,261	314	917
Total current farm assets	641,890	566,910	239,835	1,620,000
<b>Intermediate Farm Assets</b>				
Breeding livestock	178,974	292,111	76,771	281,848
Machinery and equipment	539,846	600,425	256,794	1,158,701
Titled vehicles	53,747	60,629	30,152	102,780
Other intermediate assets	32,685	68,283	11,217	38,057
Total intermediate farm assets	805,252	1,021,449	374,934	1,581,385
<b>Long Term Farm Assets</b>				
Farm land	585,115	657,388	349,617	965,327
Buildings and improvements	306,100	440,275	194,436	508,109
Other long-term assets	47,040	58,254	22,267	91,473
Total long-term farm assets	938,255	1,155,918	566,321	1,564,909
Total Farm Assets	2,385,397	2,744,277	1,181,090	4,766,295
Total Nonfarm Assets	239,263	292,981	168,389	282,592
Total Assets	2,624,660	3,037,258	1,349,479	5,048,887
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	12,199	16,466	4,961	22,757
Accounts payable	33,845	75,618	6,881	45,320
Current notes	198,739	225,475	75,100	465,393
Government crop loans	-	-	-	-
Principal due on term debt	80,007	115,703	41,666	139,655
Total current farm liabilities	324,790	433,262	128,608	673,125
Total intermediate farm liabs	198,416	297,562	92,750	386,753
Total long term farm liabilities	543,810	724,295	347,104	784,634
Total farm liabilities	1,067,016	1,455,119	568,462	1,844,512
Total nonfarm liabilities	44,350	44,896	34,415	51,092
Total liabilities	1,111,367	1,500,015	602,877	1,895,604
Net worth (farm and nonfarm)	1,513,293	1,537,243	746,602	3,153,283
Net worth change	68,337	-124,950	33,180	364,776
Percent net worth change	5 %	-8 %	5 %	13 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	51 %	76 %	54 %	42 %
Intermediate farm liab. / assets	25 %	29 %	25 %	24 %
Long term farm liab. / assets	58 %	63 %	61 %	50 %
Total debt to asset ratio	42 %	49 %	45 %	38 %

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

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	581	116	116	117
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	51,626	25,462	27,353	120,326
Prepaid expenses & supplies	60,463	53,441	21,396	142,714
Growing crops	3,258	8,623	339	5,886
Accounts receivable	39,036	60,351	18,523	70,780
Hedging accounts	1,957	295	171	6,759
Crops held for sale or feed	374,720	360,900	139,665	912,204
Crops under government loan	-	-	-	-
Market livestock held for sale	109,821	55,578	32,074	360,416
Other current assets	1,008	2,261	314	917
<b>Total current farm assets</b>	<b>641,890</b>	<b>566,910</b>	<b>239,835</b>	<b>1,620,000</b>
<b>Intermediate Farm Assets</b>				
Breeding livestock	180,321	295,262	76,738	281,413
Machinery and equipment	643,372	728,331	303,794	1,357,301
Titled vehicles	63,169	75,795	35,391	117,674
Other intermediate assets	33,853	66,513	11,794	42,183
<b>Total intermediate farm assets</b>	<b>920,716</b>	<b>1,165,901</b>	<b>427,716</b>	<b>1,798,570</b>
<b>Long Term Farm Assets</b>				
Farm land	923,812	982,735	677,907	1,446,446
Buildings and improvements	342,504	495,583	209,768	565,163
Other long-term assets	54,646	66,791	23,765	98,408
<b>Total long-term farm assets</b>	<b>1,320,962</b>	<b>1,545,109</b>	<b>911,440</b>	<b>2,110,018</b>
<b>Total Farm Assets</b>	<b>2,883,567</b>	<b>3,277,920</b>	<b>1,578,991</b>	<b>5,528,588</b>
<b>Total Nonfarm Assets</b>	<b>286,441</b>	<b>352,451</b>	<b>209,142</b>	<b>313,093</b>
<b>Total Assets</b>	<b>3,170,008</b>	<b>3,630,370</b>	<b>1,788,133</b>	<b>5,841,682</b>
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	12,199	16,466	4,961	22,757
Accounts payable	33,845	75,618	6,881	45,320
Current notes	198,739	225,475	75,100	465,393
Government crop loans	-	-	-	-
Principal due on term debt	80,007	115,703	41,666	139,655
<b>Total current farm liabilities</b>	<b>324,790</b>	<b>433,262</b>	<b>128,608</b>	<b>673,125</b>
<b>Total intermediate farm liabs</b>	<b>198,416</b>	<b>297,562</b>	<b>92,750</b>	<b>386,753</b>
<b>Total long term farm liabilities</b>	<b>543,810</b>	<b>724,295</b>	<b>347,104</b>	<b>784,634</b>
<b>Total farm liabilities</b>	<b>1,067,016</b>	<b>1,455,119</b>	<b>568,462</b>	<b>1,844,512</b>
<b>Total nonfarm liabilities</b>	<b>44,350</b>	<b>44,896</b>	<b>34,415</b>	<b>51,092</b>
<b>Total liabs excluding deferreds</b>	<b>1,111,367</b>	<b>1,500,015</b>	<b>602,877</b>	<b>1,895,604</b>
<b>Total deferred liabilities</b>	<b>269,960</b>	<b>306,291</b>	<b>148,035</b>	<b>568,339</b>
<b>Total liabilities</b>	<b>1,381,327</b>	<b>1,806,306</b>	<b>750,912</b>	<b>2,463,944</b>
<b>Retained earnings</b>	<b>1,513,293</b>	<b>1,537,243</b>	<b>746,602</b>	<b>3,153,283</b>
<b>Market valuation equity</b>	<b>275,388</b>	<b>286,821</b>	<b>290,619</b>	<b>224,455</b>
<b>Net worth (farm and nonfarm)</b>	<b>1,788,681</b>	<b>1,824,065</b>	<b>1,037,221</b>	<b>3,377,738</b>
<b>Net worth excluding deferreds</b>	<b>2,058,642</b>	<b>2,130,356</b>	<b>1,185,256</b>	<b>3,946,077</b>
<b>Net worth change</b>	<b>128,902</b>	<b>-47,349</b>	<b>73,933</b>	<b>431,162</b>
<b>Percent net worth change</b>	<b>8 %</b>	<b>-3 %</b>	<b>8 %</b>	<b>15 %</b>
<b>Ratio Analysis</b>				
Current farm liabilities / assets	51 %	76 %	54 %	42 %
Intermediate farm liab. / assets	22 %	26 %	22 %	22 %
Long term farm liab. / assets	41 %	47 %	38 %	37 %
Total debt to asset ratio	44 %	50 %	42 %	42 %
Debt to assets excl deferreds	35 %	41 %	34 %	32 %

# Recommended Farm Financial Ratios

Explanations of the FFSC recommended measures on the scorecard and where to find the information for each measure

## Measures from the Balance Sheet

The *balance sheet* provides information on both a business's both **liquidity** and **solvency** positions. **Liquidity** is the ability of the farm business to meet financial obligations as they came due, or to generate enough cash to pay for family living expenses, taxes, and to make on-time debt payments. **Solvency** is the ability of the farm business to meet all of its debts if it were sold at the current point in time.

### Recommended Liquidity Ratios

- Current Ratio  
Measures the extent to which current farm assets, if sold tomorrow, would pay off the farm's current liabilities.
- Working Capital as % of Gross Revenue  
Measures the operating capital available against the size of the business.
- Working Capital as % of Operating Expense\*  
Measures the operating capital available against the amount of the business's operating expenses.

### Recommended Solvency Ratios

- Debt-to-Asset Ratio  
Is the bank's share of the farm business. Compares total farm debt to total farm assets. A higher ratio indicates greater financial risk & lower borrowing capacity.
- Equity-to-Asset Ratio\*  
Is the farmer's share of the business. Compares total farm equity to total farm assets. *Debt-to-Asset* ratio + *Equity-to-Asset* ratio must = 100%.
- Debt-to-Equity Ratio\*  
Compares the creditor's investment to the farm owner's investment. It also indicates how much the farmer has leveraged their equity in the business.

## Measures from the Income Statement

The *income statement* is a financial statement which provides information regarding the **profitability** of the farm business. **Profitability** is the difference between the value of goods produced and the cost of the resources used in their production.

### Recommended Profitability Measures

- Rate of Return on Assets  
Can be thought of as the average interest rate being earned on all (yours and the creditor's) investments in the farm.
- Rate of Return on Equity  
Represents the interest rate being earned by your investment in the farm. This interest rate or return can be compared to returns available if your equity were invested elsewhere, such as a Certificate of Deposit or the stock market.
- Operating Profit Margin Ratio  
Shows the operating efficiency of the farm business. If expenses are low relative to the value of farm production, or revenue, the business will have a healthy operating profit margin. A low profit margin ratio can be caused by low product prices, high operating expenses, or inefficient production.
- Asset Turnover Ratio  
Measures efficiency in using capital. You could think of it as a measure of capital productivity. Generating a high level of production with a low level of capital investment will show as a high asset turnover rate. If, on the other hand, the turnover is low you will want to explore methods to use the capital invested more efficiently or sell some low-return investments. It could mean getting rid of that swampy parcel on the back 40 and getting something that produces income.

\* Denotes Acceptable Alternate Measures of the FFSC (<https://ffsc.org/>)

# Recommended Farm Financial Ratios (cont.)

Explanations of the FFSC recommended measures on the scorecard and where to find the information for each measure

## Measures from the Cash-Flow Statement

The *cash-flow statement* provides information on a business's **repayment capacity**. **Repayment capacity** shows the borrower's (i.e. your) ability to repay debts on time. It includes non-farm income and as such is **not** a measure of business performance alone.

### Recommended Repayment Capacity

- Debt Coverage Ratio  
Indicates whether your business generated enough income to cover current interest expense and all intermediate and long-term debt payments.
- Replacement Coverage Ratio  
A ratio of less than 1.0 indicates that you did not generate enough income to cover debt payments and unfunded capital purchases.
- Term Debt & Finance Lease Coverage Ratio\*  
Indicates whether your business generated enough income to cover all intermediate and long-term debt payments. A ratio of less than 1.0 indicates the business had to liquidate inventories, run up open accounts, borrow additional funds, or sell assets to make scheduled payments.

## Measures from *all* the Financial Statements

Using all the financial statements can provide valuable insight into the **financial efficiency** of a farm business. These measures show where each dollar of income generated is spent.

### Recommended Financial Efficiency

- Operating Expense Ratio  
Shows the proportion of farm income that is used to pay operating expenses, excluding depreciation and interest expense.
- Interest Expense Ratio  
Shows how much of gross farm income is used to pay for interest on borrowed capital.
- Depreciation & Amortization Expense Ratio  
Indicates how fast the business wears out capital. It tells what proportion of gross farm income is needed to maintain the capital used by the business. It is important to note that a depreciation expense ratio of less than 3% **could** indicate the operation is not replacing inefficient assets and may have higher repair expenses.
- Net Farm Income (Income from Operations) Ratio  
Compares profit to gross revenue. It shows how much is left after all farm expenses, except for unpaid labor and management, are paid.

\* Denotes Acceptable Alternate Measures of the FFSC (<https://ffsc.org/>)

# Other Important Farm Financial Measures

Other important measures (and their calculations) that are utilized in the scorecard

## Working Capital

Measures the operating capital available in the short-term from within the business.

$$\begin{aligned} & \text{Total Current Farm Assets} \\ & (-) \text{ Total Current Farm Liabilities} \\ & = \text{Working Capital} \end{aligned}$$

## Net Farm Income (NFI)

Represents the return to three things that you have invested in the farm business:

- 1) Your labor
- 2) Your management, and
- 3) Your equity.

NFI is the reward for investing your unpaid family labor, management, and money in the farm instead of elsewhere. Anything left in the business and not taken out to pay for family living expenses or taxes, will increase the net worth of the farm.

$$\begin{aligned} & \text{Gross Accrual Farm Revenue} \\ & (-) \text{ Total Accrual Operating Expense (including} \\ & \quad \text{Depreciation \& Amortization Expense)} \\ & = \text{Income from Operations} \\ & (-) \text{ Farm Interest Expense} \\ & = \text{Net Farm Income} \end{aligned}$$

## Value of Farm Production (VFP)

VFP is a measure of the value a farm operation has added to products sold.

$$\begin{aligned} & \text{Gross Cash Farm Revenue} \\ & (-) \text{ Feeder Livestock Purchased} \\ & (-) \text{ Purchased Feed} \\ & (+/-) \text{ Changes in Inventories} \\ & = \text{Value of Farm Production} \end{aligned}$$

## Repayment and Replacement Capacity Calculations

$$\begin{aligned} & \text{Income from Operations} \\ & (+/-) \text{ Miscellaneous Revenue / Expenses} \\ & (+) \text{ Non-farm Income} \\ & (+) \text{ Depreciation / Amortization Expenses} \\ & (-) \text{ Income Tax Expense} \\ & (-) \text{ Owner Withdrawals} \\ & = \text{Repayment and Replacement Capacity}^1 \end{aligned}$$

$$\begin{aligned} & \text{Repayment and Replacement Capacity} \\ & (-) \text{ Interest Expense on Current Debt} \\ & = \text{Term Debt Repayment \& Replacement Capacity} \end{aligned}$$

$$\begin{aligned} & \text{Prior Year Current Portion of Long-Term Debt} \\ & (+) \text{ Prior Year Current Portion of Finance Leases} \\ & (+) \text{ Interest Expense on Term Debt} \\ & (+) \text{ Interest Expense on Finance Leases} \\ & = \text{Total Principal \& Interest on Term Debt} \\ & \quad \text{and Finance Leases} \end{aligned}$$

$$\begin{aligned} & \text{Total Principal \& Interest on Term Debt and} \\ & \quad \text{Finance Leases} \\ & (+) \text{ Interest Expense on Current Debt} \\ & (+) \text{ Payment on Unpaid Operating Debt from Prior} \\ & \quad \text{Period (loss carryover)} \\ & (+) \text{ Annual Payments on Personal Liabilities} \\ & = \text{Total Debt Repayment} \end{aligned}$$

$$\begin{aligned} & \text{Repayment \& Replacement Capacity} \\ & (-) \text{ Total Debt Repayment} \\ & = \text{Repayment Margin} \end{aligned}$$

$$\begin{aligned} & \text{Repayment Margin} \\ & (-) \text{ Unfunded Capital Expenditures}^2 \\ & = \text{Replacement Margin} \end{aligned}$$

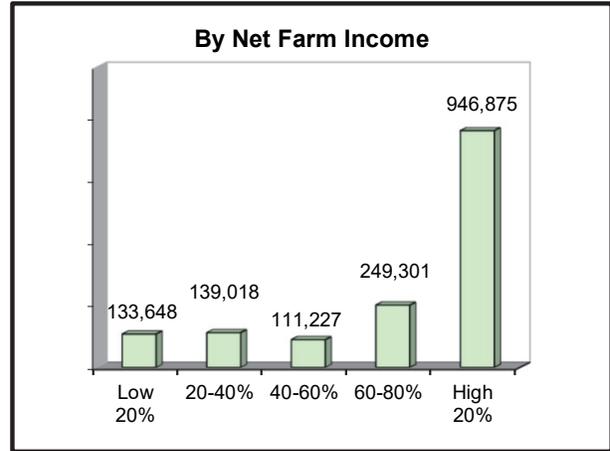
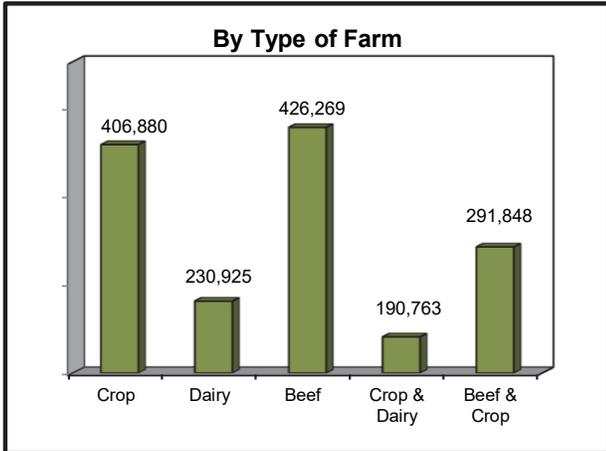
**1** = Measures the amount generated from farm and non-farm sources, to cover debt repayment and capital replacement.

**2** = Portion of depreciable capital asset purchases not funded by term debt and finance leases. This measure is the amount of internally generated funds used for investing activities related to depreciable capital assets.

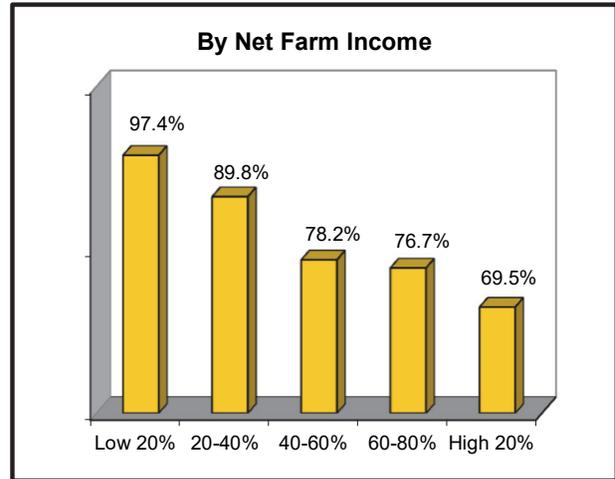
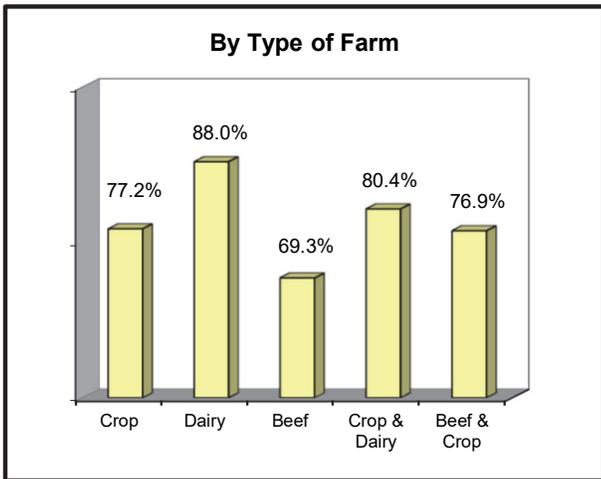
Developed by: Devin Brand, Pauline Van Nurden, Dale Nordquist, Mark Cannella, Katherine Wilts Johnson & Robert Craven  
Provided courtesy of the University of Minnesota Center for Farm Financial Management. For more information, visit: [z.umn.edu/scorecard](https://z.umn.edu/scorecard)

**Selected Financial Guideline Measures**  
**Northern Minnesota Farm Business Management Data**

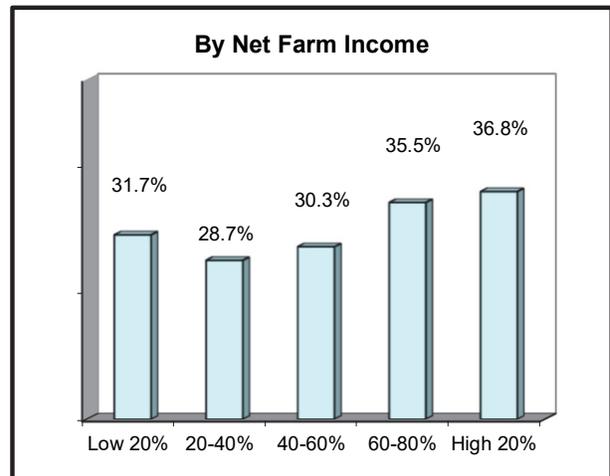
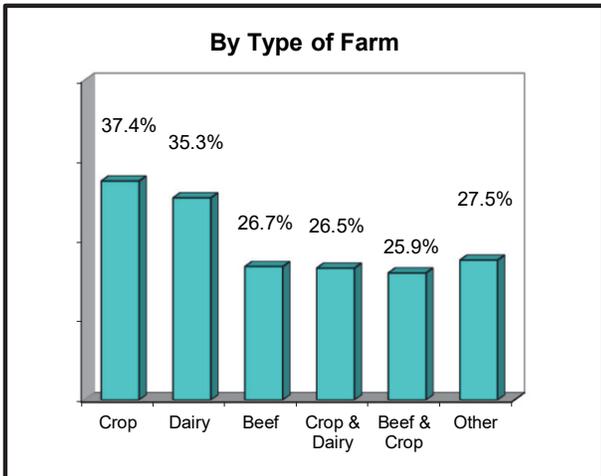
**Working Capital**



**Operating Expense Ratio**



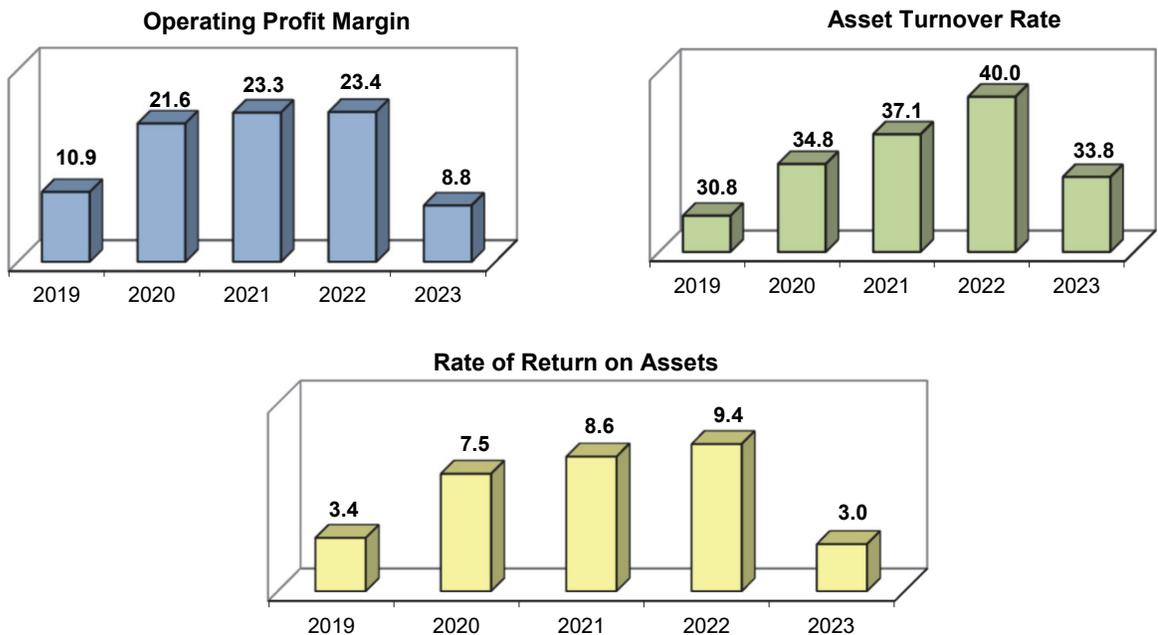
**Asset Turnover Rate**



**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	581	116	116	117
<b>Liquidity</b>				
Current ratio	1.98	1.31	1.86	2.41
Working capital to gross income	33.0%	11.5%	26.7%	50.0%
Working capital to operating expenses	41.0%	11.8%	34.1%	71.9%
<b>Solvency (market)</b>				
Farm debt to asset ratio	46%	54%	45%	44%
Farm equity to asset ratio	54%	46%	55%	56%
Farm debt to equity ratio	0.86	1.15	0.82	0.77
<b>Profitability (cost)</b>				
Rate of return on farm assets	3.0%	-4.5%	1.8%	8.2%
Rate of return on farm equity	1.7%	-14.3%	-0.2%	10.7%
Operating profit margin	8.8%	-14.3%	6.0%	22.3%
Asset turnover rate	33.8%	31.7%	30.3%	36.8%
<b>Repayment Capacity</b>				
Debt coverage ratio	1.30	0.14	1.20	2.33
Term debt coverage ratio	1.35	-0.03	1.22	2.53
Replacement coverage ratio	1.06	0.12	0.98	1.84
<b>Efficiency</b>				
Operating expense ratio	80.5%	97.4%	78.2%	69.5%
Depreciation expense ratio	6.4%	7.9%	7.7%	5.8%
Interest expense ratio	4.8%	6.1%	5.4%	4.1%
Net farm income ratio	8.4%	-11.4%	8.7%	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 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.

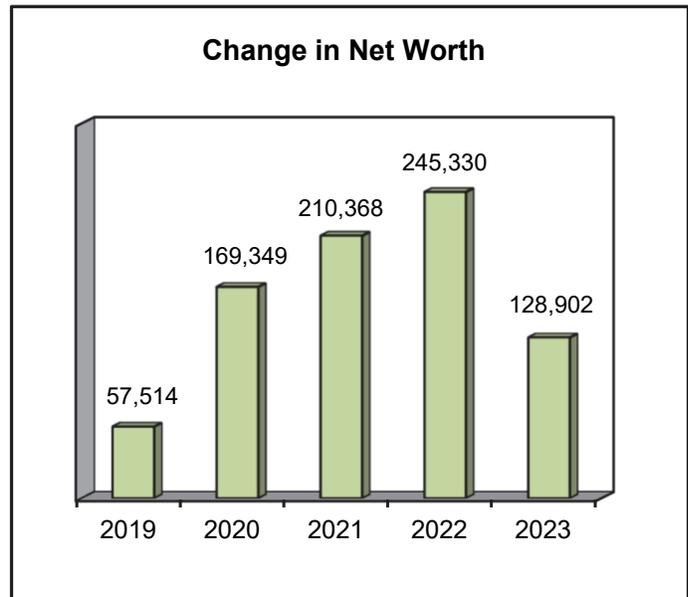
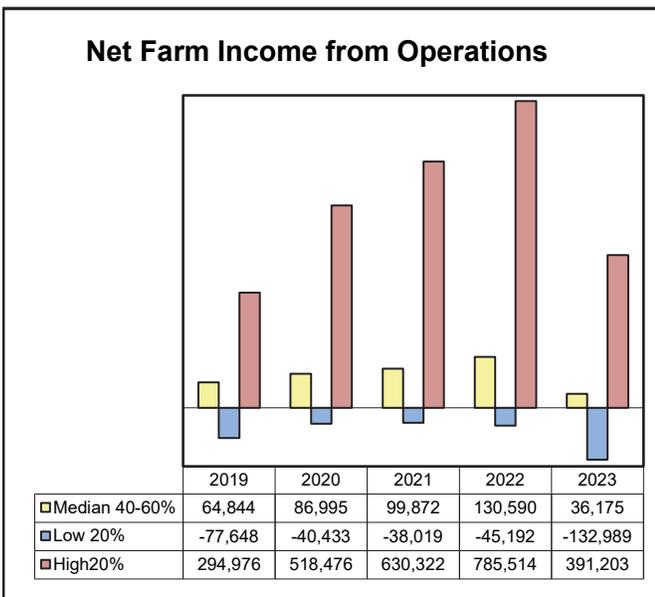
**For additional information, please see the back cover of this report. A "Financial Scorecard" is provided in color for your use.**

<b>Evaluation Chart</b>	<u>Low Farms</u>		<u>Average</u>		<u>High Farms</u>		<u>Your Farm</u>	
	2023	5 Yr Avg	2023	5 Yr Avg	2023	5 Yr Avg	2023	5 Yr Avg
<b><u>Liquidity</u></b>								
Current Ratio	1.31	1.24	1.98	2.00	2.41	2.34		
Working Capital to Gross Rev. %	11.5%	10.8%	33.0%	31.8%	50.0%	39.5%		
Working Capital to Oper Exp. * %	11.8%	14.1%	41.0%	47.3%	71.9%	61.0%		
<b><u>Solvency (Market)</u></b>								
Farm Debt to Asset Ratio %	54%	54%	46%	46%	44%	43%		
Farm Equity to Asset Ratio %	46%	46%	54%	54%	56%	57%		
Farm Debt to Equity Ratio %	1.15	1.16	0.86	0.86	0.77	0.77		
<b><u>Profitability (Cost)</u></b>								
Rate of Return on Farm Assets %	-4.5%	-4.5%	3.0%	6.4%	8.2%	10.6%		
Rate of Return on Farm Equity %	-14.3%	-16.7%	1.7%	8.2%	10.7%	14.9%		
Operating Profit Margin %	-14.3%	-20.0%	8.8%	17.6%	22.3%	26.0%		
Asset Turnover Rate (Cost) %	31.7%	23.2%	33.8%	35.3%	36.8%	40.4%		
<b><u>Repayment Capacity (Accrual)</u></b>								
Debt Coverage Ratio *	0.14	0.40	1.3	2.17	2.33	3.13		
Term Debt Coverage Ratio	-0.03	0.23	1.35	2.11	2.53	3.15		
Replacement Coverage Ratio	0.12	0.23	1.06	1.65	1.84	2.38		
<b><u>Efficiency</u></b>								
Operating Expense Ratio %	97.4%	96.6%	80.5%	73.0%	69.5%	68.0%		
Depreciation Expense Ratio %	7.9%	10.0%	6.4%	6.2%	5.8%	5.4%		
Interest Expense Ratio %	6.1%	8.8%	4.8%	4.9%	4.1%	3.6%		
Net Farm Income Ratio %	-11.4%	-16.7%	8.4%	13.8%	20.6%	22.2%		

\* NOTE: The average data for these ratios is based on a 4-year history. The Farm Financial Standards Council modified the recommended standards so the full 5-year history is not currently available.

**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	581	116	116	117
<b>Liquidity</b>				
Current ratio	1.98	1.31	1.86	2.41
Working capital	317,100	133,648	111,227	946,875
Change in Working Capital	<b>-52,284</b>	<b>-178,424</b>	<b>-29,044</b>	19,093
Working capital to gross revenue	33.0%	11.5%	26.7%	50.0%
Working capital to oper expense	41.0%	11.8%	34.1%	71.9%
Current assets	641,890	566,910	239,835	1,620,000
Current liabilities	324,790	433,262	128,608	673,125
Gross revenues (accrual)	959,729	1,162,553	416,632	1,894,739
Total operating expenses	772,563	1,132,629	325,844	1,316,703
<b>Repayment capacity</b>				
Net farm income from operations	80,142	<b>-132,989</b>	36,175	391,203
Depreciation	61,240	91,691	32,104	109,384
Personal income	39,600	51,357	40,727	33,463
Family living/owner withdrawals	<b>-60,761</b>	<b>-53,917</b>	<b>-51,264</b>	<b>-90,759</b>
Cash discrepancy	5	33	29	11
Income taxes	<b>-8,761</b>	<b>-5,804</b>	<b>-5,130</b>	<b>-21,430</b>
Interest expense	47,315	72,656	24,345	78,913
Debt repayment capacity	158,781	23,029	76,987	500,785
Debt payments	121,883	166,371	64,095	214,747
Repayment margin	36,898	<b>-143,342</b>	12,891	286,038
Cash replacement allowance	<b>-28,279</b>	<b>-32,659</b>	<b>-14,360</b>	<b>-57,469</b>
Replacement margin	8,619	<b>-176,000</b>	<b>-1,469</b>	228,569
Debt coverage ratio	1.30	0.14	1.20	2.33
Term debt coverage ratio	1.35	<b>-0.03</b>	1.22	2.53
Replacement coverage ratio	1.06	0.12	0.98	1.84



**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	581	116	116	117
<b>Operator Information</b>				
Average number of operators	1.2	1.3	1.1	1.4
Average age of operators	46.9	50.3	46.4	46.8
Average number of years farming	21.8	25.2	21.1	23.1
<b>Results Per Operator</b>				
Working capital	254,713	103,874	99,628	661,399
Total assets (market)	2,546,332	2,821,594	1,601,663	4,080,458
Total liabilities	1,109,561	1,403,896	672,606	1,721,083
Net worth (market)	1,436,771	1,417,698	929,058	2,359,375
Net worth excl deferred liabs	1,653,619	1,655,754	1,061,655	2,756,364
Gross farm income	770,909	903,559	373,185	1,323,489
Total farm expense	706,534	1,006,920	340,782	1,050,231
Net farm income from operations	64,375	-103,361	32,403	273,258
Net nonfarm income	31,809	39,916	36,480	23,374
Family living & tax withdrawals	55,840	46,390	50,487	78,357
Total acres owned	295.2	321.8	225.1	430.4
Total crop acres	653.4	682.7	373.2	1,161.5
Crop acres owned	193.5	217.6	146.6	281.9
Crop acres cash rented	455.5	459.4	225.2	874.9
Crop acres share rented	4.4	5.7	1.4	4.7
Total pasture acres	34.5	25.7	31.1	48.5
<b>Labor Analysis</b>				
Number of farms	570	113	115	115
Total unpaid labor hours	2,513	2,499	1,946	3,345
Total hired labor hours	2,393	4,717	765	2,929
Total labor hours per farm	4,906	7,216	2,710	6,273
Unpaid hours per operator	2,026	1,958	1,755	2,338
Value of farm production / hour	160.04	120.63	129.20	266.09
Net farm income / unpaid hour	31.95	-54.10	18.49	116.84
Average hourly hired labor wage	20.52	20.51	22.32	22.49
<b>Partnerships &amp; LLCs</b>				
Number of farms	103	26	11	31
Number of operators	2.0	1.7	2.4	2.3
Owner withdrawals per farm	124,157	-	-	184,872
Withdrawals per operator	56,222	-	-	72,628
<b>Corporations</b>				
Number of farms	18	6	3	6
Number of operators	2.3	2.0	-	1.8

**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	72	10	13	16
Average family size	3.4	3.6	3.5	3.0
<b>Family Living Expenses</b>				
Food and meals expense	12,989	13,643	13,583	13,784
Medical care	4,759	3,671	3,963	7,984
Health insurance	3,441	640	3,230	4,428
Cash donations	1,671	1,476	1,675	2,240
Household supplies	4,644	6,356	2,312	5,541
Clothing	1,999	2,967	1,040	2,616
Personal care	3,472	3,607	2,190	4,203
Child / Dependent care	504	53	424	220
Alimony and child support	248	-	-	-
Gifts	1,956	1,977	3,470	1,864
Education	1,521	1,164	381	596
Recreation	6,970	8,157	7,305	4,159
Utilities (household share)	2,589	2,534	3,537	1,986
Personal vehicle operating exp	3,705	4,652	3,942	3,181
Household real estate taxes	374	72	939	54
Dwelling rent	531	-	1,627	350
Household repairs	3,249	2,182	5,593	4,476
Personal interest	2,518	5,328	4,555	153
Disability / Long term care ins	343	152	403	216
Life insurance payments	2,728	1,682	1,349	5,729
Personal property insurance	309	249	973	112
Miscellaneous	8,579	7,474	5,996	8,151
Total cash family living expense	69,097	68,034	68,486	72,044
Family living from the farm	978	450	900	1,792
Total family living	70,074	68,484	69,386	73,837
<b>Other Nonfarm Expenditures</b>				
Income taxes	9,835	5,631	9,620	12,033
Furnishing & appliance purchases	98	-	-	-
Nonfarm vehicle purchases	4,470	13,003	4,216	6,661
Nonfarm real estate purchases	6,493	16,674	23,440	-
Other nonfarm capital purchases	559	1,325	-	-
Nonfarm savings & investments	4,746	-254	693	16,354
Total other nonfarm expenditures	26,200	36,379	37,970	35,047
Total cash family living investment & nonfarm capital purch	95,297	104,413	106,456	107,092

**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	581	116	116	117
<b>Nonfarm Income</b>				
Personal wages & salary	26,519	21,814	33,792	19,142
Net nonfarm business income	6,249	21,116	399	6,836
Personal rental income	310	586	62	273
Personal interest income	727	252	140	2,438
Personal cash dividends	95	17	180	38
Tax refunds	1,471	1,156	1,673	1,076
Other nonfarm income	4,229	6,416	4,480	3,661
Total nonfarm income	39,600	51,357	40,727	33,463
Gifts and inheritances	11,860	11,815	3,351	41,613
<b>Nonfarm Assets (market)</b>				
Checking & savings	12,364	5,923	10,889	18,475
Stocks & bonds	11,079	10,320	7,526	27,035
Other current assets	2,245	3,103	849	4,839
Furniture & appliances	6,818	6,459	8,367	6,003
Nonfarm vehicles	21,449	16,413	21,726	27,932
Cash value of life ins.	9,535	29,799	5,353	4,866
Retirement accounts	80,844	49,133	53,370	78,466
Other intermediate assets	6,365	9,914	2,487	4,001
Nonfarm real estate	99,683	112,489	94,365	114,009
Personal bus. investment	25,960	99,977	1,552	11,969
Other long term assets	10,098	8,921	2,659	15,498
Total nonfarm assets	286,441	352,451	209,142	313,093
<b>Nonfarm Liabilities</b>				
Accrued interest	110	113	81	57
Accounts payable	2,445	399	533	9,045
Current notes	2,398	932	980	1,011
Princ due on term debt	3,509	4,247	3,724	2,944
Total current liabilities	8,461	5,690	5,319	13,058
Intermediate liabilities	7,081	10,211	5,969	3,564
Long term liabilities	28,808	28,994	23,127	34,471
Total nonfarm liabilities	44,350	44,896	34,415	51,092
Nonfarm net worth	242,091	307,555	174,727	262,001
Nonfarm debt to asset ratio	15 %	13 %	16 %	16 %

**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	581	116	116	117
<b>Acreage Summary</b>				
Total acres owned	368	414	251	616
Total crop acres	813	878	417	1663
Crop acres owned	241	280	164	404
Crop acres cash rented	567	591	251	1,252
Crop acres share rented	5	7	2	7
Total pasture acres	43	33	35	69
Percent crop acres owned	30%	32%	39%	24%
Mach invest/crop acre cost	664	718	647	676
Mach invest/crop acre market	786	869	763	783

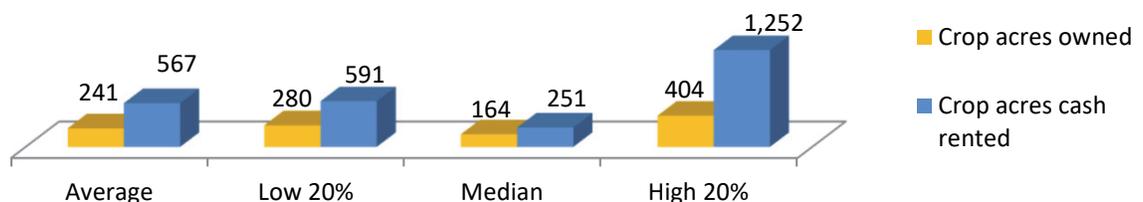
**Average Price Received (Cash Sales Only)**

Soybeans per bushel	\$13.32	\$13.24	\$12.96	\$13.43
Corn per bushel	\$5.74	\$5.72	\$5.46	\$5.91
Wheat, Spring per bushel	\$8.30	\$7.35	\$7.46	\$8.60
Oats per bushel	\$4.83	\$3.77	\$3.90	\$5.28
Rye per bushel	\$7.02	\$7.42	\$7.29	\$6.81
Hay, Alfalfa per ton	\$190.01	\$287.28	\$175.05	\$200.00
Corn Silage per ton	\$40.63	\$41.02	-	-
Soybeans Seed per bushel	\$15.13	-	-	\$15.08
Grass Seed, Perennial Rye per lb	\$0.97	-	-	\$0.96
Canola per cwt	\$26.94	-	-	\$27.64
Beans, Navy per cwt	\$36.17	-	-	\$36.32
Beans, Black Turtle per cwt	\$37.29	-	-	-
Potatoes per cwt	\$13.19	-	-	\$12.92

**Average Yield Per Acre**

Soybeans (bushel)	39.54	35.77	35.87	41.47
Corn (bushel)	166.28	157.38	156.00	174.27
Wheat, Spring (bushel)	65.91	57.41	64.21	68.18
Oats (bushel)	105.38	82.44	78.38	131.02
Rye (bushel)	40.42	28.30	32.63	43.55
Hay, Alfalfa (ton)	3.60	3.87	3.36	3.34
Corn Silage (ton)	16.84	16.75	16.54	17.15
Soybeans Seed (bushel)	40.38	39.93	-	40.14
Grass Seed, Perennial Rye (lbs)	768.47	-	-	784.51
Canola (cwt)	27.05	-	-	28.48
Beans, Navy (cwt)	24.16	-	-	23.73
Beans, Black Turtle (cwt)	19.06	-	-	-
Potatoes per (cwt)	474.25	-	-	490.78

**Crop Acres - Owned & Cash Rented**



**Financial Summary**  
**Northern Minnesota Farm Business Management Data**  
**Specialty Crop Producers with less than \$100,000 of Gross Cash Farm Income**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 33%</u>	<u>33 - 66%</u>	<u>High 34%</u>
Number of farms	17	5	6	6
<b>Income Statement</b>				
Gross cash farm income	33,413	35,895	26,474	38,284
Total cash farm expense	32,694	57,525	21,275	23,420
Net cash farm income	719	-21,631	5,199	14,864
Inventory change	198	-3,372	-628	3,997
Depreciation	-10,695	-20,009	-9,436	-4,193
Net farm income from operations	-9,778	-45,012	-4,864	14,669
Gain or loss on capital sales	41	-	117	-
Average net farm income	-9,737	-45,012	-4,748	14,669
Median net farm income	-4,786	-41,848	-5,394	6,182
<b>Profitability (cost)</b>				
Rate of return on assets	-9.8 %	-13.3 %	-11.6 %	-3.2 %
Rate of return on equity	-13.4 %	-17.5 %	-20.7 %	-4.0 %
Operating profit margin	-97.7 %	-205.1 %	-86.0 %	-24.4 %
Asset turnover rate	10.0 %	6.5 %	13.5 %	13.1 %
<b>Profitability (market)</b>				
Rate of return on assets	1.8 %	7.9 %	-7.6 %	-2.6 %
Rate of return on equity	1.8 %	8.8 %	-12.9 %	-3.1 %
Operating profit margin	22.4 %	156.8 %	-66.5 %	-22.0 %
Asset turnover rate	8.2 %	5.0 %	11.5 %	11.6 %
<b>Liquidity &amp; Repayment (end of year)</b>				
Current assets	20,824	29,690	11,634	22,626
Current liabilities	8,337	10,359	8,705	6,283
Current ratio	2.50	2.87	1.34	3.60
Working capital	12,487	19,331	2,928	16,343
Change in working capital	925	-2,613	198	4,602
Working capital to gross revenue	35.2 %	53.3 %	10.2 %	39.3 %
Working capital to oper expense	38.0 %	33.6 %	12.8 %	73.0 %
Debt coverage ratio	1.81	0.10	2.21	2.91
Term debt coverage ratio	1.77	0.08	2.07	2.92
Replacement coverage ratio	1.35	0.05	1.87	2.60
Term debt to EBITDA	27.28	-4.58	12.25	2.48
<b>Solvency (end of year at cost)</b>				
Number of farms	17	5	6	6
Total assets	584,988	1,017,116	403,174	406,694
Total liabilities	114,444	103,363	185,842	52,281
Net worth	470,543	913,753	217,333	354,413
Net worth change	-655	-18,562	-6,738	20,351
Farm debt to asset ratio	22 %	20 %	38 %	17 %
Total debt to asset ratio	20 %	10 %	46 %	13 %
Change in earned net worth %	0 %	-2 %	-3 %	6 %
<b>Solvency (end of year at market)</b>				
Number of farms	17	5	6	6
Total assets	1,026,121	1,258,822	1,133,843	724,481
Total liabilities	124,602	124,225	196,110	53,409
Net worth	901,518	1,134,598	937,733	671,071
Total net worth change	46,671	102,944	829	45,618
Farm debt to asset ratio	19 %	16 %	34 %	15 %
Total debt to asset ratio	12 %	10 %	17 %	7 %
Change in total net worth %	5 %	10 %	0 %	7 %
<b>Nonfarm Information</b>				
Net nonfarm income	53,902	77,437	71,365	16,826
<b>Crop Acres</b>				
Total crop acres	5	15	0	1
Total crop acres owned	1	2	-	0
Total crop acres cash rented	4	14	0	0
Total crop acres share rented	-	-	-	-
Machinery value per crop acre	3,937	3,293	4,608	17,650

---

## ***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.

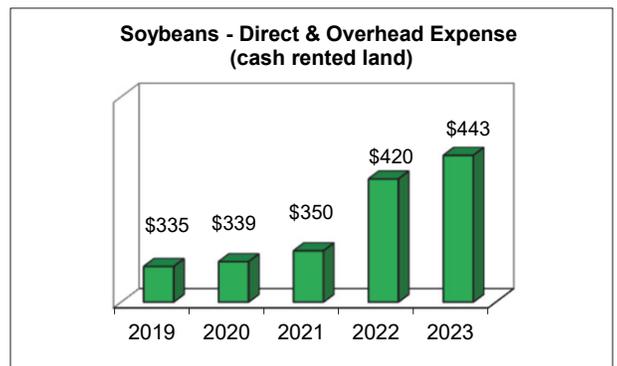
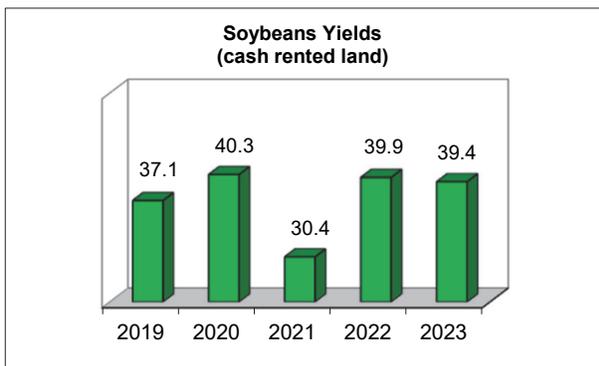
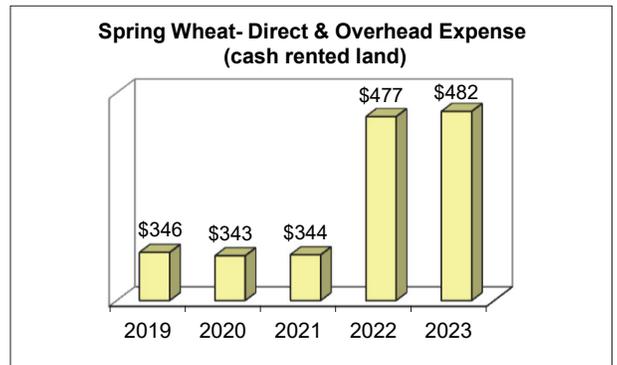
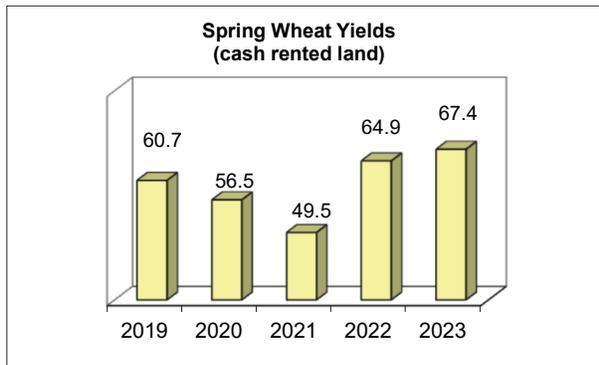
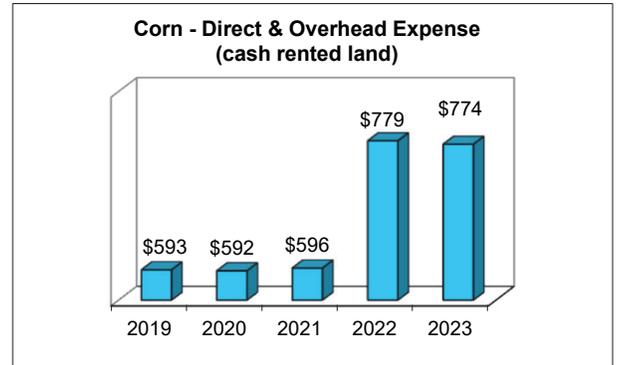
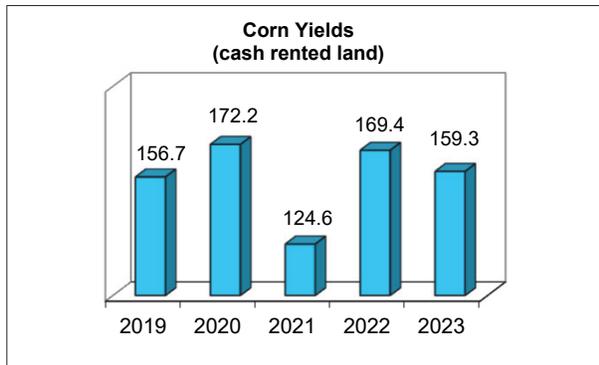
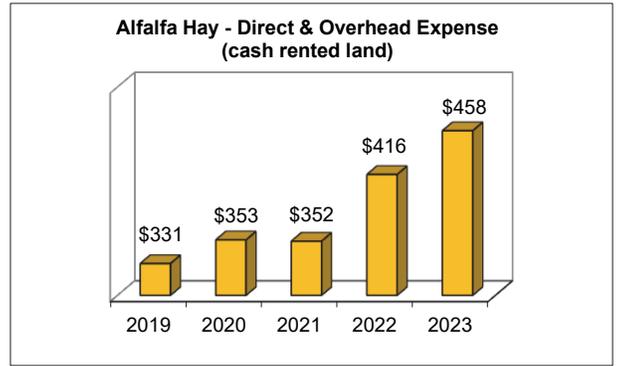
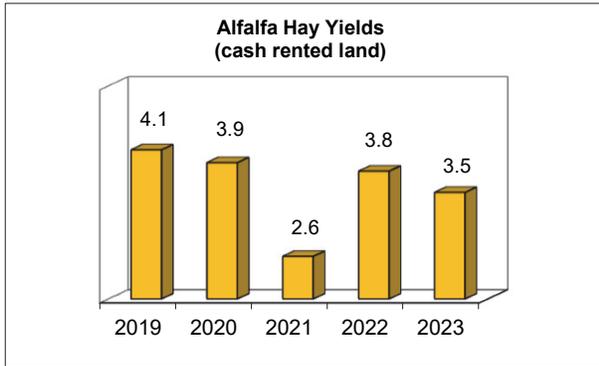
---

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.

<b>Crop</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Alfalfa Hay	\$161.73	\$168.16	\$182.89	\$207.03	\$211.62
Corn	\$160.80	\$166.17	\$165.39	\$197.33	\$197.08
Corn Silage	\$224.53	\$224.95	\$220.53	\$251.78	\$253.42
Soybeans	\$84.51	\$94.38	\$86.74	\$111.44	\$111.84
Spring Wheat	\$87.90	\$92.53	\$88.66	\$105.24	\$104.55

## 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	174	35	35
Acres	131.02	147.38	100.54
Yield per acre (bu.)	160.89	157.27	187.47
Operators share of yield %	100.00	100.00	100.00
Value per bu.	4.67	4.66	5.25
Other product return per acre	7.95	11.61	10.08
Total product return per acre	759.41	745.25	994.96
Hedging gains/losses per acre	-0.24	-1.06	-
Crop insurance per acre	69.48	75.34	96.38
Other crop income per acre	1.52	1.45	0.42
Gross return per acre	830.18	820.98	1,091.76
<b>Direct Expenses</b>			
Seed and plants	103.83	103.04	110.20
Fertilizer	179.72	190.78	177.82
Crop chemicals	41.92	40.90	49.20
Crop insurance	27.25	27.70	30.67
Drying expense	14.14	11.27	14.99
Storage	1.96	0.34	1.18
Packaging and supplies	0.44	0.23	0.81
Fuel & oil	38.77	46.41	33.05
Repairs	71.92	68.60	75.89
Custom hire	16.48	22.62	20.07
Hired labor	2.13	2.88	4.07
Machinery leases	3.15	0.75	0.84
Utilities	0.44	0.40	1.96
Hauling and trucking	3.37	4.44	1.74
Marketing	1.78	1.68	4.22
Operating interest	12.35	8.31	9.82
Miscellaneous	1.95	1.12	2.80
Total direct expenses per acre	521.60	531.46	539.32
Return over direct exp per acre	308.58	289.53	552.44
<b>Overhead Expenses</b>			
Hired labor	13.57	9.50	7.04
Machinery leases	5.89	2.03	3.30
Building leases	0.53	0.39	0.57
RE & pers. property taxes	19.60	22.99	22.91
Farm insurance	14.62	15.35	14.65
Utilities	7.85	9.70	5.00
Dues & professional fees	4.52	5.27	4.45
Interest	66.79	64.76	76.64
Mach & bldg depreciation	59.89	51.83	69.51
Miscellaneous	6.35	9.43	7.44
Total overhead expenses per acre	199.62	191.25	211.50
Total dir & ovhd expenses per acre	721.22	722.70	750.82
Net return per acre	108.96	98.28	340.94
Government payments	-	-	-
Net return with govt pmts	108.96	98.28	340.94
Labor & management charge	58.56	68.99	72.99
Net return over lbr & mgt	50.40	29.29	267.95
<b>Cost of Production</b>			
Total direct expense per bu.	3.24	3.38	2.88
Total dir & ovhd exp per bu.	4.48	4.60	4.00
Less govt & other income	3.99	4.04	3.43
With labor & management	4.36	4.48	3.82
Net value per unit	4.67	4.66	5.25
Machinery cost per acre	197.08	194.43	202.57
Est. labor hours per acre	2.96	3.51	2.83

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

**Corn on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	242	49	49
Acres	302.10	355.77	297.44
Yield per acre (bu.)	159.33	161.92	177.06
Operators share of yield %	100.00	100.00	100.00
Value per bu.	4.69	4.61	5.34
Other product return per acre	3.01	2.37	4.89
Total product return per acre	750.25	749.34	951.01
Hedging gains/losses per acre	4.51	1.91	17.41
Crop insurance per acre	69.19	69.87	57.66
Other crop income per acre	3.07	2.38	5.81
Gross return per acre	827.02	823.50	1,031.90
<b>Direct Expenses</b>			
Seed and plants	101.88	100.18	100.66
Fertilizer	187.45	193.47	161.89
Crop chemicals	38.01	38.16	38.84
Crop insurance	26.79	22.22	25.31
Drying expense	15.21	14.56	12.75
Storage	0.60	0.34	0.28
Fuel & oil	38.92	36.05	41.02
Repairs	67.59	59.96	65.00
Custom hire	13.11	15.90	11.66
Hired labor	3.10	5.85	1.22
Land rent	138.72	161.44	127.70
Machinery leases	4.78	2.83	1.64
Utilities	0.24	0.27	0.67
Hauling and trucking	1.18	1.51	0.47
Marketing	1.18	1.08	0.97
Operating interest	15.84	14.22	9.92
Miscellaneous	3.52	2.51	3.69
Total direct expenses per acre	658.12	670.57	603.68
Return over direct exp per acre	168.90	152.93	428.21
<b>Overhead Expenses</b>			
Hired labor	17.70	10.77	21.54
Machinery leases	7.82	12.86	1.07
Building leases	0.73	0.62	1.55
Farm insurance	11.25	9.65	10.63
Utilities	5.29	4.56	4.88
Dues & professional fees	3.82	3.05	3.35
Interest	7.53	6.69	6.41
Mach & bldg depreciation	55.91	49.20	61.60
Miscellaneous	6.12	3.97	5.06
Total overhead expenses per acre	116.17	101.37	116.09
Total dir & ovhd expenses per acre	774.29	771.94	719.78
Net return per acre	52.74	51.56	312.12
Government payments	-	-	-
Net return with govt pmts	52.74	51.56	312.12
Labor & management charge	48.78	43.17	54.07
Net return over lbr & mgt	3.96	8.39	258.05
<b>Cost of Production</b>			
Total direct expense per bu.	4.13	4.14	3.41
Total dir & ovhd exp per bu.	4.86	4.77	4.07
Less govt & other income	4.36	4.29	3.58
With labor & management	4.66	4.56	3.89
Net value per unit	4.72	4.63	5.44
Machinery cost per acre	190.25	179.98	179.35
Est. labor hours per acre	2.72	2.56	2.64

**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	170	34	34
Acres	186.68	186.67	117.86
Yield per acre (bu.)	39.66	39.40	51.75
Operators share of yield %	100.00	100.00	100.00
Value per bu.	12.33	12.24	12.80
Other product return per acre	0.12	0.51	0.14
Total product return per acre	489.00	482.86	662.76
Hedging gains/losses per acre	0.15	0.40	-
Crop insurance per acre	14.46	10.23	15.22
Other crop income per acre	2.73	4.57	0.30
Gross return per acre	506.33	498.07	678.28
<b>Direct Expenses</b>			
Seed and plants	62.16	61.94	56.05
Fertilizer	48.07	49.99	18.97
Crop chemicals	49.92	52.13	66.01
Crop insurance	18.52	16.97	18.98
Fuel & oil	23.18	23.06	20.69
Repairs	37.10	41.25	41.35
Custom hire	7.83	7.45	9.45
Hired labor	0.95	0.22	5.14
Machinery leases	3.90	1.63	0.83
Utilities	0.24	0.03	0.70
Hauling and trucking	1.46	2.03	3.57
Marketing	1.74	1.34	3.75
Operating interest	7.69	4.43	6.51
Miscellaneous	1.91	2.41	3.29
Total direct expenses per acre	264.66	264.88	255.28
Return over direct exp per acre	241.67	233.19	423.00
<b>Overhead Expenses</b>			
Hired labor	7.56	4.55	3.64
Machinery leases	2.07	1.45	4.43
RE & pers. property taxes	15.51	15.57	23.71
Farm insurance	9.19	8.73	8.71
Utilities	4.55	5.10	4.46
Dues & professional fees	2.62	3.02	2.68
Interest	43.34	42.24	65.85
Mach & bldg depreciation	36.90	32.18	37.44
Miscellaneous	3.62	3.74	4.39
Total overhead expenses per acre	125.35	116.59	155.30
Total dir & ovhd expenses per acre	390.01	381.47	410.58
Net return per acre	116.32	116.61	267.70
Government payments	-	-	-
Net return with govt pmts	116.32	116.61	267.70
Labor & management charge	34.55	31.21	33.72
Net return over lbr & mgt	81.77	85.40	233.98
<b>Cost of Production</b>			
Total direct expense per bu.	6.67	6.72	4.93
Total dir & ovhd exp per bu.	9.83	9.68	7.93
Less govt & other income	9.39	9.28	7.63
With labor & management	10.27	10.07	8.28
Net value per unit	12.33	12.25	12.80
Machinery cost per acre	111.84	107.78	113.72
Est. labor hours per acre	1.58	1.61	1.55

**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	237	48	48
Acres	344.77	389.45	244.93
Yield per acre (bu.)	39.40	40.99	46.74
Operators share of yield %	100.00	100.00	100.00
Value per bu.	12.44	12.32	12.55
Other product return per acre	0.15	-	0.24
Total product return per acre	490.19	505.06	586.63
Hedging gains/losses per acre	1.88	0.40	5.93
Crop insurance per acre	19.16	10.63	26.04
Other crop income per acre	4.56	5.39	6.14
Gross return per acre	515.79	521.47	624.74
<b>Direct Expenses</b>			
Seed and plants	59.98	64.16	58.83
Fertilizer	48.57	53.32	42.19
Crop chemicals	56.02	57.81	51.37
Crop insurance	17.97	21.66	15.74
Fuel & oil	22.99	22.03	23.46
Repairs	39.89	43.99	35.38
Custom hire	6.92	5.50	6.43
Hired labor	1.14	1.12	1.56
Land rent	107.24	88.20	97.56
Machinery leases	3.08	10.24	0.82
Hauling and trucking	1.46	0.35	1.50
Marketing	1.65	2.34	1.34
Operating interest	8.02	8.25	6.07
Miscellaneous	3.02	3.67	2.22
Total direct expenses per acre	377.95	382.63	344.45
Return over direct exp per acre	137.84	138.84	280.28
<b>Overhead Expenses</b>			
Hired labor	10.82	9.09	9.04
Machinery leases	3.33	0.90	5.66
Building leases	0.52	0.56	0.40
Farm insurance	7.65	7.67	6.47
Utilities	3.60	4.15	3.73
Dues & professional fees	2.25	2.38	2.26
Interest	4.08	3.47	3.78
Mach & bldg depreciation	29.96	28.38	29.75
Miscellaneous	2.72	2.46	3.38
Total overhead expenses per acre	64.93	59.06	64.47
Total dir & ovhd expenses per acre	442.87	441.69	408.92
Net return per acre	72.92	79.78	215.81
Government payments	-	-	-
Net return with govt pmts	72.92	79.78	215.81
Labor & management charge	30.38	32.11	30.71
Net return over lbr & mgt	42.54	47.67	185.11
<b>Cost of Production</b>			
Total direct expense per bu.	9.59	9.33	7.37
Total dir & ovhd exp per bu.	11.24	10.77	8.75
Less govt & other income	10.59	10.37	7.93
With labor & management	11.36	11.16	8.59
Net value per unit	12.48	12.33	12.67
Machinery cost per acre	107.79	112.06	101.02
Est. labor hours per acre	1.55	1.54	1.39

**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	81	16	17
Acres	206.78	167.93	242.79
Yield per acre (bu.)	65.68	62.71	75.21
Operators share of yield %	100.00	100.00	100.00
Value per bu.	7.06	7.21	7.35
Other product return per acre	1.62	4.14	1.14
Total product return per acre	465.45	456.34	554.27
Crop insurance per acre	13.53	2.37	35.47
Other crop income per acre	6.80	2.34	17.31
Gross return per acre	485.79	461.05	607.05
<b>Direct Expenses</b>			
Seed and plants	27.30	24.41	26.54
Fertilizer	147.42	143.17	134.83
Crop chemicals	40.95	35.75	40.32
Crop insurance	16.69	9.25	16.75
Drying expense	1.40	1.89	1.78
Fuel & oil	22.50	25.10	22.17
Repairs	32.24	32.87	27.94
Custom hire	8.26	7.35	8.45
Hired labor	0.19	0.99	0.11
Machinery leases	2.07	0.20	2.14
Hauling and trucking	1.25	-	1.35
Marketing	1.38	0.69	1.22
Operating interest	7.35	7.41	5.67
Miscellaneous	1.60	0.66	1.31
Total direct expenses per acre	310.59	289.74	290.57
Return over direct exp per acre	175.19	171.31	316.48
<b>Overhead Expenses</b>			
Hired labor	9.74	6.30	13.38
Machinery leases	3.62	1.90	3.29
RE & pers. property taxes	12.57	14.47	13.26
Farm insurance	8.93	7.48	8.27
Utilities	5.15	4.98	3.72
Dues & professional fees	2.59	3.33	2.49
Interest	38.64	45.21	45.38
Mach & bldg depreciation	36.15	29.26	42.81
Miscellaneous	2.93	1.83	3.13
Total overhead expenses per acre	120.32	114.75	135.72
Total dir & ovhd expenses per acre	430.91	404.49	426.29
Net return per acre	54.87	56.56	180.76
Government payments	-	-	-
Net return with govt pmts	54.87	56.56	180.76
Labor & management charge	35.64	30.42	33.93
Net return over lbr & mgt	19.23	26.15	146.82
<b>Cost of Production</b>			
Total direct expense per bu.	4.73	4.62	3.86
Total dir & ovhd exp per bu.	6.56	6.45	5.67
Less govt & other income	6.23	6.31	4.95
With labor & management	6.77	6.79	5.40
Net value per unit	7.06	7.21	7.35
Machinery cost per acre	104.55	97.56	103.85
Est. labor hours per acre	1.50	1.42	1.59

**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	101	20	21
Acres	373.09	497.56	404.07
Yield per acre (bu.)	67.43	68.88	76.01
Operators share of yield %	100.00	100.00	100.00
Value per bu.	7.36	7.03	7.96
Other product return per acre	1.63	0.63	0.65
Total product return per acre	497.70	484.88	605.69
Hedging gains/losses per acre	5.24	-	23.29
Crop insurance per acre	10.96	8.93	19.88
Other crop income per acre	8.52	17.68	10.70
Gross return per acre	522.42	511.48	659.55
<b>Direct Expenses</b>			
Seed and plants	29.34	28.30	29.82
Fertilizer	153.23	173.90	143.36
Crop chemicals	46.44	54.82	51.49
Crop insurance	15.04	15.02	11.53
Drying expense	1.60	1.15	1.18
Fuel & oil	22.57	21.32	22.93
Repairs	38.84	38.27	35.83
Custom hire	6.69	9.95	5.82
Land rent	87.77	74.49	84.60
Machinery leases	0.98	0.81	1.09
Hauling and trucking	1.19	1.75	0.37
Marketing	2.10	0.28	4.21
Operating interest	7.40	8.71	4.86
Miscellaneous	2.60	2.32	4.52
Total direct expenses per acre	415.79	431.07	401.62
Return over direct exp per acre	106.63	80.42	257.93
<b>Overhead Expenses</b>			
Hired labor	13.06	11.04	12.72
Machinery leases	3.22	0.73	1.48
Building leases	0.78	1.04	1.43
Farm insurance	7.61	10.75	5.93
Utilities	3.83	3.52	3.13
Dues & professional fees	2.17	1.65	2.34
Interest	3.76	3.70	3.85
Mach & bldg depreciation	28.49	33.32	27.96
Miscellaneous	3.11	1.59	3.52
Total overhead expenses per acre	66.05	67.33	62.36
Total dir & ovhd expenses per acre	481.84	498.40	463.98
Net return per acre	40.59	13.09	195.57
Government payments	-	-	-
Net return with govt pmts	40.59	13.09	195.57
Labor & management charge	30.85	32.04	29.13
Net return over lbr & mgt	9.74	-18.95	166.44
<b>Cost of Production</b>			
Total direct expense per bu.	6.17	6.26	5.28
Total dir & ovhd exp per bu.	7.15	7.24	6.10
Less govt & other income	6.76	6.84	5.39
With labor & management	7.21	7.31	5.77
Net value per unit	7.44	7.03	8.27
Machinery cost per acre	102.34	106.22	95.23
Est. labor hours per acre	1.54	1.40	1.43

**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	100	20	20
Acres	72.84	67.75	83.46
Yield per acre (ton)	17.00	18.24	17.76
Operators share of yield %	100.00	100.00	100.00
Value per ton	42.21	41.76	42.77
Total product return per acre	717.53	761.83	759.52
Crop insurance per acre	215.50	88.90	414.15
Other crop income per acre	0.05	-	-
Gross return per acre	933.07	850.73	1,173.67
<b>Direct Expenses</b>			
Seed and plants	99.18	89.97	98.12
Fertilizer	123.54	86.31	79.27
Crop chemicals	41.55	46.97	36.85
Crop insurance	23.59	22.85	27.16
Packaging and supplies	13.78	12.84	10.89
Fuel & oil	48.66	59.01	49.96
Repairs	80.61	81.02	93.12
Custom hire	68.52	91.04	38.04
Hired labor	0.50	-	0.10
Machinery leases	1.85	-	-
Operating interest	7.97	11.09	2.91
Miscellaneous	3.47	3.31	4.31
Total direct expenses per acre	513.22	504.41	440.73
Return over direct exp per acre	419.86	346.32	732.94
<b>Overhead Expenses</b>			
Hired labor	28.80	34.29	45.68
Machinery leases	4.23	6.04	1.09
Building leases	1.18	0.78	1.34
RE & pers. property taxes	15.68	17.51	15.75
Farm insurance	14.91	13.67	19.71
Utilities	7.87	8.56	8.68
Dues & professional fees	5.06	5.90	4.55
Interest	70.72	74.37	68.09
Mach & bldg depreciation	50.57	54.34	59.57
Miscellaneous	5.19	4.82	5.85
Total overhead expenses per acre	204.22	220.27	230.29
Total dir & ovhd expenses per acre	717.43	724.68	671.02
Net return per acre	215.64	126.05	502.66
Government payments	-	-	-
Net return with govt pmts	215.64	126.05	502.66
Labor & management charge	53.86	50.87	48.04
Net return over lbr & mgt	161.78	75.19	454.61
<b>Cost of Production</b>			
Total direct expense per ton	30.19	27.65	24.82
Total dir & ovhd exp per ton	42.20	39.72	37.78
Less govt & other income	29.52	34.85	14.46
With labor & management	32.69	37.64	17.17
Net value per unit	42.21	41.76	42.77
Machinery cost per acre	253.42	289.68	246.87
Est. labor hours per acre	4.33	5.05	4.73

**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	112	23	23
Acres	132.08	89.97	70.10
Yield per acre (ton)	16.22	16.33	16.69
Operators share of yield %	100.00	100.00	100.00
Value per ton	43.23	41.08	44.30
Other product return per acre	0.04	-	-
Total product return per acre	701.15	670.96	739.44
Crop insurance per acre	194.20	158.38	397.23
Other crop income per acre	0.24	-	-
Gross return per acre	895.60	829.34	1,136.67
<b>Direct Expenses</b>			
Seed and plants	106.47	112.91	98.06
Fertilizer	148.84	117.84	63.57
Crop chemicals	48.71	40.15	38.54
Crop insurance	20.91	20.68	20.74
Packaging and supplies	16.17	11.83	9.66
Fuel & oil	49.67	41.47	49.08
Repairs	59.50	88.95	72.59
Custom hire	93.91	22.74	44.17
Hired labor	0.56	-	0.47
Land rent	144.46	114.63	74.72
Machinery leases	1.36	-	-
Operating interest	4.89	3.66	3.96
Miscellaneous	2.54	1.65	1.55
Total direct expenses per acre	697.98	576.51	477.10
Return over direct exp per acre	197.61	252.84	659.57
<b>Overhead Expenses</b>			
Hired labor	24.77	21.53	39.08
Machinery leases	3.93	0.49	0.72
Building leases	1.28	1.23	0.67
Farm insurance	7.89	8.76	14.73
Utilities	5.24	6.10	5.82
Dues & professional fees	3.71	4.09	3.09
Interest	10.07	4.13	13.07
Mach & bldg depreciation	44.09	57.21	51.23
Miscellaneous	2.83	2.58	5.61
Total overhead expenses per acre	103.83	106.12	134.04
Total dir & ovhd expenses per acre	801.81	682.62	611.14
Net return per acre	93.79	146.72	525.53
Government payments	-	-	-
Net return with govt pmts	93.79	146.72	525.53
Labor & management charge	33.41	42.98	43.14
Net return over lbr & mgt	60.38	103.74	482.39
<b>Cost of Production</b>			
Total direct expense per ton	43.04	35.30	28.58
Total dir & ovhd exp per ton	49.44	41.79	36.61
Less govt & other income	37.45	32.10	12.81
With labor & management	39.51	34.73	15.40
Net value per unit	43.23	41.08	44.30
Machinery cost per acre	256.41	210.46	220.91
Est. labor hours per acre	3.02	3.87	3.78

**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	82	17	17
Acres	58.01	72.63	55.51
Yield per acre (ton)	3.69	3.44	5.53
Operators share of yield %	100.00	100.00	100.00
Value per ton	161.72	162.70	165.85
Total product return per acre	597.16	559.00	917.04
Crop insurance per acre	7.08	3.43	4.94
Other crop income per acre	0.08	-	-
Gross return per acre	604.32	562.44	921.98
<b>Direct Expenses</b>			
Seed and plants	1.36	-	-
Fertilizer	53.05	54.31	38.25
Crop chemicals	10.84	10.40	12.21
Crop insurance	3.40	6.00	0.13
Packaging and supplies	15.16	15.11	19.00
Fuel & oil	45.88	45.70	48.41
Repairs	75.35	88.47	70.35
Custom hire	28.77	5.14	60.43
Hired labor	0.36	-	0.85
Machinery leases	2.36	0.13	-
Utilities	0.53	-	-
Hauling and trucking	5.25	-	-
Marketing	1.19	-	2.24
Operating interest	5.96	3.31	7.75
Miscellaneous	3.76	5.12	3.11
Total direct expenses per acre	253.20	233.70	262.74
Return over direct exp per acre	351.12	328.74	659.24
<b>Overhead Expenses</b>			
Hired labor	21.16	21.43	39.34
Machinery leases	3.07	3.21	2.40
RE & pers. property taxes	16.88	14.14	18.17
Farm insurance	13.81	14.49	15.26
Utilities	6.03	6.04	8.52
Dues & professional fees	4.25	2.58	5.36
Interest	64.00	55.74	81.04
Mach & bldg depreciation	57.20	67.98	62.07
Miscellaneous	5.21	8.63	6.46
Total overhead expenses per acre	191.60	194.24	238.61
Total dir & ovhd expenses per acre	444.80	427.93	501.35
Net return per acre	159.51	134.50	420.63
Government payments	-	-	-
Net return with govt pmts	159.51	134.50	420.63
Labor & management charge	57.58	46.79	75.81
Net return over lbr & mgt	101.93	87.71	344.82
<b>Cost of Production</b>			
Total direct expense per ton	68.57	68.02	47.52
Total dir & ovhd exp per ton	120.46	124.55	90.67
Less govt & other income	118.52	123.55	89.78
With labor & management	134.12	137.17	103.49
Net value per unit	161.72	162.70	165.85
Machinery cost per acre	211.62	208.21	245.96
Est. labor hours per acre	3.95	3.58	4.89

**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	101	20	21
Acres	99.19	98.93	110.01
Yield per acre (ton)	3.47	3.17	4.65
Operators share of yield %	100.00	100.00	100.00
Value per ton	164.47	154.30	167.57
Total product return per acre	570.91	489.59	779.50
Crop insurance per acre	4.52	0.36	9.98
Other crop income per acre	0.20	0.21	-
Gross return per acre	575.63	490.16	789.48
<b>Direct Expenses</b>			
Seed and plants	0.66	-	-
Fertilizer	73.44	58.36	54.25
Crop chemicals	12.95	11.40	12.28
Crop insurance	1.88	2.47	2.69
Packaging and supplies	10.90	9.59	7.89
Fuel & oil	44.27	55.62	31.48
Repairs	64.69	72.61	64.79
Custom hire	22.77	6.51	8.81
Hired labor	0.58	-	2.21
Land rent	114.55	108.43	96.74
Machinery leases	1.01	-	0.88
Operating interest	7.41	7.96	3.83
Miscellaneous	2.52	3.10	1.92
Total direct expenses per acre	357.62	336.05	287.76
Return over direct exp per acre	218.01	154.11	501.72
<b>Overhead Expenses</b>			
Hired labor	21.24	22.20	8.84
Machinery leases	2.67	0.56	2.22
Building leases	1.35	0.88	0.15
Farm insurance	11.10	10.84	8.56
Utilities	5.80	5.08	6.34
Dues & professional fees	3.71	3.56	2.75
Interest	7.04	5.68	4.76
Mach & bldg depreciation	44.35	46.81	34.47
Miscellaneous	3.58	2.11	3.02
Total overhead expenses per acre	100.84	97.71	71.10
Total dir & ovhd expenses per acre	458.46	433.76	358.87
Net return per acre	117.17	56.40	430.61
Government payments	-	-	-
Net return with govt pmts	117.17	56.40	430.61
Labor & management charge	44.83	49.65	48.88
Net return over lbr & mgt	72.34	6.75	381.73
<b>Cost of Production</b>			
Total direct expense per ton	103.02	105.91	61.86
Total dir & ovhd exp per ton	132.07	136.70	77.15
Less govt & other income	130.71	136.52	75.00
With labor & management	143.63	152.17	85.51
Net value per unit	164.47	154.30	167.57
Machinery cost per acre	182.51	183.31	142.84
Est. labor hours per acre	3.53	3.37	3.44

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

	<b>Rented Hay, Mixed</b>	<b>Rented Hay, Grass</b>
Number of farms	31	58
Acres	173.38	70.78
Yield per acre	1.82	1.54
Operators share of yield %	100.00	100.00
Value	105.34	94.09
Total product return per acre	191.77	145.81
Other crop income per acre	9.25	1.26
Gross return per acre	201.02	147.07
<b>Direct Expenses</b>		
Seed	1.29	1.45
Fertilizer	21.13	12.10
Crop chemicals	1.04	0.15
Crop insurance	1.80	-
Packaging and supplies	4.10	3.56
Fuel & oil	23.09	20.09
Repairs	38.59	35.61
Custom hire	5.13	1.58
Machinery Leases	2.26	1.69
Land Rent	37.45	73.69
Operating interest	6.66	2.72
Miscellaneous	0.32	1.26
Total direct expenses per acre	143.12	153.88
Return over direct exp per acre	57.90	-6.81
<b>Overhead Expenses</b>		
Hired labor	7.83	16.67
Mach and bldg leases	1.26	3.20
Farm insurance	4.84	6.35
Utilities	2.99	2.52
Dues & professional fees	3.32	2.09
Interest	4.22	5.25
Mach & bldg depreciation	18.09	26.63
Miscellaneous	4.52	2.18
Total overhead expenses per acre	47.06	64.90
Total dir & ovhd expenses per acre	190.18	218.78
Net return per acre	10.84	-71.71
Government payments	-	-
Net return with govt pmts	10.84	-71.71
Labor & management charge	29.69	25.62
Net return over lbr & mgt	-18.85	-97.33
<b>Cost of Production</b>		
Total direct expense per bu.	78.61	100.12
Total dir & ovhd exp per bu.	104.47	142.34
Less govt & other income	99.38	140.75
With labor & management	115.69	157.42
Net value per unit	105.34	94.09
Machinery cost per acre	89.99	91.41
Est. labor hours per acre	2.01	2.25

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

	<b>Establish Alfalfa Hay</b>	<b>Oatlage</b>	<b>Sorghum Silage</b>	<b>Perennial Rye Grass Seed</b>
Number of farms	29	13	9	9
Acres	57.81	26.00	33.78	627.40
Yield per acre	1.75	3.00	6.30	768.47
Operators share of yield %	100.00	100.00	100.00	100.00
Value	164.76	41.34	41.52	0.96
Total product return per acre	291.17	124.20	261.43	734.05
Other crop income per acre	0.18	11.15	-	36.25
Gross return per acre	291.35	135.35	261.43	783.07
<b>Direct Expenses</b>				
Seed	106.80	26.49	36.05	22.09
Fertilizer	64.92	33.10	33.55	180.02
Crop chemicals	11.56	2.97	1.77	47.85
Crop insurance	1.68	1.63	-	26.37
Packaging and supplies	15.32	8.07	13.12	-
Fuel & oil	54.35	26.88	34.62	28.15
Repairs	62.62	46.49	59.07	45.54
Custom hire	60.51	17.94	41.10	10.57
Land Rent	118.92	43.57	50.76	49.73
Machinery Leases	0.55	0.18	-	3.43
Operating interest	5.09	3.50	0.18	17.01
Miscellaneous	2.16	1.19	7.43	0.01
Total direct expenses per acre	504.68	212.01	277.65	433.35
Return over direct exp per acre	-213.33	-76.66	-16.22	349.72
<b>Overhead Expenses</b>				
Hired labor	26.69	4.36	17.82	8.33
Mach and bldg leases	3.81	2.67	7.37	2.46
RE & pers. property taxes	2.88	3.29	4.59	2.25
Farm insurance	10.24	7.05	13.74	20.44
Utilities	5.57	4.65	7.77	5.12
Dues & professional fees	3.72	2.79	3.46	2.85
Interest	27.15	10.08	37.42	8.28
Mach & bldg depreciation	51.63	24.53	38.98	56.44
Miscellaneous	3.01	2.41	2.47	2.57
Total overhead expenses per acre	134.69	61.84	133.61	108.72
Total dir & ovhd expenses per acre	639.37	273.84	411.26	542.07
Net return per acre	-348.02	-138.49	-149.83	240.99
Government payments	-	-	-	-
Net return with govt pmts	-348.02	-138.49	-149.83	240.99
Labor & management charge	38.69	36.32	38.98	48.89
Net return over lbr & mgt	-386.71	-174.81	-188.80	192.10
<b>Cost of Production</b>				
Total direct expense per bu.	287.94	70.56	44.10	0.56
Total dir & ovhd exp per bu.	364.79	91.14	65.32	0.71
Less govt & other income	363.33	87.43	65.32	0.64
With labor & management	385.40	99.51	71.51	0.71
Net value per unit	164.76	41.34	41.52	0.96
Machinery cost per acre	240.78	116.32	177.61	143.70
Est. labor hours per acre	3.23	2.49	4.16	1.58

\* 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>Potatoes</u>	<u>Soybeans</u>	<u>Beans, Dark Red Kidney</u>
Number of farms	63	21	5	27	9
Acres	263.92	74.22	315.00	127.84	253.33
Yield per acre	215.20	23.84	488.35	52.80	22.47
Operators share of yield %	100.00	100.00	100.00	100.00	100.00
Value	4.71	43.14	12.84	12.73	43.50
Total product return per acre	1016.62	1028.44	6268.32	672.55	977.16
Crop insurance per acre	31.01	61.21	0.58	36.50	96.02
Other crop income per acre	1.29	-	-	-	-
Gross return per acre	1048.91	1089.65	6268.90	709.05	1073.19
<b>Direct Expenses</b>					
Seed	102.28	103.51	411.16	53.01	108.99
Fertilizer	231.33	119.68	598.57	49.28	175.28
Crop chemicals	43.70	42.67	635.40	58.70	127.82
Crop insurance	23.45	21.50	76.39	17.85	23.72
Marketing	1.76	-	16.77	2.99	1.03
Irrigation energy	39.98	32.64	58.62	40.37	29.90
Packaging and supplies/Drying Corn	17.02	9.90	-	-	1.18
Fuel & oil	41.17	54.67	190.98	22.46	38.72
Repairs	74.93	70.87	475.58	48.37	68.24
Custom hire and Trucking	17.84	71.51	184.03	15.98	27.14
Hired labor	5.76	-	230.10	0.92	17.48
Land Rent	111.09	71.45	402.20	83.84	143.40
Operating interest	15.06	2.65	32.29	3.82	32.47
Miscellaneous	10.27	1.35	152.06	2.99	5.19
Total direct expenses per acre	735.64	602.82	3464.14	400.69	800.54
Return over direct exp per acre	313.28	486.83	2804.76	308.36	272.65
<b>Overhead Expenses</b>					
Hired labor	21.98	36.17	224.19	7.06	13.39
Mach and bldg leases	4.86	1.68	19.26	6.81	11.87
RE & pers. property taxes	5.97	9.81	-	4.61	2.71
Farm insurance	17.59	15.73	86.34	10.07	12.65
Utilities	6.44	5.08	62.23	3.94	5.53
Dues & professional fees	5.08	3.89	28.32	2.92	4.23
Interest	33.08	43.06	23.55	22.73	10.53
Mach & bldg depreciation	76.66	71.86	384.66	36.50	57.36
Miscellaneous	5.44	2.51	20.39	3.92	7.66
Total overhead expenses per acre	177.11	189.78	848.94	98.56	125.93
Total dir & ovhd expenses per acre	912.75	792.60	4313.08	499.25	926.46
Net return per acre	136.16	297.05	1955.83	209.80	146.72
Government payments	-	-	-	-	-
Net return with govt pmts	136.16	297.05	1955.83	209.80	146.72
Labor & management charge	62.97	47.47	343.18	40.03	69.37
Net return over lbr & mgt	73.20	249.58	1612.65	169.77	77.35
<b>Cost of Production</b>					
Total direct expense per bu.	3.42	25.28	7.09	7.59	35.63
Total dir & ovhd exp per bu.	4.24	33.24	8.83	9.46	41.24
Less govt & other income	4.07	30.68	8.83	8.76	36.96
With labor & management	4.37	32.67	9.53	9.52	40.05
Net value per unit	4.71	43.14	12.84	12.73	43.50
Machinery cost per acre	215.14	271.33	1085.05	127.81	192.85
Est. labor hours per acre	3.10	3.96	23.03	2.08	3.08

\* 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>Barley</u>	<u>Oats</u>	<u>Rye</u>	<u>Wheat, Winter</u>
Number of farms	10	26	31	4
Acres	320.40	90.93	106.09	400.66
Yield per acre	79.56	107.33	40.90	69.28
Operators share of yield %	100.00	100.00	100.00	100.00
Value	7.26	4.00	6.73	7.72
Total product return per acre	577.85	466.76	287.37	535.13
Crop insurance per acre	6.24	3.81	11.70	11.23
Other crop income per acre	2.08	3.87	4.68	11.47
Gross return per acre	586.16	474.44	303.76	557.84
<b>Direct Expenses</b>				
Seed	27.13	22.67	30.41	23.33
Fertilizer	117.41	67.55	84.16	153.09
Crop chemicals	40.88	22.19	9.94	32.33
Crop insurance	22.32	10.30	7.40	20.63
Fuel & oil	21.56	21.64	21.79	17.28
Repairs	42.89	37.55	34.51	30.55
Custom hire	7.78	13.13	9.57	4.36
Hired labor	-	-	3.40	86.27
Land Rent	71.27	72.59	59.27	2.13
Machinery Leases	4.00	0.21	7.22	-
Operating interest	12.55	6.64	12.33	10.74
Miscellaneous	4.66	3.10	5.99	4.76
Total direct expenses per acre	372.45	277.55	285.99	385.47
Return over direct exp per acre	213.71	196.89	17.77	172.37
<b>Overhead Expenses</b>				
Hired labor	24.24	10.27	7.63	8.90
Machinery leases	2.46	2.15	3.26	1.96
Building leases	0.93	0.68	0.53	0.96
RE & pers. property taxes	3.39	4.22	2.45	2.68
Farm insurance	7.68	7.47	9.61	6.82
Utilities	2.77	3.49	3.13	1.95
Dues & professional fees	1.73	1.84	2.71	3.59
Interest	12.02	12.74	8.55	13.23
Mach & bldg depreciation	24.14	22.09	34.19	19.78
Miscellaneous	2.50	1.71	5.67	0.54
Total overhead expenses per acre	81.86	66.66	77.73	60.41
Total dir & ovhd expenses per acre	454.31	344.21	363.72	445.88
Net return per acre	131.85	130.23	-59.96	111.96
Government payments	-	-	-	-
Net return with govt pmts	131.85	130.23	-59.96	111.96
Labor & management charge	26.09	33.56	31.98	22.11
Net return over lbr & mgt	105.76	96.67	-91.94	89.85
<b>Cost of Production</b>				
Total direct expense per bu.	4.68	2.59	6.99	5.56
Total dir & ovhd exp per bu.	5.71	3.21	8.89	6.44
Less govt & other income	5.60	2.79	8.19	6.11
With labor & management	5.93	3.10	8.97	6.43
Net value per unit	7.26	4.00	6.73	7.72
Machinery cost per acre	101.98	96.33	111.77	75.62
Est. labor hours per acre	1.53	1.94	1.64	0.79

\* 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 \***

	<b>Beans, Navy</b>	<b>Beans, Black Turtle</b>	<b>Canola</b>	<b>Soybeans, Seed</b>
Number of farms	7	4	14	15
Acres	252.00	173.25	538.11	456.24
Yield per acre	24.16	20.19	27.05	40.21
Operators share of yield %	100.00	100.00	100.00	100.00
Value	33.71	39.93	22.47	14.26
Total product return per acre	814.33	806.22	607.75	573.43
Crop insurance per acre	13.08	17.91	9.05	27.57
Other crop income per acre	9.53	-	5.06	10.61
Gross return per acre	836.94	824.14	621.86	611.61
<b>Direct Expenses</b>				
Seed	80.75	82.08	57.42	59.48
Fertilizer	111.02	116.56	165.84	46.04
Crop chemicals	86.42	122.01	46.68	57.97
Crop insurance	24.42	23.01	17.97	18.51
Fuel & oil	24.94	39.38	23.92	22.80
Repairs	36.05	51.45	37.14	39.54
Custom hire	5.12	33.65	13.35	5.96
Hired labor	3.37	-	-	0.28
Land Rent	110.83	112.83	45.45	92.74
Machinery Leases	-	4.65	1.89	3.06
Operating interest	11.35	16.45	10.62	10.71
Miscellaneous	6.00	12.23	2.40	5.05
Total direct expenses per acre	500.26	614.29	422.70	362.52
Return over direct exp per acre	336.67	209.84	199.16	249.09
<b>Overhead Expenses</b>				
Hired labor	8.95	35.69	7.52	12.41
Machinery leases	7.68	1.34	6.36	1.90
Building leases	-	-	-	0.27
RE & pers. property taxes	10.16	5.10	3.61	6.22
Farm insurance	7.67	6.20	9.74	7.77
Utilities	2.79	5.76	3.04	4.00
Dues & professional fees	1.48	8.87	1.59	3.63
Interest	35.45	7.79	20.56	25.97
Mach & bldg depreciation	32.12	38.61	33.78	41.86
Miscellaneous	2.22	14.71	3.14	5.73
Total overhead expenses per acre	108.53	124.09	89.35	109.76
Total dir & ovhd expenses per acre	608.79	738.38	512.04	472.28
Net return per acre	228.15	85.75	109.81	139.33
Government payments	-	-	-	-
Net return with govt pmts	228.15	85.75	109.81	139.33
Labor & management charge	22.19	46.01	33.13	36.09
Net return over lbr & mgt	205.95	39.74	76.68	103.24
<b>Cost of Production</b>				
Total direct expense per bu.	20.71	30.43	15.63	9.02
Total dir & ovhd exp per bu.	25.20	36.57	18.93	11.75
Less govt & other income	24.27	35.69	18.41	10.80
With labor & management	25.18	37.97	19.63	11.69
Net value per unit	33.71	39.93	22.47	14.26
Machinery cost per acre	107.94	163.32	120.68	112.77
Est. labor hours per acre	1.38	2.32	1.25	1.49

\* 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 \***

	<b>Organic Corn</b>	<b>Organic Corn Silage</b>	<b>Organic Hay, Alfalfa</b>	<b>Organic Pasture</b>
Number of farms	10	8	7	7
Acres	86.70	48.34	72.34	86.14
Yield per acre	61.54	13.16	3.28	2.72
Operators share of yield %	100.00	100.00	100.00	100.00
Value	8.69	81.66	164.20	29.91
Total product return per acre	535.05	1,074.97	538.93	81.25
Crop insurance per acre	354.41	120.72	9.36	1.98
Other crop income per acre	-	-	-	-
Gross return per acre	889.47	1,195.68	548.29	83.23
<b>Direct Expenses</b>				
Seed and Plants	99.53	94.54	2.21	11.05
Fertilizer	102.88	154.94	31.32	-
Organic Crop Protection	0.13	2.20	7.71	-
Crop insurance	37.85	15.07	1.45	2.90
Drying expense	4.54	-	-	-
Packaging and Supplies	0.99	7.78	8.90	-
Fuel & oil	40.29	46.10	48.58	6.74
Repairs	82.07	76.56	79.17	8.94
Custom hire and Trucking	7.95	31.01	12.27	-
Land Rent	73.60	81.46	29.44	28.05
Organic Certification	3.87	3.68	3.75	3.67
Operating interest	22.74	8.16	5.57	4.22
Miscellaneous	6.82	0.62	3.16	1.02
Total direct expenses per acre	480.15	522.10	233.54	66.59
Return over direct exp per acre	409.32	673.58	314.76	16.64
<b>Overhead Expenses</b>				
Hired labor	2.08	30.79	34.17	2.85
Mach and bldg leases	3.42	1.23	3.57	1.06
RE & pers. property taxes	2.45	5.63	10.02	7.37
Farm insurance	11.90	13.43	12.86	1.35
Utilities	9.10	4.82	2.39	0.92
Dues & professional fees	3.39	8.52	3.97	0.36
Interest	9.54	28.62	32.37	9.89
Mach & bldg depreciation	38.56	74.24	63.27	11.22
Miscellaneous	2.48	4.34	3.96	0.77
Total overhead expenses per acre	82.93	171.62	166.56	35.80
Total dir & ovhd expenses per acre	563.08	693.72	400.10	102.39
Net return per acre	326.39	501.96	148.19	-19.16
Government payments	-	-	-	-
Net return with govt pmts	326.39	501.96	148.19	-19.16
Labor & management charge	88.51	164.22	63.18	7.35
Net return over lbr & mgt	237.87	337.74	85.01	-26.51
<b>Cost of Production</b>				
Total direct expense / Unit of Production	7.80	39.66	71.15	24.51
Total dir & ovhd exp / Unit of Production	9.15	52.70	121.90	37.69
Less govt & other income	3.39	43.53	119.05	36.96
With labor & management	4.83	56.00	138.30	39.67
Net value per unit	8.69	81.66	164.20	29.91
Machinery cost per acre	173.54	233.08	214.06	28.25
Est. labor hours per acre	3.36	5.70	5.33	0.77

\* 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)**

**Corn Owned and Rented Acres Combined\***

	<u>No Cover Crop</u>	<u>Grown after Cover Crop</u>	<u>Cover Crop Enterprise</u>	<u>Combined with Cover Crop</u>
Number of farms	289	8	8	8
Acres	331.85	182.29	182.29	182.29
Yield per acre (bu.)	159.70	145.67	-	-
Operators share of yield %	100.00	100.00	-	-
Value per bu.	4.69	4.63	-	-
Other product return per acre	4.18	1.23	-	1.23
Total product return per acre	752.43	675.85	-	675.85
Hedging gains/losses per acre	3.38	4.33	-	4.33
Crop insurance per acre	69.26	79.44	-	79.44
Other crop income per acre	2.70	0.31	8.89	9.19
Gross return per acre	827.77	759.92	8.89	768.81
<b>Direct Expenses</b>				
Seed and plants	102.35	89.81	16.99	106.81
Fertilizer	185.61	170.56	-	170.56
Crop chemicals	38.94	37.47	-	37.47
Crop insurance	26.90	27.84	-	27.84
Drying expense	14.96	11.18	-	11.18
Storage	0.92	0.24	-	0.24
Packaging and supplies	0.40	0.51	-	0.51
Fuel & oil	38.89	27.64	8.48	36.12
Repairs	68.62	72.18	26.93	99.11
Custom hire	13.91	5.40	0.55	5.95
Hired labor	2.87	-	-	-
Land rent	105.74	90.83	-	90.83
Machinery leases	4.39	0.61	-	0.61
Hauling and trucking	1.70	1.07	-	1.07
Marketing	1.32	2.07	-	2.07
Operating interest	15.01	7.55	2.00	9.54
Miscellaneous	3.14	7.05	-	7.05
Total direct expenses per acre	625.67	552.01	54.95	606.96
Return over direct exp per acre	202.11	207.92	-46.06	161.85
<b>Overhead Expenses</b>				
Hired labor	16.72	20.06	4.68	24.74
Machinery leases	7.36	0.71	0.14	0.85
Building leases	0.68	5.15	1.38	6.53
RE & pers. property taxes	4.66	1.19	-	1.19
Farm insurance	12.05	10.58	2.72	13.30
Utilities	5.90	6.91	1.81	8.72
Dues & professional fees	3.98	3.00	0.78	3.78
Interest	21.61	15.89	1.34	17.23
Mach & bldg depreciation	56.86	42.03	10.09	52.12
Miscellaneous	6.18	5.34	1.41	6.75
Total overhead expenses per acre	136.00	110.86	24.36	135.22
Total dir & ovhd expenses per acre	761.67	662.87	79.31	742.18
Net return per acre	66.10	97.06	-70.42	26.63
Government payments	-	-	-	-
Net return with govt pmnts	66.10	97.06	-70.42	26.63
Labor & management charge	51.10	58.65	14.98	73.64
Net return over lbr & mgt	15.00	38.40	-85.40	-47.00
<b>Cost of Production</b>				
Total direct expense per bu.	3.92	3.79	-	4.17
Total dir & ovhd exp per bu.	4.77	4.55	-	5.10
Less govt & other income	4.27	3.96	-	4.45
With labor & management	4.59	4.37	-	4.95
Net value per unit	4.71	4.66	-	4.66
Machinery cost per acre	191.87	148.52	46.24	194.76
Est. labor hours per acre	2.77	3.36	0.84	4.20

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

**Soybeans Owned and Rented Acres Combined\***

	<u>No Cover Crop</u>	<u>Grown after Cover Crop</u>	<u>Cover Crop Enterprise</u>	<u>Combined with Cover Crop</u>
Number of farms	277	10	10	10
Acres	410.16	127.60	127.60	127.60
Yield per acre (bu.)	39.47	42.20	-	-
Operators share of yield %	100.00	100.00	-	-
Value per bu.	12.41	12.74	-	-
Other product return per acre	0.14	-	-	-
Total product return per acre	489.85	537.49	2.01	539.50
Hedging gains/losses per acre	1.39	-	-	-
Crop insurance per acre	17.84	31.30	-	31.30
Other crop income per acre	4.04	9.20	4.49	13.69
Gross return per acre	513.13	577.98	6.50	584.48
<b>Direct Expenses</b>				
Seed and plants	60.59	60.28	15.90	76.18
Fertilizer	48.43	44.90	-	44.90
Crop chemicals	54.31	59.90	0.20	60.11
Crop insurance	18.12	28.06	-	28.06
Fuel & oil	23.04	17.35	6.19	23.54
Repairs	39.11	51.32	24.53	75.84
Custom hire	7.17	8.41	2.98	11.39
Hired labor	1.09	-	-	-
Land rent	77.13	89.69	-	89.69
Machinery leases	3.31	0.59	-	0.59
Hauling and trucking	1.46	0.42	-	0.42
Marketing	1.67	1.54	-	1.54
Operating interest	7.93	4.26	1.32	5.58
Miscellaneous	2.77	6.76	0.00	6.77
Total direct expenses per acre	346.13	373.48	51.12	424.61
Return over direct exp per acre	167.00	204.49	-44.62	159.87
<b>Overhead Expenses</b>				
Hired labor	9.91	8.57	2.84	11.41
Machinery leases	2.97	0.77	0.41	1.18
Building leases	0.45	1.90	0.90	2.80
RE & pers. property taxes	4.36	2.56	-	2.56
Farm insurance	8.08	8.08	3.62	11.70
Utilities	3.87	4.22	1.79	6.01
Dues & professional fees	2.35	2.58	1.19	3.77
Interest	15.11	26.59	2.74	29.33
Mach & bldg depreciation	31.91	30.54	13.30	43.83
Miscellaneous	2.89	4.50	2.17	6.67
Total overhead expenses per acre	81.89	90.30	28.96	119.26
Total dir & ovhd expenses per acre	428.03	463.78	80.09	543.87
Net return per acre	85.11	114.20	-73.59	40.61
Government payments	-	-	-	-
Net return with govt pmts	85.11	114.20	-73.59	40.61
Labor & management charge	31.55	28.47	12.05	40.52
Net return over lbr & mgt	53.55	85.73	-85.64	0.09
<b>Cost of Production</b>				
Total direct expense per bu.	8.77	8.85	-	10.05
Total dir & ovhd exp per bu.	10.84	10.99	-	12.87
Less govt & other income	10.25	10.03	-	11.81
With labor & management	11.05	10.71	-	12.77
Net value per unit	12.44	12.74	-	12.77
Machinery cost per acre	108.93	113.46	49.31	162.78
Est. labor hours per acre	1.56	1.76	0.74	2.50

**ALEXANDRIA**  
Technical & Community  
**COLLEGE**  
A member of Minnesota State

**RANKED #1**  
IN MINNESOTA FOR  
AFFORDABILITY  
AND QUALITY

**YOUR JOURNEY  
STARTS HERE.**

[www.alextech.edu](http://www.alextech.edu) | [go@alextech.edu](mailto:go@alextech.edu) | 320-762-0221  
888-234-1222 | 1601 Jefferson Street | Alexandria, MN 56308 | An Equal Opportunity Employer/Educator  
This document is available in alternative formats by calling 888-234-1222 ext. 4673 or 320-762-4673

**NEXT-GEN  
AGRICULTURE**

Grow your farm business or explore promising careers  
in Animal Science, Farm Business Management, Farm  
Operations Management, and General Agriculture.  
**1-800-959-6282 | [northlandcollege.edu](http://northlandcollege.edu)**

**NORTHLAND**  
COMMUNITY & TECHNICAL COLLEGE

A member of Minnesota State. An affirmative action, equal opportunity employer & educator.

ST. CLOUD TECHNICAL & COMMUNITY COLLEGE

# FARM MANAGEMENT



Learn how to grow a strong, sustainable farming business.

The Farm Business Management degree at SCTCC is designed to educate farm owners/operators and those about to go into the farming industry to meet and exceed both personal and business goals. Faculty work on your farm with individualized curriculum for the needs of each farm owner. Instruction is based on economic, social, and cultural goals of the family and business unit.

### FARM MANAGEMENT CERTIFICATE OPTIONS:

- Essentials of Farm Business Management
- Applications in Farm Business Management
- Advanced Farm Business Management
- Current Issues in Farm Business Management
- Agricultural Commodities Marketing



**ST. CLOUD**  
TECHNICAL & COMMUNITY COLLEGE

A member of Minnesota State

[sctcc.edu/farm](http://sctcc.edu/farm)

320.308.5000 | 800.222.1009  
1540 Northway Drive, St. Cloud, MN 56303

SCTCC is a member of Minnesota State and accredited by the Higher Learning Commission. ADA Accessible. Equal opportunity employer and educator.

## CENTRAL LAKES COLLEGE AGRICULTURAL PROGRAMS

**MEAT CUTTING  
AND BUTCHERY**

**AGRICULTURAL  
CROP PRODUCTION  
AND MANAGEMENT**

**FARM BUSINESS  
MANAGEMENT**



**CLC** CENTRAL LAKES COLLEGE

**FOR MORE INFORMATION  
CALL 218 855-8000**

Equal opportunity educator/employer. ADA accessible

**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>	
	249		50		50	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	99.59	19.06	99.65	18.95	99.40	20.24
Dairy Calves sold (hd)	0.00	0.43	0.00	0.43	0.00	0.45
Transferred out (hd)	0.00	0.20	0.00	0.13	0.00	0.26
Cull sales (hd)	0.00	1.23	0.00	1.23	0.00	1.30
Insurance income		0.45		0.35		0.32
Government payments		1.00		0.97		1.37
Other income		0.17		0.15		0.17
Purchased (hd)	0.00	-0.19	0.00	-0.05	0.00	-0.12
Transferred in (hd)	0.00	-0.46	0.00	-0.67	0.00	-0.21
Inventory change (hd)	0.00	0.20	0.00	0.05	0.00	0.20
Dairy repl cost		-2.67		-2.45		-2.25
Gross margin		19.43		19.11		21.73
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	14.14	3.62	9.70	2.73	13.50	3.33
Complete Ration (lb.)	3.94	2.15	6.33	2.60	2.56	2.26
Corn (bu.)	0.28	1.42	0.26	1.23	0.27	1.42
Corn Silage (lb.)	78.62	1.86	82.25	1.91	68.35	1.61
Hay, Alfalfa (lb.)	9.11	0.75	11.49	0.91	8.41	0.70
Other feed stuffs (lb)	17.60	0.93	13.85	0.78	16.18	0.94
Breeding fees		0.21		0.20		0.21
Veterinary		0.40		0.39		0.36
Supplies		0.63		0.56		0.56
Fuel & oil		0.43		0.43		0.41
Repairs		0.83		0.85		0.88
Custom hire		0.37		0.27		0.26
Hired labor		1.41		1.93		0.61
Hauling and trucking		0.46		0.49		0.29
Bedding		0.35		0.33		0.41
Miscellaneous		0.67		0.65		0.67
Total direct expenses		16.49		16.24		14.91
Return over direct expense		2.94		2.86		6.82
<b>Overhead Expenses</b>						
Hired labor		0.63		0.36		0.81
Interest		0.41		0.38		0.36
Mach & bldg depreciation		0.77		0.79		0.85
Miscellaneous		0.98		1.04		1.09
Total overhead expenses		2.80		2.57		3.11
Total dir & ovhd expenses		19.29		18.81		18.02
Net return		0.14		0.30		3.71
Labor & management charge		0.74		0.70		1.07
Net return over lbr & mgt		-0.60		-0.40		2.64
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		16.49		16.24		14.91
Total dir & ovhd expense per unit		19.29		18.81		18.02
With other revenue adjustments		18.97		18.69		16.62
With labor and management		19.71		19.40		17.69
Est. labor hours per unit		0.15		0.15		0.14
<b>Other Information</b>						
Number of cows		288.0		276.3		197.5
Milk produced per cow		25,918		26,340		26,756
Energy corrected milk per cow		28,253		28,867		29,319
Lbs of fat & protein per cow		1,916		1,961		1,987
Culling percentage		29.2		29.7		28.5
Turnover rate		34.6		35.8		33.5
Cows per milking unit		23		22		22
Feed cost per cwt. of milk		10.73		10.15		10.26
Feed cost per cow		2,779.78		2,674.45		2,744.72
Hired labor per cow		529.09		601.89		379.79
Avg. milk price per cwt.		19.14		19.01		20.36
Milk price / feed margin		8.41		8.86		10.10

**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>	
	249		50		50	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	25,813.1	4,940.54	26,247.6	4,990.36	26,595.0	5,415.61
Dairy Calves sold (hd)	0.4	111.72	0.4	114.17	0.4	120.50
Transferred out (hd)	0.7	51.69	0.6	34.90	0.6	68.84
Cull sales (hd)	0.3	319.76	0.3	324.49	0.3	348.06
Insurance income		116.51		93.09		85.92
Government payments		258.86		256.65		366.71
Other income		44.67		38.30		45.42
Purchased (hd)	0.0	-48.57	0.0	-13.82	0.0	-31.61
Transferred in (hd)	0.4	-119.90	0.4	-176.60	0.4	-56.93
Inventory change (hd)	0.0	52.68	0.0	14.35	0.0	53.94
Dairy repl cost		-691.44		-644.50		-601.56
Gross margin		5,036.98		5,033.12		5,814.92
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	3,663.7	938.34	2,554.6	717.85	3,612.5	891.26
Complete Ration (lb.)	1,020.0	558.47	1,668.3	683.89	683.9	604.73
Corn (bu.)	73.1	367.00	68.5	323.87	73.3	379.05
Corn Silage (lb.)	20,376.0	480.84	21,664.1	503.01	18,287.5	430.08
Hay, Alfalfa (lb.)	2,361.9	194.05	3,025.3	239.27	2,250.1	187.02
Other feed stuffs (lb)	4,560.5	241.09	3,648.6	206.56	4,327.8	252.58
Breeding fees		53.31		52.00		56.02
Veterinary		102.66		102.79		96.60
Supplies		163.77		146.50		149.94
Fuel & oil		112.03		114.16		109.53
Repairs		215.83		223.75		236.08
Custom hire		96.01		70.49		68.30
Hired labor		364.55		507.61		163.86
Hauling and trucking		119.89		127.93		76.26
Bedding		91.67		87.16		110.08
Miscellaneous		174.81		171.88		178.60
Total direct expenses		4,274.31		4,278.72		3,989.99
Return over direct expense		762.67		754.39		1,824.93
<b>Overhead Expenses</b>						
Hired labor		164.54		94.28		215.93
Interest		106.95		99.63		97.16
Mach & bldg depreciation		200.72		209.28		227.44
Miscellaneous		253.33		272.85		291.20
Total overhead expenses		725.53		676.03		831.72
Total dir & ovhd expenses		4,999.84		4,954.76		4,821.71
Net return		37.14		78.36		993.20
Labor & management charge		192.16		183.77		287.60
Net return over lbr & mgt		-155.02		-105.41		705.60
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		16.49		16.24		14.91
Total dir & ovhd expense per unit		19.29		18.81		18.02
With other revenue adjustments		18.97		18.69		16.62
With labor and management		19.71		19.40		17.69
Est. labor hours per unit		37.76		39.43		36.33
<b>Other Information</b>						
Number of cows		288.0		276.3		197.5
Milk produced per cow		25,918		26,340		26,756
Energy corrected milk per cow		28,253		28,867		29,319
Lbs of fat & protein per cow		1,916		1,961		1,987
Culling percentage		29.2		29.7		28.5
Turnover rate		34.6		35.8		33.5
Cows per milking unit		23		22		22
Feed cost per cwt. of milk		10.73		10.15		10.26
Feed cost per cow		2,779.78		2,674.45		2,744.72
Hired labor per cow		529.09		601.89		379.79
Avg. milk price per cwt.		19.14		19.01		20.36
Milk price / feed margin		8.41		8.86		10.10

**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	16		55		75		65		38	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	18,484.6	3,349.15	21,417.4	3,987.86	23,296.0	4,397.24	25,601.9	4,923.25	27,302.0	5,246.76
Dairy Calves sold (hd)	0.2	38.55	0.2	77.37	0.3	66.29	0.3	110.65	0.5	130.78
Transferred out (hd)	0.8	138.28	0.7	89.87	0.7	80.14	0.7	47.80	0.6	39.63
Cull sales (hd)	0.3	335.61	0.3	313.25	0.3	378.67	0.3	332.18	0.3	296.25
Insurance income		-		52.94		72.63		106.03		144.53
Government payments		413.01		410.42		419.80		333.84		150.12
Other income		27.13		31.44		32.48		36.13		54.80
Purchased (hd)	0.2	-240.54	0.1	-55.28	0.0	-17.96	0.0	-26.69	0.0	-65.41
Transferred in (hd)	0.3	-98.60	0.3	-106.54	0.4	-102.95	0.4	-84.77	0.4	-146.29
Inventory change (hd)	0.1	152.66	0.0	73.64	0.0	6.08	0.0	10.41	0.1	85.49
Dairy repl cost		-520.14		-683.55		-688.30		-699.08		-692.06
Gross margin		3,595.09		4,191.64		4,646.42		5,089.74		5,244.81
<b>Direct Expenses</b>										
Protein Vit Minerals (lb.)	3,330.0	745.92	2,996.8	930.86	3,102.9	904.98	3,135.1	846.35	4,203.8	1,003.49
Complete Ration (lb.)	1,819.2	279.22	892.5	212.19	963.3	395.48	1,226.5	695.64	922.1	574.64
Corn (bu.)	57.8	294.51	66.8	333.20	66.7	331.37	69.6	320.54	77.9	408.39
Corn Silage (lb.)	16,668.7	354.86	16,145.9	374.52	19,275.6	441.22	19,510.5	434.44	21,734.3	532.75
Hay, Alfalfa (lb.)	1,744.0	150.35	3,629.5	293.50	3,682.4	301.18	2,869.9	207.51	1,560.1	144.71
Other feed stuffs (lb)	5,895.0	285.81	5,712.0	302.92	4,427.5	224.71	4,160.1	228.82	4,664.2	244.67
Breeding fees		43.31		47.91		49.42		52.47		55.70
Supplies		178.31		164.02		165.02		170.48		159.38
Fuel & oil		101.34		96.61		114.97		119.74		108.87
Repairs		186.41		200.67		227.51		235.67		203.70
Custom hire		30.56		45.72		65.03		76.33		122.95
Hired labor		58.32		19.60		121.66		292.59		520.56
Hauling and trucking		110.93		98.66		95.33		103.22		138.90
Miscellaneous		268.83		323.79		345.26		367.43		384.10
Total direct expenses		3,088.68		3,444.17		3,783.12		4,151.23		4,602.81
Return over direct expense		506.42		747.47		863.30		938.51		642.00
<b>Overhead Expenses</b>										
Hired labor		28.20		99.73		110.04		208.94		165.61
Interest		88.49		113.89		116.37		107.97		103.16
Mach & bldg depreciation		255.47		213.43		229.82		215.90		181.38
Miscellaneous		289.24		236.81		271.12		263.21		243.95
Total overhead expenses		661.41		663.87		727.36		796.01		694.09
Total dir & ovhd expenses		3,750.09		4,108.04		4,510.48		4,947.25		5,296.91
Net return		-154.99		83.61		135.93		142.49		-52.10
Labor & management charge		477.72		383.03		275.76		221.54		124.30
Net return over lbr & mgt		-632.71		-299.43		-139.83		-79.05		-176.40
<b>Cost of Production Per Cwt. Of Milk</b>										
Total direct expense per unit		16.71		16.00		16.16		16.15		16.80
Total dir& ovhd expense per unit		20.29		19.08		19.27		19.24		19.33
With other revenue adjustments		18.96		18.21		18.28		18.66		19.37
With labor and management		21.54		19.99		19.46		19.52		19.82
Est. labor hours per unit		41.43		35.40		33.88		37.26		39.37
<b>Other Information</b>										
Number of cows		40.3		76.5		140.0		309.9		953.0
Milk produced per cow		18,485		21,527		23,408		25,711		27,404
Energy corrected milk per cow		19,706		23,624		25,365		28,010		29,915
Lbs of fat & protein per cow		1,334		1,607		1,717		1,899		2,030
Culling percentage		30.4		28.6		32.1		29.0		28.6
Turnover rate		37.2		36.4		37.9		34.5		33.4
Cows per milking unit		8		11		14		22		36
Feed cost per cwt. of milk		11.42		11.37		11.10		10.63		10.61
Feed cost per cow		2,110.67		2,447.19		2,598.92		2,733.30		2,908.65
Hired labor per cow		86.52		119.34		231.70		501.53		686.17
Avg. milk price per cwt.		18.12		18.62		18.88		19.23		19.22
Milk price / feed margin		6.70		7.25		7.77		8.60		8.60

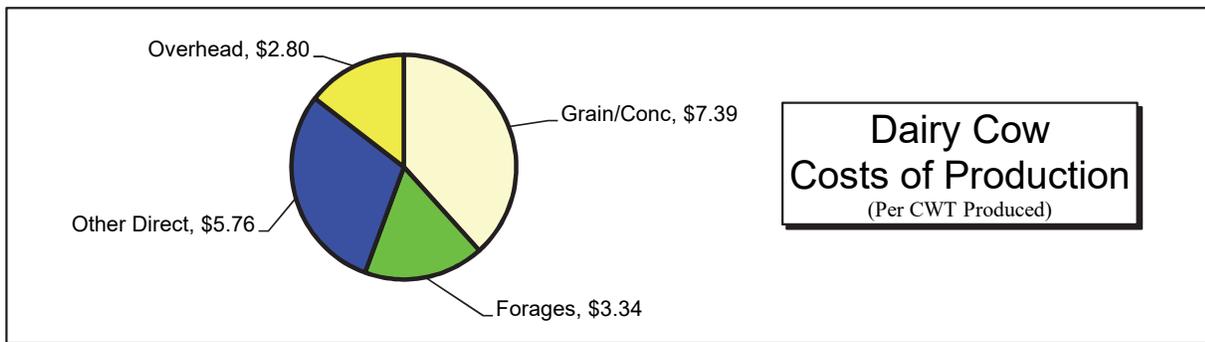
**Livestock Enterprise Analysis**  
**Farm Business Management Statewide Data**  
**Organic Only**  
**(Farms Sorted By Return to Overhead)**  
**Dairy -- Average Per Cow**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	20		4		4	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms		20		4		4
Milk sold (hd)	14,956.3	4,756.77	15,086.9	4,745.81	17,425.0	5,874.22
Dairy Calves sold (hd)	0.4	103.90	0.3	92.47	0.4	129.20
Transferred out (hd)	0.6	60.59	0.7	52.35	0.5	54.30
Cull sales (hd)	0.2	298.39	0.2	252.66	0.3	461.30
Government payments		290.95		209.17		261.76
Other income		49.19		26.92		61.67
Purchased (hd)	0.0	-9.60	-	-	-	-
Transferred in (hd)	0.3	-120.25	0.2	-178.59	0.3	-45.44
Inventory change (hd)	0.0	-70.95	0.0	-425.01	0.0	8.78
Dairy repl cost		-512.34		-395.51		-762.42
Gross margin		4,846.65		4,380.29		6,043.37
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	917.4	216.24	1,081.4	317.55	502.6	178.73
Complete Ration (lb.)	1,258.0	178.40	-	-	3,642.0	498.87
Corn (bu.)	38.4	361.33	30.5	349.03	43.4	410.74
Corn Silage (lb.)	12,479.0	445.63	14,956.3	643.38	9,242.4	254.90
Flax (bu.)	0.1	76.76	-	-	0.3	240.72
Hay, Alfalfa (lb.)	5,059.1	437.26	5,724.8	425.97	4,989.6	520.45
Pasture (aum)	2.0	87.38	2.7	124.19	0.8	68.54
Other feed stuffs (lb)	4,318.1	366.34	8,121.7	378.80	502.0	92.58
Breeding fees		30.92		22.49		39.27
Supplies		150.36		129.16		139.27
Fuel & oil		123.99		136.51		143.73
Repairs		253.02		265.95		299.10
Hired labor		117.94		76.42		202.20
Miscellaneous		384.20		262.93		368.77
Total direct expenses		3,229.77		3,132.38		3,457.88
Return over direct expense		1,616.88		1,247.91		2,585.49
<b>Overhead Expenses</b>						
Hired labor		78.92		107.08		31.78
Building leases		45.42		7.51		94.83
Farm insurance		71.60		55.87		95.08
Interest		118.83		125.81		22.00
Mach & bldg depreciation		202.10		176.95		210.37
Miscellaneous		171.03		128.63		239.22
Total overhead expenses		687.90		601.85		693.27
Total dir & ovhd expenses		3,917.67		3,734.23		4,151.16
Net return		928.98		646.06		1,892.22
Labor & management charge		498.92		325.39		697.15
Net return over lbr & mgt		430.06		320.66		1,195.06
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		21.31		20.61		19.60
Total dir & ovhd expense per unit		25.85		24.57		23.53
With other revenue adjustments		25.53		27.15		22.88
With labor and management		28.82		29.29		26.83
Est. labor hours per unit		42.75		30.98		55.25
<b>Other Information</b>						
Number of cows		91.1		106.3		145.3
Milk produced per cow		15,157		15,198		17,640
Energy corrected milk per cow		17,613		16,659		22,774
Lbs of fat & protein per cow		1,217		1,131		1,637
Culling percentage		22.3		20.5		31.0
Turnover rate		26.9		21.6		34.8
Cows per milking unit		12		15		9
Feed cost per cwt. of milk		14.31		14.73		12.84
Feed cost per cow		2,169.34		2,238.92		2,265.54
Hired labor per cow		196.86		183.50		233.98
Avg. milk price per cwt.		31.80		31.46		33.71
Milk price / feed margin		17.49		16.73		20.87

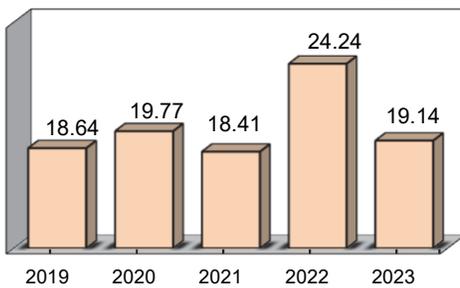
**Livestock Enterprise Analysis**  
**Farm Business Management Statewide Data**  
**Excluding Organic and Organic Transition**  
**(Farms Sorted By Return to Overhead)**  
**Dairy and Repl Heifers -- Average Per Cow**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	210		42		42	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms		210		42		42
Milk sold (hd)	25,927.1	4,964.91	25,964.2	4,973.73	26,609.4	5,454.34
Dairy Calves sold (hd)	-	137.16	-	140.77	-	165.28
Transferred out (hd)	-	37.38	-	27.62	-	47.35
Cull sales (hd)	-	325.70	-	336.09	-	350.19
Insurance income		119.58		75.69		94.02
Government payments		255.79		263.56		362.96
Other income		49.52		36.99		47.76
Purchased (hd)	-	-68.75	-	-28.72	-	-33.92
Transferred in (hd)	-	-26.57	-	-31.64	-	-8.96
Inventory change (hd)	-	80.44	-	29.45	-	87.65
Gross margin		5,876.40		5,823.55		6,574.12
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	3,952.6	992.81	2,385.6	672.90	3,605.4	955.82
Complete Ration (lb.)	1,065.8	654.67	1,194.5	889.09	867.9	718.92
Corn (bu.)	79.1	401.04	80.5	382.20	77.1	397.25
Corn Silage (lb.)	24,079.1	561.05	23,732.1	539.49	21,734.8	507.44
Hay, Alfalfa (lb.)	2,826.8	230.83	3,268.8	274.02	3,026.8	245.50
Other feed stuffs (lb)	6,004.9	347.45	4,810.1	306.96	6,212.4	376.27
Breeding fees		74.69		72.37		72.82
Supplies		179.39		166.71		165.63
Contract production exp.		151.21		176.43		44.82
Fuel & oil		122.36		130.42		121.44
Repairs		242.18		254.36		257.07
Hired labor		426.08		535.13		159.23
Hauling and trucking		120.17		124.59		82.74
Bedding		110.88		119.08		124.11
Miscellaneous		395.24		361.20		383.61
Total direct expenses		5,010.05		5,004.94		4,612.67
Return over direct expense		866.35		818.62		1,961.45
<b>Overhead Expenses</b>						
Hired labor		182.85		116.74		253.68
Interest		125.06		106.77		111.66
Mach & bldg depreciation		221.30		238.35		265.96
Miscellaneous		291.71		295.91		330.06
Total overhead expenses		820.92		757.76		961.36
Total dir & ovhd expenses		5,830.97		5,762.70		5,574.03
Net return		45.43		60.85		1,000.09
Labor & management charge		213.34		208.66		317.78
Net return over lbr & mgt		-167.91		-147.81		682.31
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		19.25		19.21		17.23
Total dir & ovhd expense per unit		22.40		22.12		20.82
With other revenue adjustments		18.95		18.91		16.72
With labor and management		19.77		19.71		17.94
Est. labor hours per unit		43.64		47.21		42.84
<b>Other Information</b>						
Number of cows		294.2		271.9		215.4
Milk produced per cow		26,028		26,049		26,772
Energy corrected milk per cow		28,482		28,520		29,678
Lbs of fat & protein per cow		1,935		1,936		2,020
Culling percentage		28.9		29.1		27.3
Turnover rate		34.3		35.2		32.6
Cows per milking unit		23		21		23
Feed cost per cwt. of milk		12.25		11.76		11.96
Feed cost per cow		3,187.85		3,064.66		3,201.20
Hired labor per cow		608.93		651.86		412.92
Avg. milk price per cwt.		19.15		19.16		20.50
Milk price / feed margin		6.90		7.39		8.54

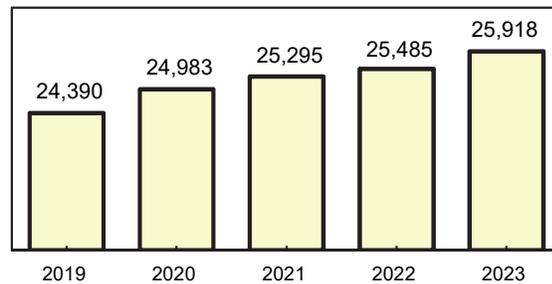
## Summary of Selected Dairy Enterprise Factors



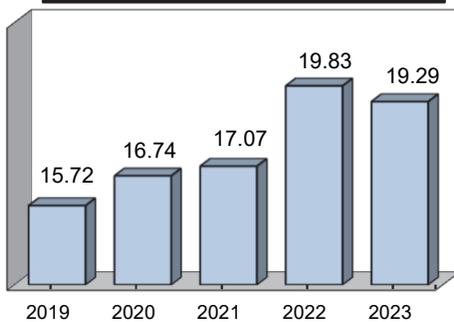
**Avg Milk Price Recv'd**



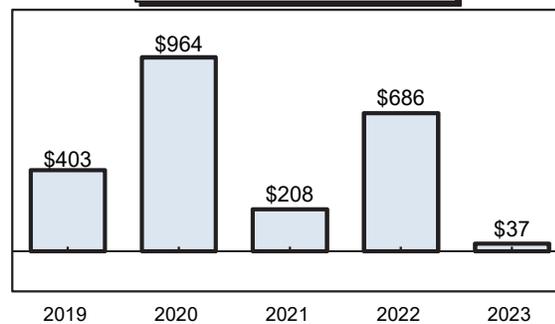
**Milk Production per Cow**



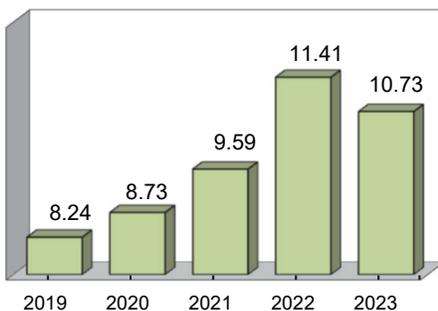
**Dir & Ovhd Exp per CWT**



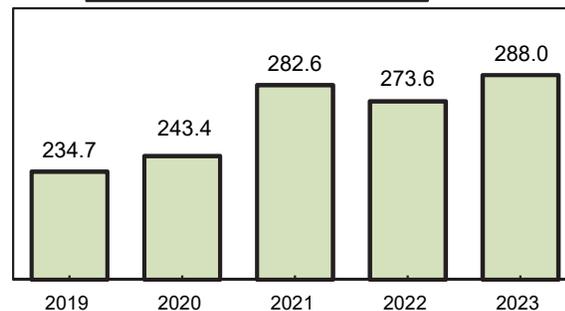
**Net Return per Cow**



**Feed Cost per CWT**



**Avg Number of Cows**



**Livestock Enterprise Analysis**  
**Farm Business Management Statewide Data**  
**Excluding Organic and 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	229		46		46	
	Quantity	Value	Quantity	Value	Quantity	Value
Replacements sold (hd)	0.1	35.36	0.1	60.29	0.0	35.68
Transferred out (hd)	0.5	602.03	0.4	569.56	0.5	951.40
Cull sales (hd)	0.0	10.04	0.0	8.34	0.0	9.41
Insurance income		0.11		-		-
Government payments		0.04		-		-
Other income		0.46		0.58		0.10
Purchased (hd)	0.0	-17.29	0.0	-7.28	0.0	-8.56
Transferred in (hd)	0.6	-134.85	0.5	-127.88	0.6	-95.51
Inventory change (hd)	0.0	10.64	0.0	-21.74	0.0	33.83
Gross margin		507.83		481.88		933.28
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	284.0	80.52	268.3	69.00	307.7	64.51
Milk Replacer (lb.)	21.1	34.33	13.8	19.98	4.7	13.73
Complete Ration (lb.)	471.0	112.88	193.4	97.84	252.6	63.31
Corn (bu.)	5.0	24.75	6.0	29.24	5.9	29.09
Corn Silage (lb.)	4,530.9	105.98	4,724.4	108.77	3,851.3	92.10
Hay, Alfalfa (lb.)	743.9	54.25	667.8	48.95	1,143.3	77.86
Hay, Grass (lb.)	723.3	42.97	663.5	35.39	257.1	11.66
Hay (lb.)	476.5	28.56	650.9	40.32	349.4	21.46
Other feed stuffs (lb)	1,097.5	49.41	1,074.6	45.49	1,223.3	66.90
Breeding fees		23.01		20.56		25.41
Veterinary		20.01		19.23		24.16
Contract production exp.		147.08		101.49		161.36
Repairs		36.27		34.41		34.34
Hired labor		49.59		38.58		28.24
Bedding		21.01		25.41		16.03
Miscellaneous		52.69		55.04		64.81
Total direct expenses		883.31		789.71		794.96
Return over direct expense		-375.48		-307.83		138.32
<b>Overhead Expenses</b>						
Hired labor		27.59		24.87		40.72
Mach & bldg depreciation		36.55		40.53		32.11
Miscellaneous		62.57		62.75		55.57
Total overhead expenses		126.71		128.15		128.40
Total dir & ovhd expenses		1,010.03		917.85		923.36
Net return		-502.20		-435.97		9.92
Labor & management charge		36.55		37.40		40.19
Net return over lbr & mgt		-538.75		-473.37		-30.27
<b>Cost of Production Per Head Per Day</b>						
Total direct expense per unit		2.78		2.57		2.34
Total dir & ovhd expense per unit		3.13		2.92		2.70
With other revenue adjustments		3.13		2.92		2.70
With labor and management		3.23		3.02		2.81
Est. labor hours per unit		6.39		6.16		5.96
<b>Other Information</b>						
No. purchased or trans in		139		96		128
Number sold or trans out		119		87		112
Average number of head		229		177		211
Percentage death loss		3.5		3.3		2.3
Feed cost per average head		533.65		494.98		440.61
Hired labor per average head		77.17		63.45		68.96
Feed cost/head sold/trans		1,030.61		1,002.17		831.53
Total cost/head sold/trans		2,273.89		2,233.65		1,933.07
Feed cost per head per day		1.46		1.36		1.21
Avg. purch price / head		1,306.19		1,409.52		705.13
Avg. sales price / head		523.68		663.90		1,051.36

**Livestock Enterprise Analysis**  
**Farm Business Management Statewide Data**  
**(Farms Sorted By Return to Overhead)**  
**Dairy Finishing (Per Head) and Dairy Feeders (Per Head)**

	<u>Dairy Finishing</u>		<u>Dairy Feeders</u>	
	<b>89</b>		<b>14</b>	
Number of Farms	Quantity	Value	Quantity	Value
Dairy Finish/Feeder sold (lb)	1320.1	2031.19	342.4	568.96
Transferred out (lb)	-	0.04	156.3	301.38
Other income		12.60		11.99
Purchased (lb)	-346.3	-689.80	-62.4	-153.1
Transferred in (lb)	-63.0	-99.25	-23.2	-76.69
Inventory change (lb)	98.1	422.10	-57.0	-11.84
Gross margin		1,676.87		640.68
<b>Direct Expenses</b>				
Protein Vit Minerals (lb.)	671.8	143.13	235.9	78.26
Milk Replacer (lb.)	-	-	30.0	44.92
Complete Ration (lb.)	485.2	89.23	354.9	118.62
Corn (bu.)	93.7	473.29	15.7	85.96
Corn Silage (lb.)	1192.1	27.79	5.6	0.11
DDGS, dry (lb.)	576.9	31.43	-	-
Other feed stuffs (lb)	2084.1	104.84	165.8	9.44
Veterinary		35.22		45.17
Supplies		10.54		7.45
Fuel & Oil		23.06		17.42
Repairs		45.86		24.13
Hired Labor		8.00		18.52
Marketing		10.48		1.48
Bedding		9.99		4.72
Operating interest		33.34		12.12
Miscellaneous		68.95		1.41
Total direct expenses		1115.15		469.73
Return over direct expense		561.72		170.94
<b>Overhead Expenses</b>				
Hired labor		18.29		19.18
Interest		23.01		12.27
Mach & bldg depreciation		48.42		16.09
Miscellaneous		47.23		22.09
Total overhead expenses		136.95		69.63
Total dir & ovhd expenses		1,252.10		539.37
Net return		424.77		101.31
Labor & management charge		68.15		29.12
Net return over lbr & mgt		356.62		72.19
<b>Cost of Production/Cwt. Carcass Sold</b>				
Total direct expense per unit		111.31		140.26
Total dir & ovhd expense per unit		121.68		154.22
With other revenue adjustments		121.69		154.22
With labor and management		126.85		160.06
Est. labor hours per unit		4.59		3.37
<b>Other Information</b>				
No. purchased or trans in		252		156
Number sold or trans out		212		165
Percentage death loss		3.8		3.9
Avg. daily gain (lb.)		2.49		1.59
Lb. of conc / lb. of gain		8.22		4.05
Lb. of feed / lb. of gain		9.14		4.57
Feed cost per cwt. of gain		85.49		92.60
Feed cost per head		869.71		337.32
Hired labor per head		26.28		37.70
Average purchase weight		402		108
Avg wgt / Finish/Feeder sold		1,430		488
Avg purch price / head		800.13		264.98
Avg sales price / cwt.		156.86		166.19

**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>	
Number of farms	72		15		15	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	155.4	346.85	87.5	196.85	308.5	708.75
Transferred out (lb)	254.4	636.38	304.1	749.87	194.4	479.70
Cull sales (lb)	101.0	182.53	207.4	220.75	141.3	153.39
Insurance income		7.99		-		14.38
Government payments		11.83		-		7.08
Other income		14.56		14.97		4.88
Purchased (lb)	-26.1	-65.79	-65.4	-132.57	-0.8	-9.88
Transferred in (lb)	-23.9	-123.96	-50.1	-112.58	-	-45.00
Inventory change (lb)	34.6	131.72	13.3	22.56	-41.5	115.49
Gross margin		1,142.11		959.84		1,428.79
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	290.7	63.48	536.7	56.09	221.4	60.03
Corn Silage (lb.)	3,870.2	90.10	4,471.4	110.01	2,895.7	60.00
Hay, Alfalfa (lb.)	728.5	54.74	1,189.0	100.03	410.0	30.80
Hay, Grass (lb.)	1,710.3	85.45	1,975.4	102.85	540.9	30.55
Pasture (aum)	4.3	90.22	3.3	81.56	5.0	95.98
Hay (lb.)	3,519.0	163.11	935.1	65.69	7,069.9	295.05
Other feed stuffs (lb)	1,861.3	77.09	1,027.3	46.14	491.9	24.32
Veterinary		46.88		46.70		37.91
Fuel & oil		36.23		25.34		37.29
Repairs		58.32		44.07		49.70
Operating interest		25.51		29.56		6.38
Miscellaneous		64.60		41.50		44.49
Total direct expenses		855.71		749.55		772.48
Return over direct expense		286.40		210.29		656.31
<b>Overhead Expenses</b>						
Hired labor		24.17		41.35		5.06
Interest		34.91		21.96		26.53
Mach & bldg depreciation		56.95		46.43		23.27
Miscellaneous		72.51		50.31		59.46
Total overhead expenses		188.54		160.06		114.33
Total dir & ovhd expenses		1,044.25		909.62		886.81
Net return		97.86		50.23		541.97
Labor & management charge		132.82		127.98		108.14
Net return over lbr & mgt		-34.96		-77.75		433.83
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		171.54		149.82		127.33
Total dir & ovhd expense per unit		209.33		181.82		146.18
With other revenue adjustments		198.86		192.11		118.64
With labor and management		225.48		217.69		136.46
Est. labor hours per unit		10.47		9.27		7.67
<b>Other Information</b>						
Number of cows		66.7		82.7		53.3
Pregnancy percentage		94.0		93.0		96.8
Pregnancy loss percentage		1.8		0.9		0.6
Culling percentage		14.4		16.2		12.8
Calving percentage		92.3		92.2		96.1
Weaning percentage		86.2		84.1		90.4
Calves sold per cow		0.78		0.75		0.86
Calf death loss percent		6.5		9.3		4.5
Cow death loss percent		3.2		4.4		4.1
Cows per FTE		267.4		302.0		364.9
Average weaning weight		519		522		579
Lb. weaned/exposed female		447		439		523
Feed cost per cow		624.18		562.37		596.71
Avg wgt/ Beef Calves sold		582		613		591
Avg price / cwt.		223.17		224.86		229.71

**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>	
	42		9		9	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Beef Calves sold (lb)	285.8	623.46	397.5	851.32	230.9	532.02
Transferred out (lb)	156.4	359.42	137.2	296.54	218.0	516.11
Cull sales (lb)	76.6	169.05	66.5	144.32	130.3	179.45
Insurance income		6.07		-		18.48
Government payments		16.07		15.75		20.94
Other income		7.17		-		-
Purchased (lb)	-39.3	-91.63	-0.3	-12.74	-114.4	-142.18
Transferred in (lb)	-3.4	-11.90	-	-39.96	-10.3	-11.94
Inventory change (lb)	25.1	246.18	-10.0	80.81	38.1	460.39
Gross margin		1,323.91		1,336.04		1,573.26
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	195.9	62.07	260.8	64.06	95.5	52.48
Corn Silage (lb.)	4,042.4	82.82	2,993.9	68.02	3,639.6	70.29
Hay, Alfalfa (lb.)	1,213.8	90.40	1,016.1	80.74	1,087.5	75.73
Hay, Grass (lb.)	2,564.7	125.95	2,337.3	131.82	1,812.9	38.16
Pasture (aum)	3.9	78.02	3.6	56.74	3.1	96.75
DDGS, wet (lb.)	226.1	10.62	1,018.9	50.95	-	-
Hay (lb.)	2,311.7	118.77	3,650.7	180.90	1,297.3	56.37
Other feed stuffs (lb)	2,708.9	51.68	623.4	53.41	5,771.8	59.51
Veterinary		39.84		36.08		32.88
Supplies		19.98		15.98		28.25
Fuel & oil		42.34		33.08		46.96
Repairs		71.70		72.98		41.01
Grazing fees		9.60		45.45		1.59
Miscellaneous		65.05		73.36		51.15
Total direct expenses		868.84		963.56		651.14
Return over direct expense		455.07		372.48		922.12
<b>Overhead Expenses</b>						
Interest		39.41		26.14		21.98
Mach & bldg depreciation		73.54		94.20		34.03
Miscellaneous		58.99		52.45		45.31
Total overhead expenses		171.94		172.78		101.32
Total dir & ovhd expenses		1,040.78		1,136.34		752.46
Net return		283.12		199.70		820.81
Labor & management charge		122.86		128.78		112.51
Net return over lbr & mgt		160.26		70.92		708.30
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		172.08		163.06		132.18
Total dir & ovhd expense per unit		206.13		192.30		152.75
With other revenue adjustments		180.76		190.81		97.98
With labor and management		205.09		212.61		120.82
Est. labor hours per unit		9.42		12.14		7.88
<b>Other Information</b>						
Number of cows		81.9		76.3		125.7
Pregnancy percentage		91.8		91.5		93.2
Pregnancy loss percentage		1.8		1.9		1.1
Culling percentage		13.3		10.6		14.9
Calving percentage		90.1		89.7		92.1
Weaning percentage		82.5		80.7		83.8
Calves sold per cow		0.72		0.79		0.75
Calf death loss percent		6.8		8.4		5.1
Cow death loss percent		3.7		2.0		2.4
Cows per FTE		297.3		230.7		355.2
Average weaning weight		514		518		506
Lb. weaned/exposed female		424		418		423
Feed cost per cow		620.34		686.64		449.29
Avg wgt/ Beef Calves sold		635		699		592
Avg price / cwt.		218.16		214.19		230.38

**Livestock Enterprise Analysis**  
**Farm Business Management Statewide Data**  
**Including Backgrounding**  
**(Farms Sorted By Enterprise Size)**  
**Beef Cow-Calf -- Average Per Cow**

	<u>Up to 50</u>		<u>50 100</u>		<u>100 200</u>		<u>200 500</u>	
Number of farms	60		31		18		7	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	251.5	551.90	274.6	571.90	240.3	508.22	78.9	222.34
Transferred out (lb)	171.1	403.51	175.6	406.46	191.3	464.22	309.2	799.53
Cull sales (lb)	75.3	183.34	80.8	163.37	125.6	185.14	63.7	171.18
Insurance income		15.63		-		4.68		9.90
Government payments		11.68		13.74		2.68		26.32
Other income		16.60		25.53		3.90		0.47
Purchased (lb)	-27.2	-99.54	-7.7	-94.55	-29.1	-45.18	-59.5	-70.11
Transferred in (lb)	-	-14.84	-29.6	-71.32	-11.4	-26.74	-16.2	-191.92
Inventory change (lb)	72.6	155.52	25.7	222.25	12.6	76.84	14.0	243.73
Gross margin		1,223.80		1,237.38		1,173.76		1,211.43
<b>Direct Expenses</b>								
Beet Pulp (dry) (lb.)	215.4	1.87	436.1	5.67	223.7	2.03	4,208.2	56.52
Protein Vit Minerals (lb.)	331.5	94.38	227.0	69.15	353.3	50.58	98.8	46.34
Corn (bu.)	10.5	43.74	1.9	8.26	4.7	25.38	0.5	2.30
Corn Silage (lb.)	3,513.7	79.07	3,513.4	77.18	5,288.9	116.15	3,235.7	71.65
Hay, Alfalfa (lb.)	988.5	73.18	1,063.8	68.97	604.7	51.81	1,138.9	91.39
Hay, Grass (lb.)	2,009.3	111.93	2,822.1	149.66	1,447.0	62.94	1,933.9	83.14
Pasture (aum)	4.7	71.32	3.0	58.76	4.1	89.97	4.8	116.02
Hay (lb.)	3,909.4	217.40	2,366.0	113.30	3,132.8	141.39	2,571.4	111.63
Other feed stuffs (lb)	1,184.3	55.79	805.7	36.01	1,308.9	39.93	700.3	10.55
Veterinary		41.87		46.61		42.25		44.22
Fuel & oil		47.36		31.08		33.00		44.81
Repairs		89.10		70.22		53.34		47.13
Operating interest		11.73		13.24		11.53		45.16
Miscellaneous		88.60		78.52		61.43		58.75
Total direct expenses		1,027.34		826.63		781.72		829.61
Return over direct expense		196.46		410.75		392.04		381.82
<b>Overhead Expenses</b>								
Interest		60.55		41.60		28.96		20.06
Mach & bldg depreciation		88.11		70.36		53.70		46.99
Miscellaneous		120.17		85.93		84.03		47.10
Total overhead expenses		268.83		197.89		166.70		114.15
Total dir & ovhd expenses		1,296.17		1,024.52		948.41		943.76
Net return		-72.38		212.86		225.35		267.67
Labor & management charge		170.09		136.77		120.73		96.08
Net return over lbr & mgt		-242.47		76.09		104.62		171.60
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		187.20		156.59		147.52		212.67
Total dir & ovhd expense per unit		236.18		194.08		178.97		241.93
With other revenue adjustments		217.00		173.57		174.84		218.65
With labor and management		247.99		199.47		197.62		243.28
Est. labor hours per unit		13.83		11.11		8.61		7.41
<b>Other Information</b>								
Number of cows		28.6		70.1		136.6		301.6
Pregnancy percentage		94.5		93.5		92.3		92.9
Pregnancy loss percentage		1.9		1.5		1.5		2.8
Culling percentage		13.6		12.7		14.9		14.2
Calving percentage		92.7		92.1		91.0		90.3
Weaning percentage		87.0		85.8		82.8		84.0
Calves sold per cow		0.75		0.77		0.75		0.77
Calf death loss percent		6.2		7.6		8.1		4.3
Cow death loss percent		3.8		2.6		3.1		4.1
Cows per FTE		202.4		252.1		325.3		378.1
Average weaning weight		529		533		527		470
Lb. weaned/exposed female		460		457		436		395
Feed cost per cow		748.68		586.96		580.18		589.54
Avg wgt/ Beef Calves sold		591		620		642		537
Avg price / cwt.		219.48		208.26		211.46		281.80

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

**Beef Finishing (Per Head) and Beef Backgrounding (Per Head)**

	<u>Beef Finishing</u>		<u>Beef Backgrounding</u>	
		<b>86</b>		<b>15</b>
Number of Farms				
	Quantity	Value	Quantity	Value
Dairy Finish/Feeder sold (lb)	1336.3	2343.05	650.9	1369.74
Transferred out (lb)	3.5	5.84	148.5	280.48
Other income		-7.97		0.80
Purchased (lb)	-533.8	-1193.50	-302.7	-829.15
Transferred in (lb)	-45.9	-105.81	-183.8	-462.97
Inventory change (lb)	-19.4	146.27	-6.5	239.57
Gross margin		1,198.18		598.48
<b>Direct Expenses</b>				
Protein Vit Minerals (lb.)	510.7	71.66	43.9	14.79
Complete Ration (lb.)	821.0	94.32	227.8	37.66
Corn (bu.)	47.9	295.77	8.4	46.75
Corn Silage (lb.)	2440.0	61.26	2390.5	49.12
Hay (lb)	756.8	44.31	1901.7	93.86
DDGS, dry (lb.)	576.9	27.21	28.6	3.09
Other feed stuffs (lb)	658.7	44.01		11.36
Veterinary		16.86		12.16
Supplies		6.77		2.02
Fuel & Oil		20.48		15.90
Repairs		37.48		19.03
Hired Labor		9.09		0.47
Marketing		9.94		8.08
Bedding		1.44		2.36
Operating interest		34.84		22.92
Miscellaneous		51.27		17.11
Total direct expenses		826.71		356.68
Return over direct expense		371.47		241.80
<b>Overhead Expenses</b>				
Hired labor		13.75		6.80
Interest		18.90		10.48
Mach & bldg depreciation		44.11		12.62
Miscellaneous		40.91		12.43
Total overhead expenses		117.67		42.33
Total dir & ovhd expenses		944.38		399.01
Net return		253.08		199.47
Labor & management charge		49.72		37.04
Net return over lbr & mgt		204.08		162.43
<b>Cost of Production/Cwt. Carcass Sold</b>				
Total direct expense per unit		146.99		176.29
Total dir & ovhd expense per unit		155.77		181.59
With other revenue adjustments		156.37		181.49
With labor and management		160.08		186.12
Est. labor hours per unit		2.92		2.65
<b>Other Information</b>				
No. purchased or trans in		290		161
Number sold or trans out		296		168
Percentage death loss		0.9		1.1
Avg. daily gain (lb.)		2.71		1.26
Lb. of conc / lb. of gain		7.77		2.59
Lb. of feed / lb. of gain		9.70		11.38
Feed cost per cwt. of gain		86.67		83.75
Feed cost per head		647.31		256.63
Hired labor per head		22.84		7.27
Average purchase weight		639		529
Avg wgt / Finish/Feeder sold		1,440		846
Avg purch price / cwt		223.59		273.93
Avg sales price / cwt.		175.34		210.44

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

**Sheep, Market Lamb Prod -- Average Per Ewe**

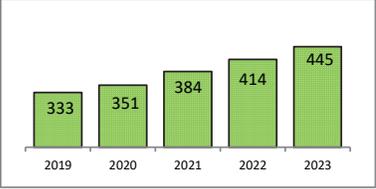
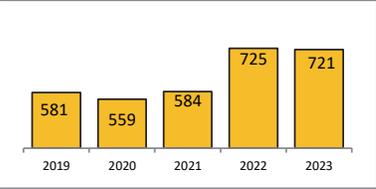
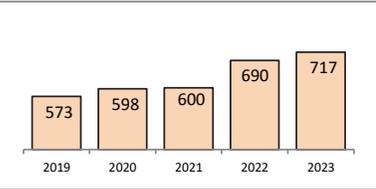
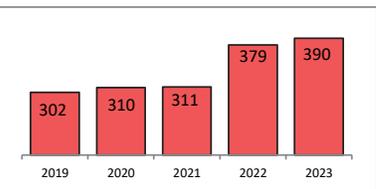
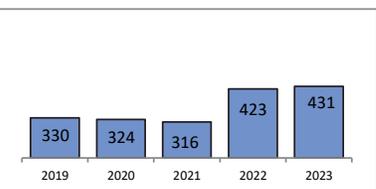
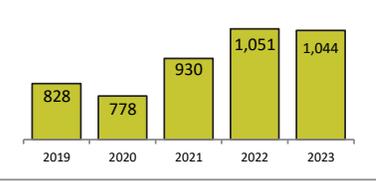
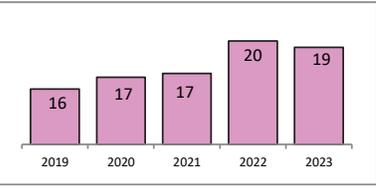
	<b>Avg. Of All Farms</b>	
Number of farms	9	
	Quantity	Value
Lambs sold (lb)	5.6	0.38
Mkt Lambs sold (lb)	168.0	323.00
Cull sales (lb)	11.7	17.11
Government payments		4.29
Other income		8.03
Purchased (lb)	-4.1	-15.83
Transferred in (lb)	-0.9	-0.93
Inventory change (lb)	4.2	30.74
Gross margin		366.78
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	239.1	64.40
Complete Ration (lb.)	73.2	15.33
Corn (bu.)	6.7	36.12
Corn Silage (lb.)	1,178.6	28.84
Hay, Alfalfa (lb.)	532.8	43.15
Hay, Grass (lb.)	214.9	15.55
Hay (lb.)	31.8	2.70
Other feed stuffs (lb)	178.1	12.50
Supplies		9.80
Repairs		17.10
Custom hire		10.60
Miscellaneous		28.67
Total direct expenses		284.77
Return over direct expense		82.02
<b>Overhead Expenses</b>		
Interest		10.67
Mach & bldg depreciation		22.87
Miscellaneous		33.35
Total overhead expenses		66.88
Total dir & ovhd expenses		351.65
Net return		15.13
Labor & management charge		56.79
Net return over lbr & mgt		-41.66
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		155.65
Total dir & ovhd expense per unit		192.20
With other revenue adjustments		181.54
With labor and management		212.58
Est. labor hours per unit		3.70
<b>Other Information</b>		
Number of ewes		321.4
Pregnancy percentage		97.7
Pregnancy loss percentage		1.4
Female turnover rate		17.94
Lambs born / ewe exposed		1.81
Lambs born / ewe lambing		1.88
Lambs weaned/ewe exposed		1.47
Lambs sold per ewe		1.29
Lamb dth loss (died/born)		11.0
Ewe death loss percentage		6.1
Ewes per FTE		757.6
Average weaning weight		50
Lb. weaned/exposed female		74
Feed cost per ewe		218.59
Avg wgt/Mkt Lambs sold		130
Avg price / cwt.		192.26

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

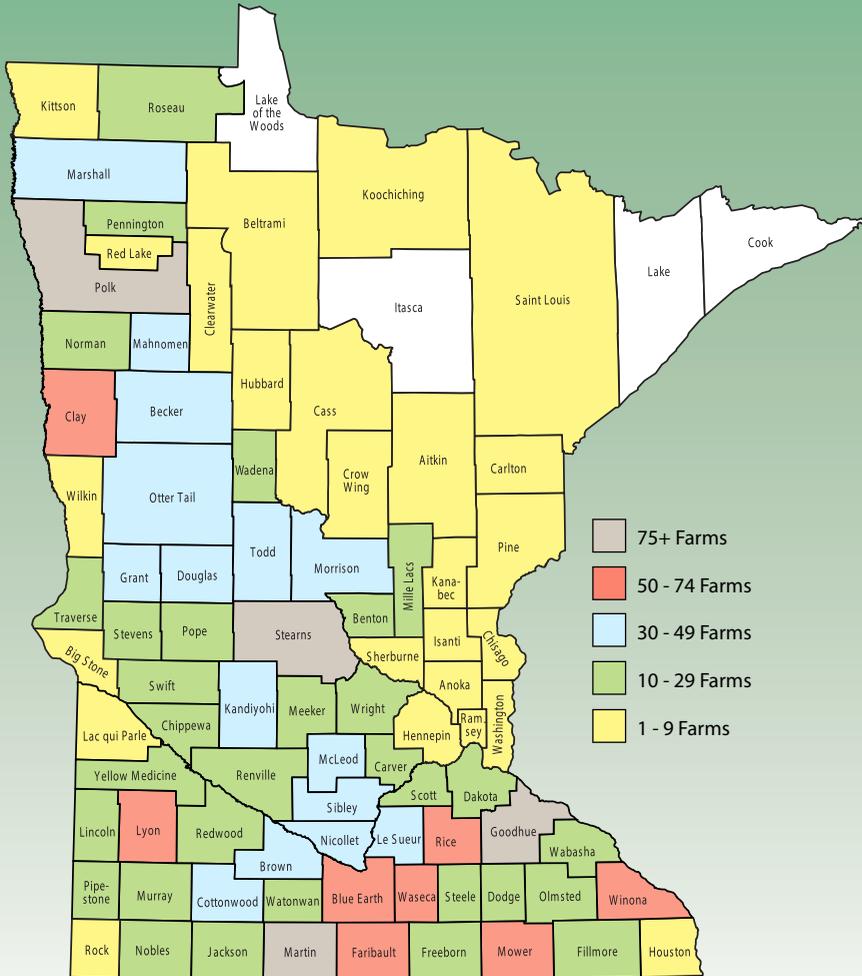
**Hogs, Weaning to Finish (Per Head) and Finish Feeder Pigs (Per Head)**

	<u>Weaning to Finish</u>		<u>Finish Feeder Pigs</u>	
	16		10	
Number of Farms	Quantity	Value	Quantity	Value
Pigs / Hogs sold (lb)	286.3	173.15	283.4	175.34
Transferred out (lb)	1.2	1.10	0.1	0.26
Insurance income	-	1.42	-	1.76
Government payments	-	-	-	-
Other income & hedging gains/losses	-	6.24	-	-0.87
Purchased (lb)	-12.9	-42.18	-23.5	-69.31
Transferred in (lb)	-2.5	-8.43	-1.7	-1.62
Inventory change (lb)	-2.2	-1.82	-13.0	-7.37
Gross margin		129.48		98.18
<b>Direct Expenses</b>				
Protein Vit Minerals (lb.)	135.2	36.19	149.9	34.08
Complete Ration (lb.)	118.9	18.63	107.9	20.68
Corn (bu.)	6.9	38.68	6.8	34.66
DDGS, dry (lb.)	75.6	8.74	9.9	1.12
Other feed stuffs (lb)	5.7	0.12	0.1	0.13
Veterinary		4.21		1.53
Contract production exp.		6.63		-
Repairs		2.29		0.81
Custom hire		4.19		0.35
Fuel & oil		1.61		0.44
Hauling and trucking		2.85		2.36
Hired labor		2.47		0.59
Operating interest		1.66		0.38
Miscellaneous		3.16		2.87
Total direct expenses		131.43		100.00
Return over direct expense		-1.95		-1.82
<b>Overhead Expenses</b>				
Hired labor		0.91		1.76
Building leases		5.21		9.72
Farm insurance		0.83		1.02
Utilities		0.21		0.56
Interest		0.46		0.64
Mach & bldg depreciation		2.42		0.99
Miscellaneous		0.93		1.59
Total overhead expenses		10.97		16.28
Total dir & ovhd expenses		142.40		116.29
Net return		-12.93		-18.11
Labor & management charge		2.85		1.92
Net return over lbr & mgt		-15.78		-20.02
<b>Cost of Production/Cwt. Carcass Sold</b>				
Total direct expense per unit		86.20		85.25
Total dir & ovhd expense per unit		91.35		93.05
With other revenue adjustments		87.77		92.87
With labor and management		89.11		93.79
Est. labor hours per unit		0.31		0.21
<b>Other Information</b>				
No. purchased or trans in		30,184		10,813
Number sold or trans out		28,394		9,912
Percentage death loss		4.5		5.9
Percent substandard hogs		2		1
Avg. daily gain (lb.)		1.74		1.73
Lb. of feed / lb. of gain		2.61		2.62
Feed cost per cwt. of gain		37.08		36.69
Feed cost per head		102.36		90.70
Hired labor per head		3.38		2.35
Average purchase weight		14		22
Avg wgt /Fin Pig/Hog sold		277		285
Avg purch price / head		46.53		65.43
Avg sales price / cwt.		60.49		61.86
Average carcass weight		210		213
Average price / cwt. carcass		80.80		83.68

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

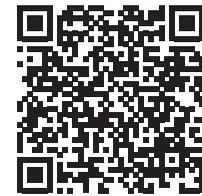
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Total Dir&amp;Ovhd Expense</u>
<b><u>Alfalfa Hay</u></b>						
Yield per Acre	4.0	4.2	2.9	4.1	3.7	
Value per Ton	\$148.97	\$136.11	\$172.67	\$153.99	\$161.72	
Fuel, Oil, Repairs per Acre	\$87.41	\$91.02	\$111.25	\$127.46	\$121.23	
Total Dir & Ovhd Exp per Acre	\$333.24	\$351.17	\$384.31	\$413.66	\$444.80	
Net Return per Acre	\$301.16	\$232.35	\$136.48	\$219.76	\$159.51	
Total Direct Expenses per Ton	\$41.84	\$44.90	\$68.27	\$60.05	\$68.57	
Total Dir & Ovhd Exp per Ton	\$82.69	\$84.56	\$93.54	\$101.02	\$120.46	
<b><u>Corn</u></b>						
Yield per Acre	160.2	176.2	141.1	169.0	161.0	
Value per Bushel	\$3.40	\$3.78	\$5.30	\$6.09	\$4.67	
Fuel, Oil, Repairs per Acre	\$83.95	\$82.16	\$89.47	\$117.03	\$110.69	
Total Dir & Ovhd Exp per Acre	\$580.96	\$559.08	\$584.48	\$725.05	\$721.22	
Net Return per Acre	\$35.63	\$158.49	\$158.49	\$319.63	\$108.96	
Total Direct Expenses per Bu.	\$2.42	\$2.15	\$2.83	\$3.12	\$3.24	
Total Dir & Ovhd Exp per Bushel	\$3.63	\$3.17	\$4.14	\$4.29	\$4.48	
<b><u>Corn Silage</u></b>						
Yield per Acre	18.7	21.0	13.3	19.4	17.0	
Value per Ton	\$31.58	\$34.35	\$41.87	\$45.33	\$42.21	
Fuel, Oil, Repairs per Acre	\$94.18	\$103.57	\$111.94	\$134.63	\$129.27	
Total Dir & Ovhd Exp per Acre	\$572.60	\$597.78	\$600.39	\$690.23	\$717.43	
Net Return per Acre	\$75.40	\$162.77	\$131.40	\$190.28	\$215.64	
Total Direct Expenses per Ton	\$20.73	\$19.84	\$31.07	\$25.96	\$30.19	
Total Dir & Ovhd Exp per Ton	\$30.63	\$28.43	\$45.16	\$35.63	\$42.20	
<b><u>Soybeans</u></b>						
Yield per Acre	37.8	41.5	30.6	39.7	39.7	
Value per Bushel	\$8.17	\$10.23	\$12.25	\$13.93	\$12.33	
Fuel, Oil, Repairs per Acre	\$42.10	\$46.34	\$46.71	\$62.93	\$60.28	
Total Dir & Ovhd Exp per Acre	\$301.73	\$309.79	\$310.81	\$379.03	\$390.01	
Net Return per Acre	\$68.79	\$155.17	\$118.55	\$190.43	\$116.32	
Total Direct Expenses per Bu.	\$5.09	\$4.67	\$6.62	\$6.36	\$6.67	
Total Dir & Ovhd Exp per Bushel	\$7.98	\$7.46	\$10.15	\$9.55	\$9.83	
<b><u>Spring Wheat</u></b>						
Yield per Acre	59.8	59.9	50.3	64.4	65.7	
Value per Bushel	\$5.09	\$5.48	\$8.80	\$9.05	\$7.06	
Fuel, Oil, Repairs per Acre	\$41.94	\$42.63	\$44.24	\$56.99	\$54.74	
Total Dir & Ovhd Exp per Acre	\$329.97	\$324.04	\$316.32	\$422.81	\$430.91	
Net Return per Acre	\$53.62	\$65.64	\$178.66	\$171.05	\$54.87	
Total Direct Expenses per Bu.	\$3.75	\$3.56	\$4.25	\$4.84	\$4.73	
Total Dir & Ovhd Exp per Bushel	\$5.52	\$5.41	\$6.29	\$6.57	\$6.56	
<b><u>Beef Cow Calf</u></b>						
Price Recv'd/Cwt Calf Sold	\$145.96	\$159.21	\$153.79	\$180.23	\$223.17	
Total Feed Cost/Cow	\$469.02	\$433.96	\$549.62	\$640.45	\$624.18	
Return over Feed/Cow	\$136.18	\$314.25	\$214.94	\$174.45	\$517.93	
Net Return/Cow	-\$223.06	-\$29.30	-\$165.68	-\$235.79	\$97.86	
Total Direct & Ovhd Expenses	\$828.25	\$777.50	\$930.24	\$1,050.70	\$1,044.25	
<b><u>Dairy Cows</u></b>						
Production/Cow	24,390	24,983	25,285	25,485	25,918	
Price Recv'd/Cwt Milk	\$18.64	\$19.77	\$18.41	\$24.24	\$19.14	
Total Feed Cost/Cwt Milk	\$8.24	\$8.73	\$9.59	\$11.41	\$10.73	
Return over Feed/Cwt Milk	\$10.40	\$11.04	\$8.82	\$12.83	\$8.41	
Net Return/Cwt Milk	\$1.65	\$3.86	\$0.82	\$2.69	\$0.14	
Total Direct & Ovhd Expenses	\$15.72	\$16.74	\$17.07	\$19.83	\$19.29	

# 2023 FARM BUSINESS MANAGEMENT FINANCIAL ANALYSIS BY COUNTY



## SOURCES OF DATA

The 2,317 producers who provided data for three MN regional reports are located in 83 of Minnesota's 87 counties. Those counties are highlighted on the map to the left, color coded based on the number of farms included from each county.



## MINNESOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAMS

### 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 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



**MINNESOTA STATE**  
Northern Agricultural Center of Excellence

### Keith Olander

Executive Director of AgCentric,  
Northern Agricultural  
Center of Excellence

Keith.Olander@clcmn.edu  
(218) 894-5163

agcentric.org



### Tina LeBrun

Executive Director of the  
Southern Agricultural  
Center of Excellence

Tina.LaBrun@southcentral.edu  
(507) 389-7391

www.centerofagriculture.org



**MINNESOTA STATE**  
Southern Agricultural Center of Excellence

# Farm Financial Scorecard

Using Recommended Measures from the Farm Financial Standards Council (FFSC)

	<b>Your Farm:</b>			<b>Desired Trend</b>		
<b>Liquidity</b>						
Current Ratio	_____ . _____	Vulnerable	1.3	2.0	Strong	↑
Working Capital as % of Gross Revenue	_____ %		10%	30%		↑
Working Capital as % of Operating Expense*	_____ %		20%	40%		↑
<b>Solvency</b>						
Debt-to-Asset Ratio	_____ %	Vulnerable	60%	30%	Strong	↓
Equity-to-Asset Ratio*	_____ %		40%	70%		↑
Debt-to-Equity Ratio*	_____ . _____		1.5	0.43		↓
<b>Profitability</b>						
Rate of Return on Assets	_____ %	Vulnerable	4%	8%	Strong	↑
Rate of Return on Equity	_____ %		3%	10%		↑
Operating Profit Margin Ratio	_____ %		15%	25%		↑
Asset Turnover Ratio	_____ %		30%	45%		↑
<b>Repayment Capacity</b>						
Debt Coverage Ratio	_____ . _____	Vulnerable	1.25	1.75	Strong	↑
Replacement Coverage Ratio	_____ . _____		1.1	1.5		↑
Term Debt & Finance Lease Coverage Ratio*	_____ . _____		1.25	1.75		↑
<b>Financial Efficiency</b>						
Operating Expense Ratio	_____ %	Vulnerable	80%	60%	Strong	↓
Depreciation Expense Ratio	_____ %		10%	5%		↓
Interest Expense Ratio	_____ %		10%	5%		↓
Net Farm Income Ratio	_____ %		10%	20%		↑

\* Denotes Acceptable Alternate Measures of the FFSC (<https://ffsc.org/>)