



# Farm Business Management

## Northern Minnesota 2020 ANNUAL REPORT



April, 2021



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

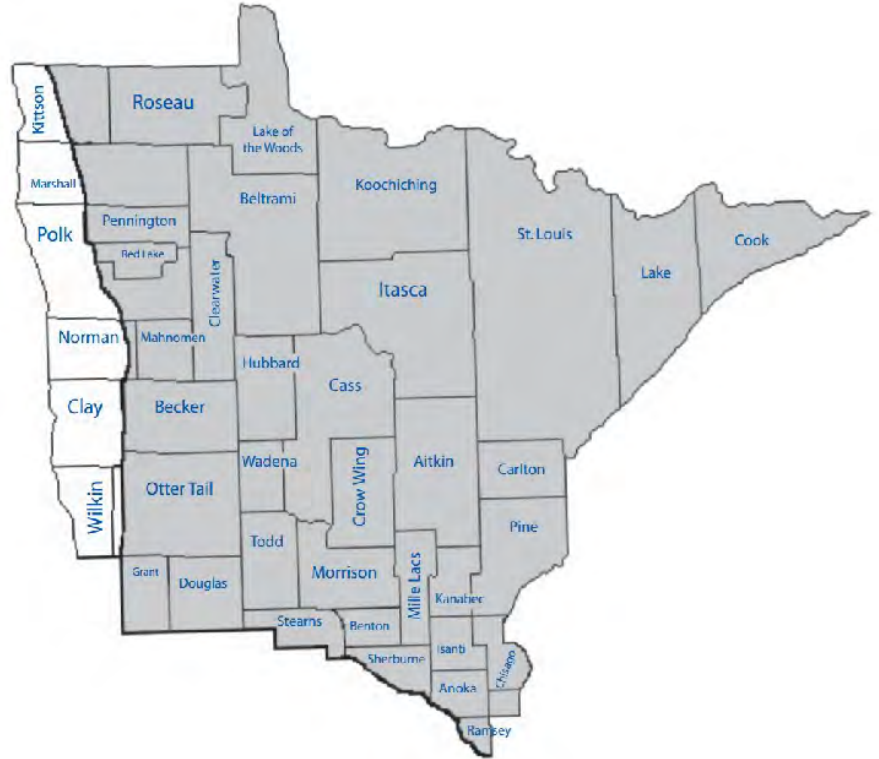
A Management Education Program through AgCentric, Northern Center of Excellence for Agriculture

A MEMBER OF THE MINNESOTA STATE SYSTEM

# Northern Minnesota Annual Report Instructors and Locations



## MINNESOTA STATE



### Northland



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



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



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



**Jessica Hanson**  
Red Lake Falls  
(218) 684-0976



**Bill Januszewski**  
Fergus Falls  
(218) 329-2373



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



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



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

### Central Lakes



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



**Bethany Maus**  
Little Falls—Foley  
(320) 309-3782



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



**Bob Rick**  
Staples  
(218) 820-8699



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



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

### Alexandria



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

### Ridgewater



**Kevin Dahlman**  
Melrose  
(320) 249-1957



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

### St. Cloud



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



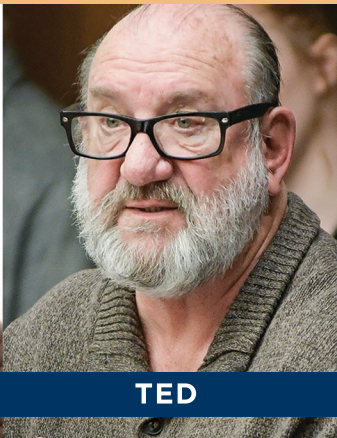
**Ken Thiesen**  
St. Cloud  
(320) 309-3293

**TABLE OF CONTENTS**

<b><u>Description</u></b>	<b><u>Page Number</u></b>	
Table of Contents	1	
Rural Mental Health Program Overview	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 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 - 17
	Financial Standards Measures and "How does your Farm Stack Up"	18 - 19
	Graphic Summary of Selected Financial Guideline Measures	20
	Profitability Measures	21
	Liquidity and Repayment Capacity Measures	22
	AgCentric and Central Lakes College information	23
	Household & Personal Expense Reported	24
	Nonfarm Summary	25
	Operator and Labor Information	26
	Crop Production and Marketing Summary	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	40
	Hay, Grass	41
	Establish Alfalfa Hay, Oatlage, Fescue Grass Seed, & Perennial Rye Grass Seed	42
	Irrigated Crops: Corn, Corn Silage, Alfalfa Hay, Soybeans, & Dark Red Kidney Beans	43
	Small Grains & Other: Barley, Oats, Rye, Canola, & Sunflowers	44
	Edible Beans & Other: Navy Beans, Black Turtle Beans, Seed Soybeans, & Field Peas	45
	Organic Crops: Corn, Corn Silage, Alfalfa, & Oats	46
	Alexandria and Northland Technical & Community College information	47
	Statewide Livestock Enterprises	Dairy Cows - excluding Organic & Organic Transition
Dairy Cows - Organic Production		50
Dairy Cows - Sorted by Herd Size		51
Dairy Cows and Dairy Replacements Combined (All Dairy)		52
Dairy Replacement Heifers		53
Dairy Feeders and Dairy Finishing		54-55
Graphic Summary of Selected Dairy Factors		56
Ridgewater and St. Cloud Technical & Community College information		57
Beef Cow-Calf - excluding Backgrounding		58
Beef Cow-Calf - with Backgrounding		59
Beef Cow-Calf - Sorted by Herd Size		60
Beef Finishing		61
Beef Backgrounding		62
Hogs, Finish Feeder Pigs & Weaning to Finish		63
Enterprise Trend Summary	64	



**MONICA**



**TED**



**Assist** in Meeting Farm Business and Personal Goals

**Direct** Effective Financial Management

**Support** Rural Mental Health

**Guide** Sound Business Decisions

**Advise** Farm Transition and Succession Planning

**Develop** Farm Efficiency and Risk Management

**Increase** Access to Lending Opportunities

**Rural Mental Health Support**

FARM INFO LINE  
**1-800-232-9077**

MN FARM & RURAL HELPLINE  
**833-600-2670, x1**

**MN Mental Health Outreach Program**

TED MATTHEWS, M.S.  
**320-266-2390**

MONICA MCCONKEY, MA, LPC  
**218-280-7785**

## MENTAL HEALTH OUTREACH PROGRAM

### Colleges Supporting Farm Business Management

Alexandria Technical College

Central Lakes College

Minnesota West Community  
and Technical College

Northland Community and Technical College

Ridgewater College

Riverland Community College

South Central College

St. Cloud Technical and  
Community College

Visit us at [www.centerofagriculture.org](http://www.centerofagriculture.org) or [www.agcentric.org](http://www.agcentric.org)



**For More Information**

**Brad Schloesser, Director**  
*Southern Agricultural Center of Excellence*  
Brad.Schloesser@southcentral.edu  
(507) 389-7263

**Keith Olander, Director**  
*AgCentric*  
keith.olander@clcmn.edu  
(763) 257-2881



## 2020 Annual Report – Executive Summary

The 2020 farm year was the highest net farm income in the past seven years for Northern Minnesota, however it wasn't without its challenges. Producers faced issues related to harvesting 2019 crop during the early spring in 2020, crop marketing challenges during 2020 as well as the challenges surrounding the COVID-19 Pandemic.

In 2020, Average Net Farm Income for the 577 farms in the Northern Minnesota database was \$156,941. This was up from the \$72,208 reported in 2019. Median Net Farm Income was up as well, increasing to \$85,468 in 2020, compared to \$29,325 in 2019. Many factors contributed to this increase including increases in yields for most crops as well as higher selling values coupled with a variety government programs designed to assist farmers with challenging marketing prices as well as disaster payments for previously grown crops.

Financial Factors	2013	2014	2015	2016	2017	2018	2019	2020
Average Net Farm Income	\$75,243	\$114,095	\$37,182	\$59,480	\$54,021	\$59,306	\$72,208	\$156,941
Median Net Farm Income	\$27,886	\$46,104	\$23,730	\$25,654	\$23,489	\$25,857	\$29,325	\$85,468

Some key financial measures showed increases compared to 2019. Working Capital increased to \$240,631 at the end of 2020 compared to \$144,382 at the end of 2019; an increase of 66.7%. Working Capital represents the dollar amount remaining after subtracting current liabilities from current assets. The 2020 Northern Minnesota term debt coverage average was 2.38 compared to 1.35 in 2019. With increases in profitability in 2020, the Operating Expense Ratio came in at 69.6%.

The Dairy industry showed some increases in net return per cow due to increases in milk production on a per cow basis as well as a larger average milk price compared to 2019 and 2018. However, the Beef Industry was challenged again with a negative \$29 net return per cow. This lack of profitability in Beef is due to prices remaining low and expenses increasing. Cattle prices were tempered this past year by COVID-19 related food chain issues and increasing feed increases at year end.

Statewide FBM Data	Dairy (Excluding Organic & Organic Transition)			Beef Cow-Calf (Excluding backgrounding)		
	2018	2019	2020	2018	2019	2020
Feed Cost / Cow	\$1,933	\$2,010	\$2,180	\$423	\$469	\$434
Dir & Ovhd Expense/Cow	\$3,705	\$3,835	\$4,183	\$746	\$828	\$778
Net Return / Cow	(\$38)	\$403	\$964	(\$54)	(\$223)	(\$29)
Average Milk Price	\$16.44	\$18.64	\$19.77	xxx	xxx	xxx
Cost of Prod per CWT w/LaborMgmt	\$17.29	\$17.65	\$16.65	xxx	xxx	xxx
Average Price per CWT Calf Sold	xxx	xxx	xxx	\$152.00	\$146.00	\$159.00

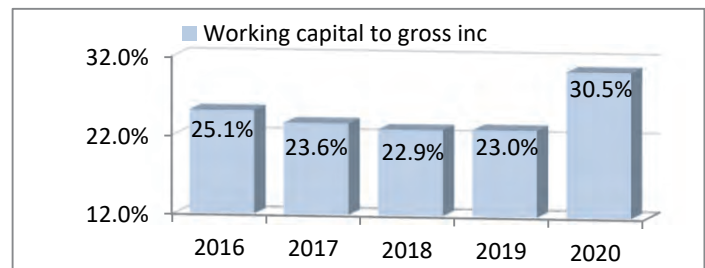
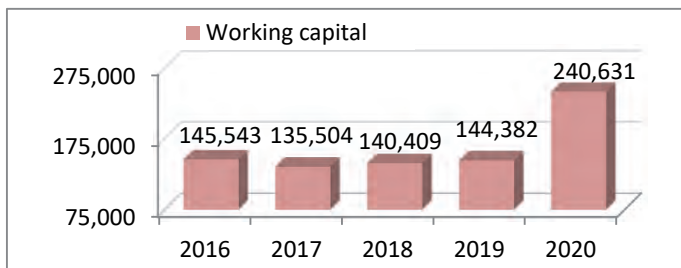
2020 showed a variety of yield differences for the northern half of Minnesota, with an average yield per acre of 172.7 bushels for corn, 40.3 bushels for soybeans, and 56.5 bushels for spring wheat. Net returns showed profitability on all three crops for the second consecutive year. The chart below displays 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	2018	174.9	\$3.29	\$591.86	\$600.68	(\$8.82)	\$3.43
	2019	156.7	\$3.42	\$605.07	\$593.49	\$11.58	\$3.79
	2020	172.2	\$3.85	\$710.99	\$592.09	\$118.90	\$3.44
Soybeans	2018	39.9	\$8.44	\$417.24	\$342.97	\$74.27	\$8.60
	2019	37.1	\$8.22	\$370.04	\$334.72	\$35.32	\$9.01
	2020	40.3	\$10.01	\$446.10	\$339.38	\$106.71	\$8.43
Spring Wheat	2018	59.6	\$5.53	\$355.89	\$338.44	(\$1.08)	\$5.68
	2019	60.7	\$5.09	\$383.13	\$346.31	\$36.82	\$5.70
	2020	56.5	\$5.49	\$366.60	\$343.07	\$23.53	\$6.07

Trend information for the 2016-2020 Financial Summary can be found on page 4 of this report. A quick look at 2020 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>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
<b>Income Statement</b>					
Gross Cash Farm Income	557,016	562,001	585,946	605,725	756,236
Total Cash Farm Expense	473,748	470,535	505,816	511,025	613,229
Net Cash Farm Income	83,268	91,466	80,130	94,700	143,007
Inventory change	20,084	7,106	21,774	16,031	60,809
Depreciation	-44,472	-44,668	-42,395	-45,887	-49,447
Net Farm Income From Operations	58,880	53,905	59,509	64,844	154,368
Gain or loss on capital sales	601	116	-202	7364	2,573
Average Net Farm Income	59,480	54,021	59,306	72,208	156,941
Median Net Farm Income	25,654	23,489	25,857	29,325	85,468
<b>Profitability (Cost)</b>					
Rate of Return on Assets	2.7%	2.5%	3.1%	3.4%	7.5%
Rate of Return on Equity	1.6%	1.2%	2.0%	2.4%	10.4%
Operating Profit Margin	9.2%	8.4%	10.0%	10.9%	21.6%
Asset Turnover Rate	29.6%	30.1%	30.6%	30.8%	34.8%
<b>Liquidity &amp; Repayment (end of year)</b>					
Current Assets	395,719	372,786	413,286	414,578	508,521
Current Liabilities	250,175	237,282	272,877	270,196	267,890
Current Ratio	1.58	1.57	1.51	1.53	1.90
Working capital	145,543	135,504	140,409	144,382	240,631
Change in working capital	-	-	5,184	11,194	88,962
Working capital to gross inc	25.1%	23.6%	22.9%	23.0%	30.5%
Term Debt Coverage Ratio	1.22	1.18	1.27	1.35	2.38
Replacement coverage ratio	1.01	0.96	1.02	1.07	1.87
Term debt to EBITDA	3.63	3.85	3.80	3.55	2.41
<b>Solvency (Market)</b>					
Number of Farms	615	622	615	572	577
Total Assets	1,842,910	1,837,006	2,267,883	2,290,635	2,572,803
Total Liabilities	803,433	794,024	1,026,167	1,029,465	1,128,308
Net Worth	1,039,477	1,042,982	1,241,716	1,261,170	1,444,495
Net Worth Change	43,243	38,476	48,792	57,514	169,349
Farm Debt to Asset Ratio	46%	46%	48%	47%	46%
Total Debt to Asset Ratio	44%	43%	45%	45%	44%
Change in total net worth %	4%	4%	4%	5%	13%
<b>Nonfarm Information</b>					
Net Nonfarm Income	27,427	28,846	31,318	33,283	39,596
Farms Reporting Liv Expenses	101	76	75	70	74
Total Family Living Expense	47,828	50,678	50,802	51,527	55,350
Total Living, Invest, & Cap Purch	59,233	65,631	63,149	74,591	62,491
<b>Crop Acres</b>					
Total Crop Acres	713	755	754	798	828
Total Crop Acres Owned	239	257	251	245	246
Total Crop Acres Cash Rented	466	492	497	545	576
Total Crop Acres Share Rent	8	6	6	8	7
Machinery value per crop acre	622	596	531	580	608



<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>577</b>	<b>2246</b>				
	<b><u>Farms</u></b>	<b><u>Farms</u></b>				
<b><u>Income Statement</u></b>						
Gross Cash Farm Income	\$756,236	\$834,622	_____	_____	_____	_____
Total Cash Operating Expense	\$613,229	\$697,094	_____	_____	_____	_____
Net Cash Farm Income	\$143,007	\$137,529	_____	_____	_____	_____
Net Operating Profit	\$203,815	\$220,709	_____	_____	_____	_____
Net Farm Income	\$156,941	\$172,678	_____	_____	_____	_____
Median Farm Income	\$85,468	\$100,684	_____	_____	_____	_____
<b><u>Balance Sheet (Market)</u></b>						
Total Assets - 12/31	\$2,572,803	\$3,059,297	_____	_____	_____	_____
Total Liabilities - 12/31	\$1,128,308	\$1,293,631	_____	_____	_____	_____
Net Worth - 12/31	\$1,444,495	\$1,765,665	_____	_____	_____	_____
Change in Net Worth	\$169,349	\$184,782	_____	_____	_____	_____
<b><u>Financial Standards Measures</u></b>						
Working Capital - 12/31	\$240,631	\$284,758	_____	_____	_____	_____
Debt to Asset Ratio - 12/31	46%	45%	_____	_____	_____	_____
Rate of Return on Farm Assets - Cost	7.5%	7.5%	_____	_____	_____	_____
Rate of Return on Farm Equity - Cost	10.4%	10.5%	_____	_____	_____	_____
Term Debt Coverage Ratio	2.38	2.61	_____	_____	_____	_____
Asset Turnover Rate	34.8%	37.2%	_____	_____	_____	_____
Operating Expense Ratio	69.6%	71.0%	_____	_____	_____	_____
Interest Expense Ratio	4.6%	4.4%	_____	_____	_____	_____
<b><u>Operator Information</u></b>						
Average Age of the Farmer	46.8	46.9	_____	_____	_____	_____
Average Years Farming	22.1	22.7	_____	_____	_____	_____
<b><u>Personal Spending &amp; Income</u></b>						
Total Cash Family Living Expense	\$54,928	\$59,797	_____	_____	_____	_____
Total Non Farm Income	\$39,596	\$43,268	_____	_____	_____	_____

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:

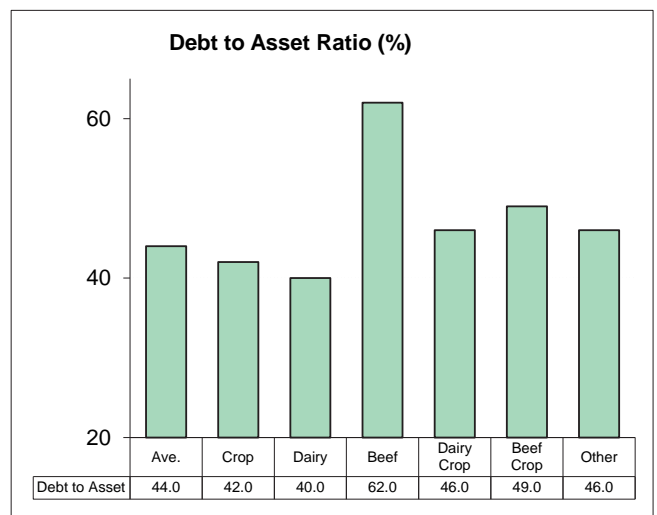
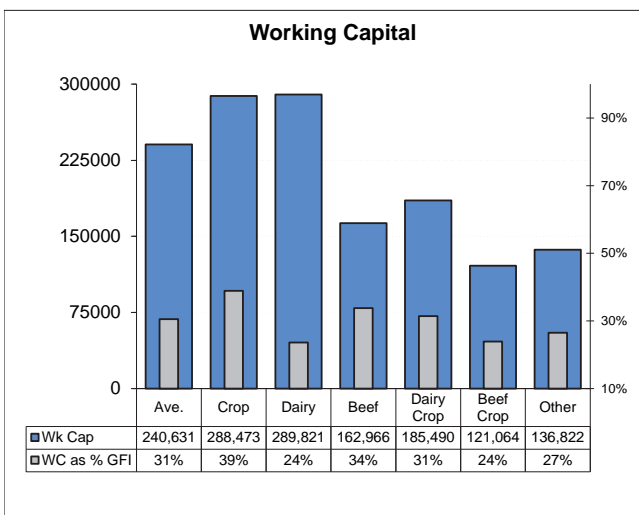
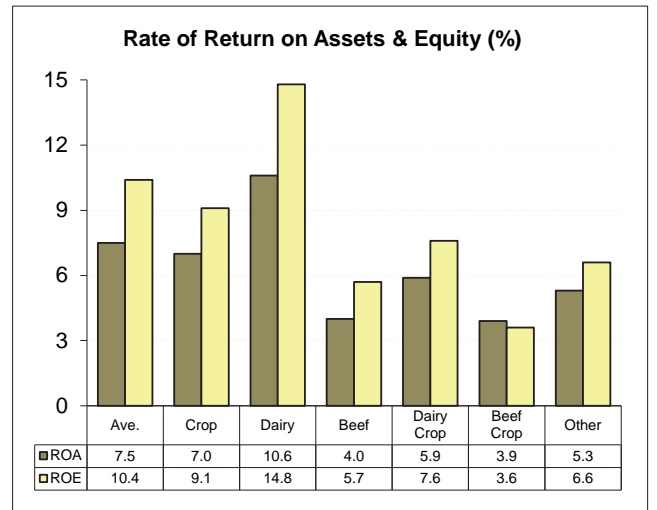
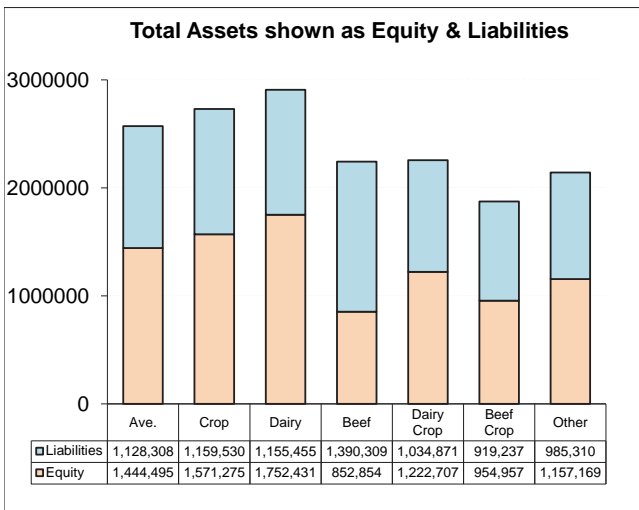
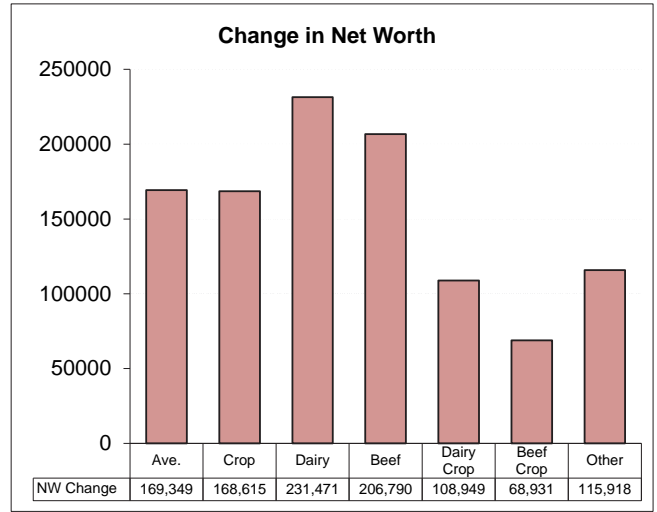
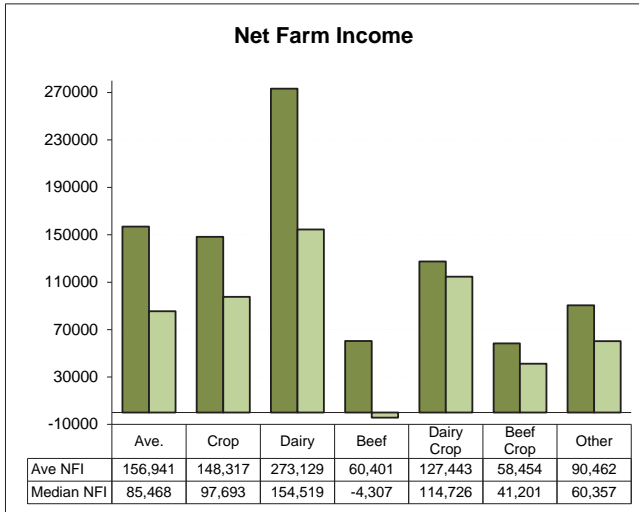
		<u>Northern Minnesota</u>	<u>State Data</u>
Net Farm Income	(+)	\$156,941	\$172,678
Depreciation	(+)	\$49,447	\$51,676
Family Living (Excl Health/Med)	(-)	\$48,149	\$50,274
Social Security and Income Tax	(-)	\$6,495	\$11,546
Health and Medical Expense	(-)	\$6,779	\$9,523
Retirement Accounts	(-)	\$5,670	\$8,717
Principal Payments	(-)	\$62,605	\$60,177
Balance	(=)	\$76,690	\$84,117

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

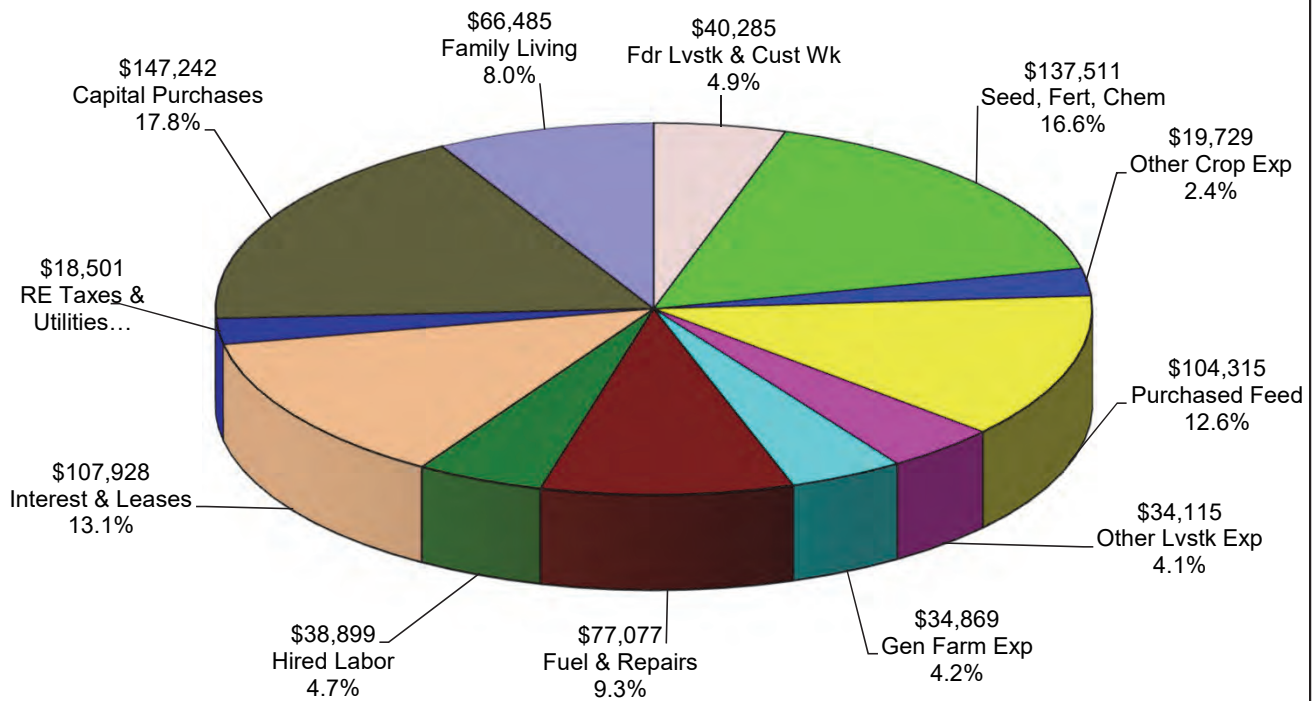
	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Dairy</u>	<u>Beef</u>	<u>Crop and Dairy</u>	<u>Crop and Beef</u>	<u>Other</u>
Number of farms	577	244	143	40	17	39	91
<b>Income Statement</b>							
Gross cash farm income	756,236	706,628	1,190,007	407,306	603,715	500,801	491,347
Total cash farm expense	613,229	561,289	949,611	419,681	472,813	428,919	401,433
Net cash farm income	143,007	145,339	240,397	-12,375	130,902	71,882	89,915
Inventory change	60,809	48,254	101,709	93,994	24,915	22,290	36,691
Depreciation	-49,447	-48,700	-68,589	-24,329	-43,715	-33,495	-40,424
Net farm income from operations	154,368	144,893	273,517	57,290	112,102	60,678	86,181
Gain or loss on capital sales	2,573	3,424	-388	3,111	15,341	-2,224	4,281
Average net farm income	156,941	148,317	273,129	60,401	127,443	58,454	90,462
Median net farm income	85,468	97,693	154,519	-4,307	114,726	41,201	60,357
<b>Profitability (cost)</b>							
Rate of return on assets	7.5 %	7.0 %	10.6 %	4.0 %	5.9 %	3.9 %	5.3 %
Rate of return on equity	10.4 %	9.1 %	14.8 %	5.7 %	7.6 %	3.6 %	6.6 %
Operating profit margin	21.6 %	18.5 %	28.0 %	19.7 %	21.0 %	13.1 %	19.4 %
Asset turnover rate	34.8 %	37.6 %	38.0 %	20.3 %	28.2 %	30.0 %	27.2 %
<b>Profitability (market)</b>							
Rate of return on assets	7.0 %	6.8 %	9.0 %	8.3 %	5.2 %	3.2 %	4.9 %
Rate of return on equity	10.4 %	9.7 %	13.2 %	21.0 %	6.6 %	2.9 %	6.5 %
Operating profit margin	24.0 %	21.8 %	26.4 %	48.2 %	22.6 %	13.5 %	23.0 %
Asset turnover rate	29.3 %	31.1 %	34.0 %	17.3 %	22.9 %	24.0 %	21.4 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	508,521	618,291	432,587	635,091	360,467	377,562	357,162
Current liabilities	267,890	329,818	142,766	472,125	174,978	256,498	220,340
Current ratio	1.90	1.87	3.03	1.35	2.06	1.47	1.62
Working capital	240,631	288,473	289,821	162,966	185,490	121,064	136,822
Change in working capital	88,962	84,445	134,810	33,945	73,907	70,782	63,683
Working capital to gross inc	30.5 %	38.9 %	23.6 %	33.8 %	31.4 %	23.9 %	26.5 %
Term debt coverage ratio	2.38	2.48	2.80	1.85	1.64	1.54	1.81
Replacement coverage ratio	1.87	1.75	2.41	1.64	1.26	1.23	1.51
Term debt to EBITDA	2.41	2.21	1.96	5.13	3.34	3.43	3.39
<b>Solvency (end of year at cost)</b>							
Number of farms	577	244	143	40	17	39	91
Total assets	2,180,463	2,275,649	2,617,808	1,933,990	1,829,695	1,502,499	1,712,072
Total liabilities	914,623	924,949	935,191	1,167,471	864,992	762,795	809,802
Net worth	1,265,840	1,350,700	1,682,617	766,519	964,704	739,704	902,270
Net worth change	148,808	138,655	244,183	105,536	92,031	61,404	95,840
Farm debt to asset ratio	45 %	43 %	38 %	63 %	51 %	53 %	51 %
Total debt to asset ratio	42 %	41 %	36 %	60 %	47 %	51 %	47 %
Change in earned net worth %	13 %	11 %	17 %	16 %	11 %	9 %	12 %
<b>Solvency (end of year at market)</b>							
Number of farms	577	244	143	40	17	39	91
Total assets	2,572,803	2,730,805	2,907,886	2,243,163	2,257,578	1,874,194	2,142,479
Total liabilities	1,128,308	1,159,530	1,155,455	1,390,309	1,034,871	919,237	985,310
Net worth	1,444,495	1,571,275	1,752,431	852,854	1,222,707	954,956	1,157,168
Total net worth change	169,349	168,615	231,471	206,790	108,949	68,931	115,918
Farm debt to asset ratio	46 %	45 %	42 %	65 %	49 %	51 %	49 %
Total debt to asset ratio	44 %	42 %	40 %	62 %	46 %	49 %	46 %
Change in total net worth %	13 %	12 %	15 %	32 %	10 %	8 %	11 %
<b>Nonfarm Information</b>							
Net nonfarm income	39,596	49,200	13,245	74,582	26,202	42,868	41,510
Farms reporting living expenses	74	24	23	2	2	4	19
Total family living expense	55,350	55,213	55,502	-	-	51,563	57,618
Total living, invest, cap. purch	62,491	82,211	63,972	-	-	77,611	35,587
<b>Crop Acres</b>							
Total crop acres	828	1,325	455	404	484	686	393
Total crop acres owned	246	337	179	174	245	179	162
Total crop acres cash rented	576	973	274	227	239	506	231
Total crop acres share rented	7	14	2	3	-	1	-
Machinery value per crop acre	608	472	1,130	719	871	541	836



## Selected Factors by Type of Farm



Each farmer, on average, spent \$826,956 in the Greater Community in 2020



**Average Money Spent by Each Farmer in the Greater Community: \$826,956**

**Average Money Spent by Each Farmer in a 40 Yr Career: \$33,078,240**  
**Money Spent in Community by 577 Farmers: \$477,153,612**

### Report Overview

Farm Business Management Education has been a part of agricultural education programs in Minnesota since 1953. FBM Programs are now an integral part of the Minnesota State System, delivered through eight two-year colleges. The 2018 Northern Minnesota Annual Report includes data from Farm Business Management programs administered by: Northland Community & Technical College, Central Lakes College, Alexandria Technical & Community College, Ridgewater College, and St. Cloud Technical & Community Colleges.

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

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

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

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

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

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

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

	<u>Avg. Of All Farms</u>	<u>10 or Less</u>	<u>11 - 20</u>	<u>21 - 30</u>	<u>31 - 40</u>	<u>Over 40</u>
Number of farms	577	144	140	78	93	122
<b>Income Statement</b>						
Gross cash farm income	756,236	381,893	913,093	815,867	965,394	820,516
Total cash farm expense	613,229	308,652	766,418	663,897	798,668	623,185
Net cash farm income	143,007	73,241	146,675	151,969	166,726	197,332
Inventory change	60,809	30,395	90,895	81,410	84,294	31,107
Depreciation	-49,447	-19,254	-49,340	-58,120	-72,486	-62,100
Net farm income from operations	154,368	84,381	188,230	175,260	178,535	166,339
Gain or loss on capital sales	2,573	785	750	442	5,825	5,658
Average net farm income	156,941	85,166	188,980	175,702	184,361	171,997
Median net farm income	85,468	48,003	106,768	118,183	120,099	83,766
<b>Profitability (cost)</b>						
Rate of return on assets	7.5 %	8.1 %	9.1 %	7.7 %	6.8 %	6.2 %
Rate of return on equity	10.4 %	12.8 %	15.5 %	10.4 %	8.8 %	7.1 %
Operating profit margin	21.6 %	20.7 %	23.9 %	21.2 %	20.0 %	20.9 %
Asset turnover rate	34.8 %	38.9 %	38.0 %	36.2 %	34.1 %	29.6 %
<b>Profitability (market)</b>						
Rate of return on assets	7.0 %	8.9 %	9.2 %	7.1 %	6.2 %	5.1 %
Rate of return on equity	10.4 %	15.3 %	17.6 %	10.2 %	8.7 %	6.2 %
Operating profit margin	24.0 %	24.9 %	27.0 %	23.3 %	21.6 %	22.5 %
Asset turnover rate	29.3 %	35.7 %	34.2 %	30.4 %	28.9 %	22.6 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	508,521	249,722	578,498	602,778	618,881	589,299
Current liabilities	267,890	136,292	357,950	325,672	329,223	236,178
Current ratio	1.90	1.83	1.62	1.85	1.88	2.50
Working capital	240,631	113,430	220,548	277,106	289,658	353,122
Change in working capital	88,962	38,113	94,317	124,573	123,395	93,821
Working capital to gross inc	30.5 %	28.3 %	22.9 %	31.2 %	28.8 %	42.9 %
Term debt coverage ratio	2.38	2.65	2.26	2.53	2.04	2.66
Replacement coverage ratio	1.87	2.27	2.03	1.84	1.69	1.70
Term debt to EBITDA	2.41	2.56	2.54	2.26	2.48	2.20
<b>Solvency (end of year at cost)</b>						
Number of farms	577	144	140	78	93	122
Total assets	2,180,463	1,128,389	2,283,079	2,460,617	2,760,702	2,683,071
Total liabilities	914,623	553,672	1,174,021	1,003,248	1,121,051	828,974
Net worth	1,265,840	574,717	1,109,057	1,457,369	1,639,651	1,854,097
Net worth change	148,808	96,673	180,140	167,832	166,621	148,650
Farm debt to asset ratio	45 %	51 %	54 %	43 %	44 %	34 %
Total debt to asset ratio	42 %	49 %	51 %	41 %	41 %	31 %
Change in earned net worth %	13 %	20 %	19 %	13 %	11 %	9 %
<b>Solvency (end of year at market)</b>						
Number of farms	577	144	140	78	93	122
Total assets	2,572,803	1,237,200	2,528,830	2,918,384	3,260,259	3,454,724
Total liabilities	1,128,308	621,424	1,374,322	1,247,003	1,409,530	1,154,023
Net worth	1,444,495	615,776	1,154,508	1,671,381	1,850,729	2,300,700
Total net worth change	169,349	113,636	206,444	188,680	188,020	165,949
Farm debt to asset ratio	46 %	52 %	57 %	45 %	47 %	36 %
Total debt to asset ratio	44 %	50 %	54 %	43 %	43 %	33 %
Change in total net worth %	13 %	23 %	22 %	13 %	11 %	8 %
<b>Nonfarm Information</b>						
Net nonfarm income	39,596	49,595	40,762	43,341	29,503	31,753
Farms reporting living expenses	74	15	22	11	12	14
Total family living expense	55,350	49,486	54,011	63,100	52,146	60,395
Total living, invest, cap. purch	62,491	54,031	60,636	85,072	57,163	61,294
<b>Crop Acres</b>						
Total crop acres	828	540	841	1,046	1,038	855
Total crop acres owned	246	89	193	273	275	451
Total crop acres cash rented	576	447	648	760	760	386
Total crop acres share rented	7	4	-	13	3	17
Machinery value per crop acre	608	427	520	645	627	794

**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	577	86	101	137	122	95	36
<b>Income Statement</b>							
Gross cash farm income	756,236	52,857	166,401	371,400	720,038	1,367,396	4,065,739
Total cash farm expense	613,229	61,975	140,680	286,123	573,549	1,074,894	3,416,886
Net cash farm income	143,007	-9,117	25,722	85,277	146,489	292,501	648,853
Inventory change	60,809	12,238	9,317	29,508	53,788	97,860	366,434
Depreciation	-49,447	-8,728	-14,107	-25,194	-50,811	-95,297	-212,552
Net farm income from operations	154,368	-5,608	20,932	89,591	149,467	295,064	802,735
Gain or loss on capital sales	2,573	1,742	6,747	1,220	4,535	1,082	-4,716
Average net farm income	156,941	-3,866	27,679	90,811	154,002	296,146	798,019
Median net farm income	85,468	-4,054	31,208	84,106	137,389	292,048	634,548
<b>Profitability (cost)</b>							
Rate of return on assets	7.5 %	-2.2 %	1.8 %	6.7 %	7.3 %	8.7 %	9.4 %
Rate of return on equity	10.4 %	-9.7 %	-0.7 %	9.4 %	10.0 %	12.3 %	13.0 %
Operating profit margin	21.6 %	-18.3 %	7.8 %	21.2 %	20.7 %	24.0 %	23.3 %
Asset turnover rate	34.8 %	12.3 %	22.4 %	31.7 %	35.2 %	36.1 %	40.4 %
<b>Profitability (market)</b>							
Rate of return on assets	7.0 %	-1.0 %	2.2 %	5.8 %	5.9 %	8.7 %	9.5 %
Rate of return on equity	10.4 %	-5.1 %	1.2 %	8.1 %	8.2 %	13.3 %	15.4 %
Operating profit margin	24.0 %	-10.5 %	13.3 %	22.3 %	21.1 %	28.8 %	24.8 %
Asset turnover rate	29.3 %	9.7 %	16.4 %	25.9 %	28.1 %	30.1 %	38.2 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	508,521	53,038	133,716	284,914	493,970	915,932	2,473,309
Current liabilities	267,890	32,367	82,689	127,803	283,041	486,929	1,253,871
Current ratio	1.90	1.64	1.62	2.23	1.75	1.88	1.97
Working capital	240,631	20,670	51,027	157,111	210,929	429,003	1,219,438
Change in working capital	88,962	14,695	21,189	55,004	79,647	166,576	412,506
Working capital to gross inc	30.5 %	33.1 %	29.8 %	40.4 %	28.0 %	30.3 %	28.6 %
Term debt coverage ratio	2.38	1.75	1.49	2.17	2.09	2.66	2.79
Replacement coverage ratio	1.87	1.46	1.19	1.78	1.67	1.99	2.23
Term debt to EBITDA	2.41	17.16	5.55	2.73	2.49	2.21	1.67
<b>Solvency (end of year at cost)</b>							
Number of farms	577	86	101	137	122	95	36
Total assets	2,180,463	579,723	881,367	1,359,490	2,152,164	3,628,937	9,046,935
Total liabilities	914,623	282,091	407,280	579,595	942,074	1,565,262	3,314,031
Net worth	1,265,840	297,632	474,087	779,896	1,210,090	2,063,675	5,732,904
Net worth change	148,808	36,346	47,333	83,035	131,263	262,110	712,939
Farm debt to asset ratio	45 %	55 %	53 %	47 %	47 %	45 %	38 %
Total debt to asset ratio	42 %	49 %	46 %	43 %	44 %	43 %	37 %
Change in earned net worth %	13 %	14 %	11 %	12 %	12 %	15 %	14 %
<b>Solvency (end of year at market)</b>							
Number of farms	577	86	101	137	122	95	36
Total assets	2,572,803	712,355	1,148,796	1,633,540	2,667,600	4,360,697	9,547,443
Total liabilities	1,128,308	313,229	479,998	684,465	1,173,421	1,945,802	4,273,215
Net worth	1,444,495	399,126	668,798	949,075	1,494,179	2,414,895	5,274,228
Total net worth change	169,349	42,480	58,656	93,119	141,378	321,538	766,258
Farm debt to asset ratio	46 %	49 %	46 %	46 %	47 %	46 %	46 %
Total debt to asset ratio	44 %	44 %	42 %	42 %	44 %	45 %	45 %
Change in total net worth %	13 %	12 %	10 %	11 %	10 %	15 %	17 %
<b>Nonfarm Information</b>							
Net nonfarm income	39,596	71,545	50,710	40,762	27,047	18,722	25,260
Farms reporting living expenses	74	6	14	24	20	8	2
Total family living expense	55,350	29,648	41,988	58,677	64,803	57,780	-
Total living, invest, cap. purch	62,491	37,154	15,454	77,533	79,457	69,466	-
<b>Crop Acres</b>							
Total crop acres	828	123	284	558	985	1,467	2,859
Total crop acres owned	246	64	130	198	294	412	584
Total crop acres cash rented	576	58	150	358	670	1,047	2,275
Total crop acres share rented	7	1	4	1	20	8	-
Machinery value per crop acre	608	754	633	497	533	647	702

**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	577	82	103	113	124	62	36	52	4
<b>Income Statement</b>									
Gross cash farm income	756,236	313,245	272,304	444,552	625,762	1,017,565	1,295,641	2,449,728	2,501,382
Total cash farm expense	613,229	250,453	218,267	353,185	491,035	805,706	1,081,634	2,043,344	1,988,864
Net cash farm income	143,007	62,792	54,037	91,367	134,726	211,858	214,007	406,384	512,517
Inventory change	60,809	10,306	21,521	35,304	48,981	71,817	74,868	261,769	282,896
Depreciation	-49,447	-19,233	-19,437	-30,285	-41,327	-74,656	-98,681	-143,128	-134,485
Net farm income from operations	154,368	53,866	56,120	96,386	142,381	209,019	190,194	525,025	660,929
Gain or loss on capital sales	2,573	1,280	3,123	2,858	7,327	230	-576	-3,349	1,540
Average net farm income	156,941	55,146	59,244	99,244	149,708	209,249	189,618	521,676	662,468
Median net farm income	85,468	9,124	38,098	68,818	108,350	131,753	132,022	382,825	605,594
<b>Profitability (cost)</b>									
Rate of return on assets	7.5 %	5.2 %	5.6 %	6.9 %	7.9 %	7.4 %	6.2 %	9.1 %	9.5 %
Rate of return on equity	10.4 %	6.5 %	7.5 %	9.6 %	11.3 %	9.9 %	7.5 %	12.7 %	11.7 %
Operating profit margin	21.6 %	21.4 %	21.6 %	22.4 %	23.1 %	21.4 %	16.1 %	23.3 %	20.8 %
Asset turnover rate	34.8 %	24.1 %	25.7 %	31.0 %	34.2 %	34.5 %	38.6 %	39.2 %	45.5 %
<b>Profitability (market)</b>									
Rate of return on assets	7.0 %	5.1 %	4.5 %	6.1 %	7.0 %	5.7 %	7.4 %	9.5 %	7.7 %
Rate of return on equity	10.4 %	6.6 %	5.8 %	8.5 %	10.2 %	7.8 %	11.1 %	15.2 %	10.8 %
Operating profit margin	24.0 %	27.0 %	21.7 %	24.9 %	24.7 %	19.3 %	23.5 %	27.3 %	18.0 %
Asset turnover rate	29.3 %	18.7 %	20.8 %	24.7 %	28.3 %	29.7 %	31.6 %	34.9 %	42.8 %
<b>Liquidity &amp; Repayment (end of year)</b>									
Current assets	508,521	165,338	134,750	244,039	400,716	641,492	923,386	1,909,470	2,518,875
Current liabilities	267,890	97,515	65,025	109,345	195,376	307,582	600,091	1,000,677	1,029,361
Current ratio	1.90	1.70	2.07	2.23	2.05	2.09	1.54	1.91	2.45
Working capital	240,631	67,822	69,725	134,694	205,339	333,910	323,295	908,793	1,489,514
Change in working capital	88,962	37,726	30,383	58,456	77,302	120,235	124,774	298,348	291,190
Working capital to gross inc	30.5 %	22.1 %	24.6 %	29.2 %	31.4 %	32.0 %	24.7 %	34.8 %	55.9 %
Term debt coverage ratio	2.38	1.62	2.22	2.21	2.47	2.31	2.07	2.96	2.72
Replacement coverage ratio	1.87	1.44	1.93	1.82	1.92	1.86	1.63	2.15	1.77
Term debt to EBITDA	2.41	3.92	3.55	2.97	2.61	2.41	2.15	1.61	0.77
<b>Solvency (end of year at cost)</b>									
Number of farms	577	82	103	113	124	62	36	52	4
Total assets	2,180,463	1,038,149	1,039,666	1,397,733	1,892,641	3,005,532	3,375,981	6,161,007	6,263,968
Total liabilities	914,623	521,689	454,983	610,275	811,779	1,138,167	1,525,521	2,369,661	1,767,219
Net worth	1,265,840	516,460	584,683	787,458	1,080,863	1,867,365	1,850,461	3,791,346	4,496,748
Net worth change	148,808	62,401	75,118	100,373	136,241	219,565	160,273	442,556	478,783
Farm debt to asset ratio	45 %	52 %	50 %	47 %	46 %	42 %	47 %	39 %	28 %
Total debt to asset ratio	42 %	50 %	44 %	44 %	43 %	38 %	45 %	38 %	28 %
Change in earned net worth %	13 %	14 %	15 %	15 %	14 %	13 %	9 %	13 %	12 %
<b>Solvency (end of year at market)</b>									
Number of farms	577	82	103	113	124	62	36	52	4
Total assets	2,572,803	1,328,445	1,246,584	1,719,873	2,272,936	3,437,892	4,148,718	6,926,194	6,659,979
Total liabilities	1,128,308	607,515	530,062	732,069	991,654	1,402,468	1,942,636	3,055,103	2,549,210
Net worth	1,444,495	720,929	716,522	987,804	1,281,281	2,035,424	2,206,082	3,871,092	4,110,769
Total net worth change	169,349	76,799	79,449	112,670	151,273	204,209	255,369	534,897	404,032
Farm debt to asset ratio	46 %	47 %	48 %	45 %	46 %	45 %	49 %	45 %	38 %
Total debt to asset ratio	44 %	46 %	43 %	43 %	44 %	41 %	47 %	44 %	38 %
Change in total net worth %	13 %	12 %	12 %	13 %	13 %	11 %	13 %	16 %	11 %
<b>Nonfarm Information</b>									
Net nonfarm income	39,596	45,973	51,947	35,616	36,004	35,302	46,588	23,785	36,465
Farms reporting living expenses	74	7	24	16	12	7	4	4	-
Total family living expense	55,350	49,361	50,935	51,503	59,591	74,403	64,184	52,813	-
Total living, invest, cap. purch	62,491	25,176	50,008	73,394	60,333	110,079	86,650	58,110	-
<b>Crop Acres</b>									
Total crop acres	828	20	175	361	701	1,232	1,752	2,950	6,287
Total crop acres owned	246	15	94	156	244	387	451	770	158
Total crop acres cash rented	576	6	77	203	456	838	1,255	2,154	6,130
Total crop acres share rented	7	-	3	2	0	7	45	26	-
Machinery value per crop acre	608	2,377	1,039	848	648	605	560	533	368

**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	577	115	116	116
<b>Sale of Crops</b>				
Barley	2,086	373	1,632	4,542
Beans, Edible	12,540	12,291	4,886	27,446
Corn	76,679	34,684	70,550	165,920
Corn Silage	1,502	51	1,386	5,234
Hay, Alfalfa	2,678	1,759	2,309	3,936
Hay, Mixed	3,337	2,226	3,627	1,075
Organic Crop Enterprises	98	105	365	-
Other Forage Crops	1,568	206	-	7,596
Potatoes	7,821	292	-	35,008
Soybeans	100,188	40,809	91,222	218,964
Soybeans, Seed	5,024	-	4,647	13,240
Sunflowers	1,517	-	2,336	2,471
Oats	996	319	1,082	1,003
Wheat, Spring	37,474	15,660	29,580	92,428
Grass Seed	7,988	2,522	1,604	25,080
Other Crop Enterprises	2,872	858	2,198	8,061
Miscellaneous crop income	3,799	2,345	4,419	7,786
<b>Total Crop Sales</b>	<b>268,167</b>	<b>114,500</b>	<b>221,843</b>	<b>619,790</b>
<b>Sale of Livestock</b>				
Beef Cow-Calf, Beef Calves	6,313	11,360	6,706	992
Beef, Backgrounding	6,098	2,971	4,112	4,455
Beef, Finishing	22,563	15,253	8,926	62,071
Other Beef Enterprises	491	1,215	750	-
Dairy, Milk	240,066	16,187	92,956	833,697
Dairy Calves	2,018	110	513	8,166
Dairy Heifers (for sale)	931	72	567	2,970
Dairy Feeders & Backgrounding	2,799	1,572	3,851	1,661
Dairy Finishing	20,091	13,574	12,749	49,051
Hog and Pig Sales	2,024	281	1,751	147
Other Livestock Enterprises	808	-	1,928	43
Cull breeding livestock	12,611	3,543	6,341	36,074
Misc. livestock income	1,550	574	1,494	4,013
<b>Total Livestock &amp; Product Sales</b>	<b>318,363</b>	<b>66,712</b>	<b>142,644</b>	<b>1,003,340</b>
<b>Other farm income</b>				
Crop government payments	10,297	4,752	7,192	26,178
Conservation govt payments	6,161	1,536	7,861	9,823
Livestock govt payments	4,960	1,084	3,515	12,216
Other government payments	80,385	26,759	53,696	202,832
Custom work income	12,359	7,102	8,738	25,422
Patronage dividends, cash	5,705	1,893	4,335	13,535
Insurance income	20,667	13,249	14,794	41,163
Contract livestock income	10,563	31,889	3,463	11,525
Other farm income	18,609	13,303	16,233	30,293
<b>Total Other Farm Income</b>	<b>169,706</b>	<b>101,567</b>	<b>119,827</b>	<b>372,987</b>
<b>Gross Cash Farm Income</b>	<b>756,236</b>	<b>282,779</b>	<b>484,314</b>	<b>1,996,117</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>	577	115	116	116
<b>Direct Crop Expense</b>				
Seed	48,267	20,380	39,636	110,577
Fertilizer	61,759	24,645	46,498	150,199
Crop chemicals	27,485	13,582	22,284	63,218
Crop insurance	10,406	4,338	8,313	23,923
Drying Expense	2,480	871	2,006	6,503
Other direct crop expenses	6,843	3,047	4,880	16,176
<b>Total Direct Crop Expense</b>	<b>157,240</b>	<b>66,863</b>	<b>123,617</b>	<b>370,596</b>
<b>Direct Livestock Expense</b>				
Feeder livestock purchase	21,176	11,703	9,310	40,859
Purchased feed	104,315	26,352	42,128	328,482
Breeding fees	3,802	854	1,021	13,612
Veterinary	8,212	3,485	3,343	24,983
Supplies	9,243	2,100	4,309	28,914
Contract production exp.	5,532	5,763	667	17,266
Livestock hauling and trucking	7,527	1,192	4,427	24,981
Livestock marketing	5,252	1,703	3,468	15,236
Bedding	5,249	2,090	1,939	15,861
Other livestock expenses	2,077	504	1,245	5,949
<b>Total Direct Livestock Expense</b>	<b>172,385</b>	<b>55,746</b>	<b>71,857</b>	<b>516,143</b>
<b>Other Farm Expense</b>				
Interest	38,260	27,022	32,147	71,614
Fuel & oil	23,332	12,009	16,929	52,910
Repairs	53,745	29,130	37,752	122,378
Custom hire	19,109	8,677	9,084	50,774
Hired labor	38,899	10,227	13,507	133,395
Land rent	60,099	25,619	39,803	160,282
Machinery & bldg leases	9,569	5,825	6,418	22,846
Real estate taxes	6,005	4,337	5,862	9,665
Farm insurance	10,500	5,803	8,358	21,660
Utilities	12,496	5,956	8,620	29,399
Dues & professional fees	4,531	2,655	3,374	9,396
Miscellaneous	7,059	5,397	6,052	13,565
<b>Total Other Farm Expense</b>	<b>283,604</b>	<b>142,657</b>	<b>187,906</b>	<b>697,884</b>
<b>Total cash expense</b>	<b>613,229</b>	<b>265,266</b>	<b>383,380</b>	<b>1,584,623</b>
<b>Net cash farm income</b>	<b>143,007</b>	<b>17,513</b>	<b>100,934</b>	<b>411,494</b>
<b>Inventory Changes</b>				
Prepays and supplies	14,979	1,463	6,277	46,044
Accounts receivable	-5,313	-1,271	-4,323	-18,990
Hedging acct. & Oth Cur Assets	-9,047	-2,929	-3,927	-35,841
Crops and feed	35,687	-26,498	14,302	142,332
Market livestock	1,718	-10,560	1,176	10,351
Breeding livestock	6,117	765	-3,035	37,693
Accounts payable	13,117	5,341	5,042	38,770
Accrued Interest & other assets	3,550	3,148	5,288	5,601
<b>Total inventory change</b>	<b>60,808</b>	<b>-30,540</b>	<b>20,799</b>	<b>225,961</b>
<b>Net operating profit</b>	<b>203,815</b>	<b>-13,027</b>	<b>121,733</b>	<b>637,455</b>
<b>Depreciation</b>				
Machinery and equipment	-39,956	-19,663	-26,551	-87,154
Titled vehicles	-3,995	-4,243	-2,984	-6,736
Buildings and improvements	-9,496	-3,500	-5,203	-25,088
<b>Total depreciation</b>	<b>-49,447</b>	<b>-27,406</b>	<b>-34,738</b>	<b>-118,979</b>
<b>Net farm income from operations</b>	<b>154,368</b>	<b>-40,433</b>	<b>86,995</b>	<b>518,476</b>
Gain or loss on capital sales	2,573	-1,283	663	11,337
<b>Net farm income</b>	<b>156,941</b>	<b>-41,716</b>	<b>87,658</b>	<b>529,813</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	577	115	116	116
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	50,576	21,594	35,550	133,642
Prepaid expenses & supplies	47,536	9,684	26,320	150,502
Growing crops	2,406	510	533	10,031
Accounts receivable	34,294	15,874	24,343	77,567
Hedging accounts	1,719	805	1,577	4,676
Crops held for sale or feed	302,510	101,604	205,331	799,227
Crops under government loan	-	-	-	-
Market livestock held for sale	67,986	30,219	37,296	178,440
Other current assets	1,494	1,149	1,096	2,210
Total current farm assets	508,521	181,440	332,046	1,356,296
<b>Intermediate Farm Assets</b>				
Breeding livestock	165,936	65,187	85,624	480,367
Machinery and equipment	431,187	234,076	294,216	1,046,734
Titled vehicles	37,425	32,709	27,038	66,792
Other intermediate assets	33,036	9,437	9,826	97,619
Total intermediate farm assets	667,584	341,409	416,703	1,691,512
<b>Long Term Farm Assets</b>				
Farm land	511,179	353,634	462,118	925,698
Buildings and improvements	244,441	97,862	148,289	589,332
Other long-term assets	41,248	18,201	30,827	109,794
Total long-term farm assets	796,868	469,698	641,234	1,624,824
Total Farm Assets	1,972,973	992,547	1,389,984	4,672,632
Total Nonfarm Assets	207,490	169,678	224,597	248,701
Total Assets	2,180,463	1,162,225	1,614,581	4,921,333
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	8,364	6,424	8,086	15,034
Accounts payable	20,425	17,070	12,958	39,124
Current notes	176,496	102,139	124,757	414,644
Government crop loans	-	-	-	-
Principal due on term debt	62,605	36,694	47,223	135,612
Total current farm liabilities	267,890	162,327	193,023	604,414
Total intermediate farm liabs	162,626	108,203	117,834	346,772
Total long term farm liabilities	448,178	311,873	368,613	754,561
Total farm liabilities	878,694	582,403	679,471	1,705,747
Total nonfarm liabilities	35,929	41,998	42,641	18,621
Total liabilities	914,623	624,401	722,112	1,724,368
Net worth (farm and nonfarm)	1,265,840	537,824	892,469	3,196,965
Net worth change	148,808	-6,568	85,956	467,862
Percent net worth change	13 %	-1 %	11 %	17 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	53 %	89 %	58 %	45 %
Intermediate farm liab. / assets	24 %	32 %	28 %	21 %
Long term farm liab. / assets	56 %	66 %	57 %	46 %
Total debt to asset ratio	42 %	54 %	45 %	35 %



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

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	577	115	116	116
<b>Assets</b>				
<b>Current Farm Assets</b>				
Cash and checking balance	50,576	21,594	35,550	133,642
Prepaid expenses & supplies	47,536	9,684	26,320	150,502
Growing crops	2,406	510	533	10,031
Accounts receivable	34,294	15,874	24,343	77,567
Hedging accounts	1,719	805	1,577	4,676
Crops held for sale or feed	302,510	101,604	205,331	799,227
Crops under government loan	-	-	-	-
Market livestock held for sale	67,986	30,219	37,296	178,440
Other current assets	1,494	1,149	1,096	2,210
<b>Total current farm assets</b>	<b>508,521</b>	<b>181,440</b>	<b>332,046</b>	<b>1,356,296</b>
<b>Intermediate Farm Assets</b>				
Breeding livestock	167,888	66,387	86,989	485,669
Machinery and equipment	506,286	291,935	364,711	1,195,519
Titled vehicles	42,420	38,507	31,383	72,729
Other intermediate assets	33,034	10,193	10,765	97,551
<b>Total intermediate farm assets</b>	<b>749,628</b>	<b>407,022</b>	<b>493,847</b>	<b>1,851,467</b>
<b>Long Term Farm Assets</b>				
Farm land	772,176	571,256	702,120	1,257,319
Buildings and improvements	270,037	120,448	162,124	627,495
Other long-term assets	44,342	19,000	37,438	112,466
<b>Total long-term farm assets</b>	<b>1,086,555</b>	<b>710,704</b>	<b>901,681</b>	<b>1,997,280</b>
<b>Total Farm Assets</b>	<b>2,344,704</b>	<b>1,299,166</b>	<b>1,727,575</b>	<b>5,205,043</b>
<b>Total Nonfarm Assets</b>	<b>228,098</b>	<b>185,770</b>	<b>245,518</b>	<b>265,807</b>
<b>Total Assets</b>	<b>2,572,803</b>	<b>1,484,936</b>	<b>1,973,093</b>	<b>5,470,850</b>
<b>Liabilities</b>				
<b>Current Farm Liabilities</b>				
Accrued interest	8,364	6,424	8,086	15,034
Accounts payable	20,425	17,070	12,958	39,124
Current notes	176,496	102,139	124,757	414,644
Government crop loans	-	-	-	-
Principal due on term debt	62,605	36,694	47,223	135,612
<b>Total current farm liabilities</b>	<b>267,890</b>	<b>162,327</b>	<b>193,023</b>	<b>604,414</b>
<b>Total intermediate farm liabs</b>	<b>162,626</b>	<b>108,203</b>	<b>117,834</b>	<b>346,772</b>
<b>Total long term farm liabilities</b>	<b>448,178</b>	<b>311,873</b>	<b>368,613</b>	<b>754,561</b>
<b>Total farm liabilities</b>	<b>878,694</b>	<b>582,403</b>	<b>679,471</b>	<b>1,705,747</b>
<b>Total nonfarm liabilities</b>	<b>35,929</b>	<b>41,998</b>	<b>42,641</b>	<b>18,621</b>
<b>Total liabs excluding deferreds</b>	<b>914,623</b>	<b>624,401</b>	<b>722,112</b>	<b>1,724,368</b>
<b>Total deferred liabilities</b>	<b>213,684</b>	<b>93,874</b>	<b>144,424</b>	<b>528,122</b>
<b>Total liabilities</b>	<b>1,128,308</b>	<b>718,274</b>	<b>866,536</b>	<b>2,252,490</b>
<b>Retained earnings</b>	<b>1,265,840</b>	<b>537,824</b>	<b>892,469</b>	<b>3,196,965</b>
<b>Market valuation equity</b>	<b>178,656</b>	<b>228,837</b>	<b>214,089</b>	<b>21,395</b>
<b>Net worth (farm and nonfarm)</b>	<b>1,444,495</b>	<b>766,661</b>	<b>1,106,557</b>	<b>3,218,360</b>
<b>Net worth excluding deferreds</b>	<b>1,658,180</b>	<b>860,535</b>	<b>1,250,981</b>	<b>3,746,482</b>
<b>Net worth change</b>	<b>169,349</b>	<b>25,796</b>	<b>98,499</b>	<b>492,408</b>
<b>Percent net worth change</b>	<b>13 %</b>	<b>3 %</b>	<b>10 %</b>	<b>18 %</b>
<b>Ratio Analysis</b>				
Current farm liabilities / assets	53 %	89 %	58 %	45 %
Intermediate farm liab. / assets	22 %	27 %	24 %	19 %
Long term farm liab. / assets	41 %	44 %	41 %	38 %
Total debt to asset ratio	44 %	48 %	44 %	41 %
Debt to assets excl deferreds	36 %	42 %	37 %	32 %

---

## ***Financial Guideline Measures***

---

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

### **Liquidity**

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

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

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

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

### **Solvency**

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

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

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

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

### **Profitability**

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

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

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

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

---

## ***Financial Guideline Measures***

---

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

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

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

### **Repayment Capacity**

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

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

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

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

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

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

### **Efficiency**

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

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

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

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

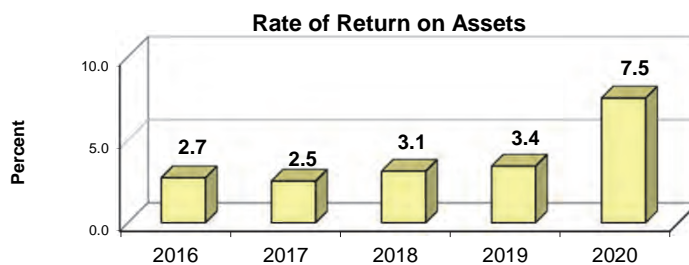
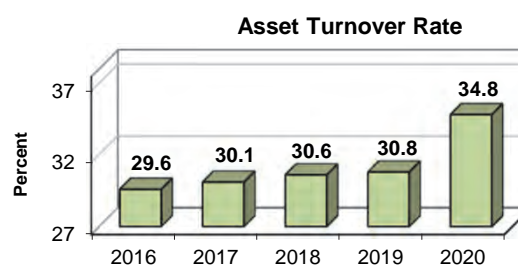
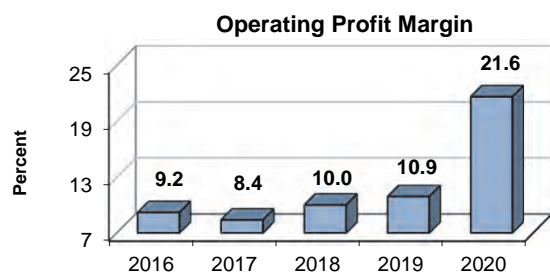
**Interest Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to pay farm interest expenses.

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

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

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	577	115	116	116
<b>Liquidity</b>				
Current ratio	1.90	1.12	1.72	2.24
Working capital	240,631	19,112	139,023	751,881
Working capital to gross inc	30.5%	7.8%	28.3%	35.0%
<b>Solvency (market)</b>				
Farm debt to asset ratio	46%	52%	48%	43%
Farm equity to asset ratio	54%	48%	52%	57%
Farm debt to equity ratio	0.87	1.08	0.91	0.75
<b>Profitability (cost)</b>				
Rate of return on farm assets	7.5%	-4.1%	5.6%	11.0%
Rate of return on farm equity	10.4%	-15.8%	7.0%	15.4%
Operating profit margin	21.6%	-19.9%	17.4%	27.7%
Net farm income	156,941	-41,716	87,658	529,813
EBITDA	240,168	12,775	150,559	706,138
<b>Repayment Capacity</b>				
Capital debt repayment capacity	211,654	25,646	125,097	616,381
Capital debt repayment margin	122,600	-30,304	57,764	430,288
Replacement margin	98,699	-44,511	41,986	371,492
Term debt coverage ratio	2.38	0.46	1.86	3.31
Replacement coverage ratio	1.87	0.37	1.51	2.52
<b>Efficiency</b>				
Asset turnover rate (cost)	34.8%	20.5%	32.3%	39.8%
Operating expense ratio	69.6%	94.8%	69.3%	67.1%
Depreciation expense ratio	6.3%	11.2%	7.1%	5.5%
Interest expense ratio	4.6%	10.5%	5.9%	3.2%
Net farm income ratio	19.5%	-16.5%	17.7%	24.1%

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



## How does your Farm Stack Up?

### Northern Minnesota Farm Business Management Data

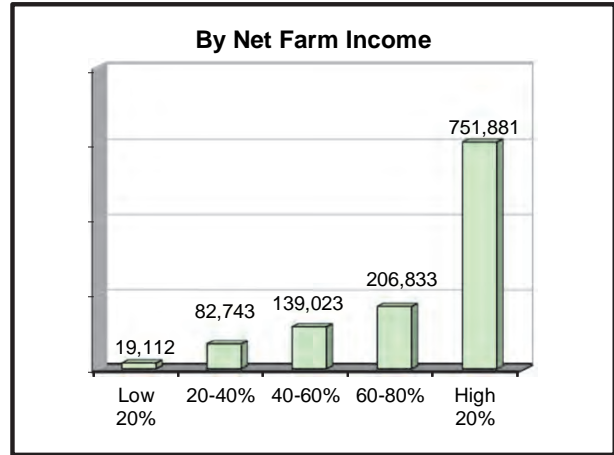
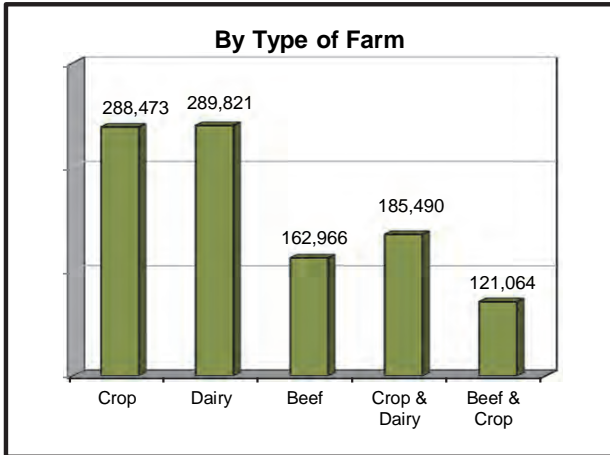
Below is a summary of the low, average, and high farms using the 21 Financial Standards Measures. The numbers listed below are intended to provide a general overview of the farm situation for the current year and over a five year period. The current year data provides a snapshot of the conditions that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

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

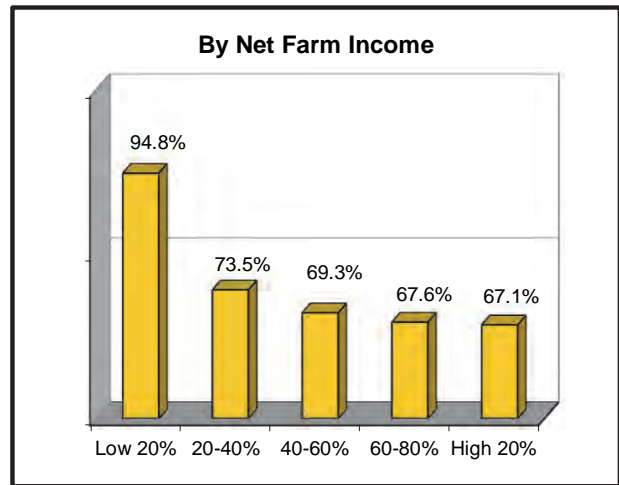
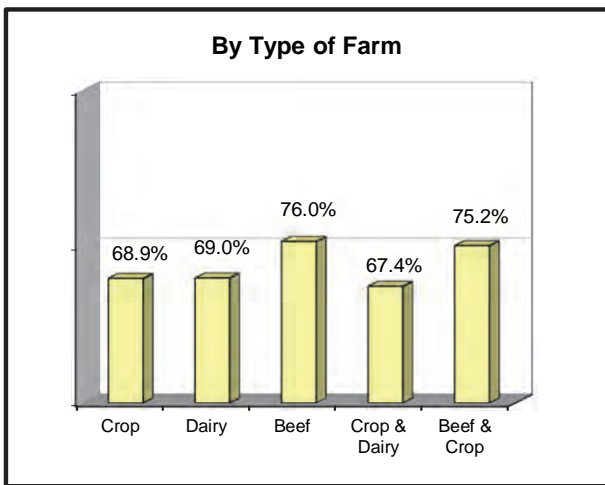
<b>Evaluation Chart</b>	<u>Low Farms</u>		<u>Average</u>		<u>High Farms</u>		<u>Your Farm</u>	
	2020	5 Yr Ave	2020	5 Yr Ave	2020	5 Yr Ave	2020	5 Yr Ave
<b><u>Liquidity</u></b>								
Current Ratio	1.12	1.06	1.9	1.62	2.24	2.11		
Working Capital	\$ 19,112	15,836	240,631	161,294	751,881	535,363		
Working Capital to Gross Inc.	% 7.8%	3.8%	30.5%	25.0%	35.0%	34.9%		
<b><u>Solvency (Market)</u></b>								
Farm Debt to Asset Ratio	% 52%	56%	46%	47%	43%	41%		
Farm Equity to Asset Ratio	% 48%	44%	54%	53%	57%	59%		
Farm Debt to Equity Ratio	% 1.08	1.27	0.87	0.88	0.75	0.71		
<b><u>Profitability (Cost)</u></b>								
Rate of Return on Farm Assets	% -4.1%	-4.7%	7.5%	3.8%	11.0%	8.5%		
Rate of Return on Farm Equity	% -15.8%	-17.6%	10.4%	3.5%	15.4%	11.1%		
Operating Profit Margin	% -19.9%	-21.6%	21.6%	12.0%	27.7%	23.0%		
Net Farm Income	\$ -41,716	-80,572	156,941	80,391	529,813	344,471		
EBIDTA	\$ 12,775	7,055	240,168	156,942	706,138	480,522		
<b><u>Repayment Capacity (Accrual)</u></b>								
Capital Debt Repayment Cap.	\$ 25,646	-5,098	211,654	123,784	616,381	389,917		
Capital Debt Repayment Margin	\$ -30,304	-91,894	122,600	41,172	430,288	241,099		
Replacement Margin	\$ -44,511	-109,426	98,699	21,115	371,492	196,078		
Term Debt Coverage Ratio	0.46	-0.02	2.38	1.48	3.31	2.58		
Replacement Coverage Ratio	0.37	-0.02	1.87	1.19	2.52	1.98		
<b><u>Efficiency</u></b>								
Asset Turnover Rate (Cost)	% 20.5%	21.9%	34.8%	31.2%	39.8%	36.6%		
Operating Expense Ratio	% 94.8%	98.1%	69.6%	75.7%	67.1%	68.8%		
Depreciation Expense Ratio	% 11.2%	10.2%	6.3%	7.2%	5.5%	6.2%		
Interest Expense Ratio	% 10.5%	9.3%	4.6%	5.2%	3.2%	3.6%		
Net Farm Income Ratio	% -16.5%	-18.4%	19.5%	11.8%	24.1%	21.6%		

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

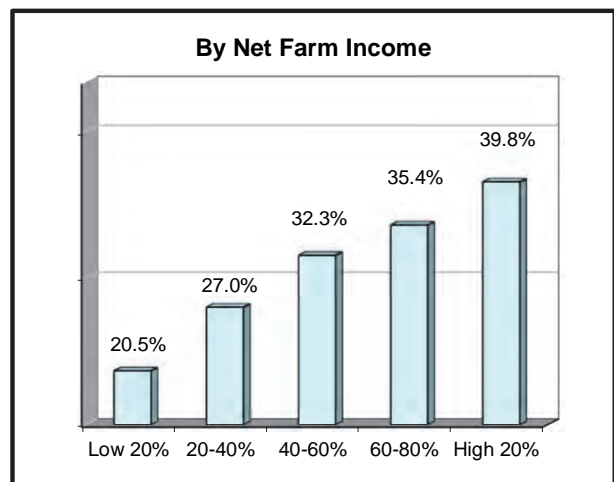
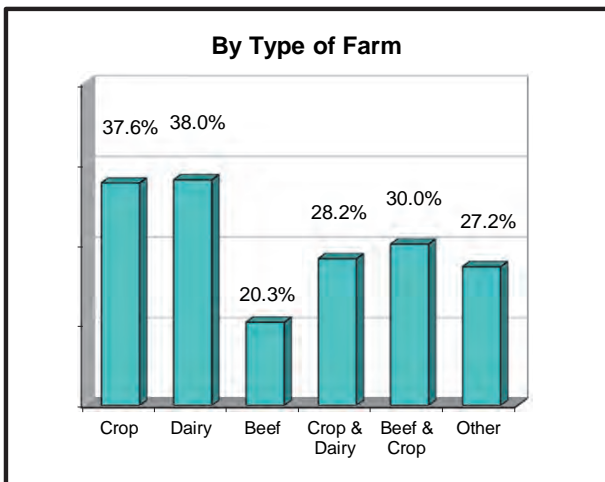
**Working Capital**



**Operating Expense Ratio**



**Asset Turnover Rate**

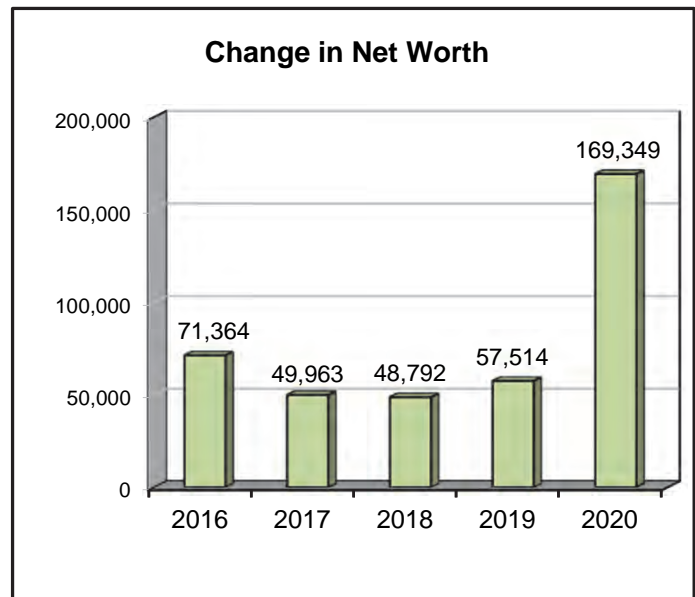
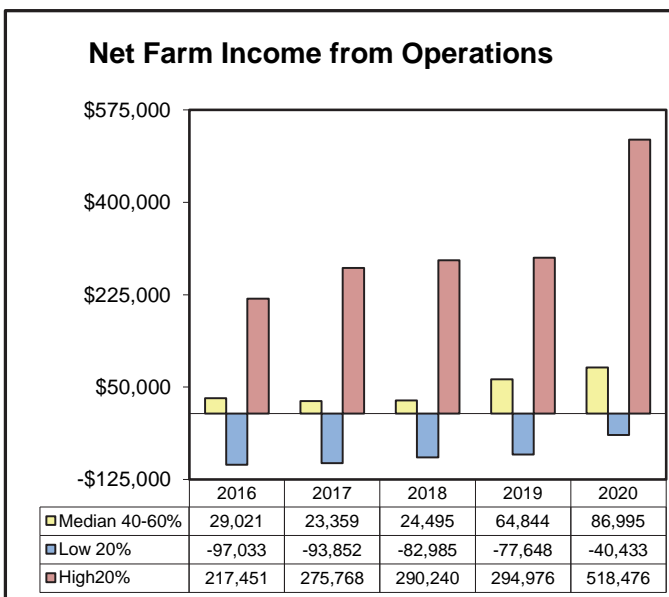


**Profitability Measures**  
**Northern Minnesota Farm Business Management Data**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	577	115	116	116
<b>Profitability (assets valued at cost)</b>				
Net farm income from operations	154,368	-40,433	86,995	518,476
Rate of return on assets	7.5 %	-4.1 %	5.6 %	11.0 %
Rate of return on equity	10.4 %	-15.8 %	7.0 %	15.4 %
Operating profit margin	21.6 %	-19.9 %	17.4 %	27.7 %
Asset turnover rate	34.8 %	20.5 %	32.3 %	39.8 %
Farm interest expense	36,352	25,802	28,826	68,683
Value of operator lbr and mgmt.	47,569	26,464	39,655	94,852
Return on farm assets	143,152	-41,095	76,166	492,307
Average farm assets	1,905,405	1,004,223	1,357,541	4,456,432
Return on farm equity	106,799	-66,896	47,340	423,624
Average farm equity	1,028,922	422,080	676,584	2,749,992
Value of farm production	663,477	206,349	438,059	1,775,802
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	577	115	116	116
<b>Profitability (assets valued at market)</b>				
Net farm income from operations	170,576	-11,638	94,827	540,865
Rate of return on assets	7.0 %	-0.9 %	5.0 %	10.4 %
Rate of return on equity	10.4 %	-6.1 %	6.4 %	16.2 %
Operating profit margin	24.0 %	-6.0 %	19.2 %	29.0 %
Asset turnover rate	29.3 %	15.9 %	25.9 %	35.8 %
Farm interest expense	36,352	25,802	28,826	68,683
Value of operator lbr and mgmt.	47,569	26,464	39,655	94,852
Return on farm assets	159,360	-12,300	83,999	514,697
Average farm assets	2,263,098	1,300,143	1,688,568	4,961,043
Return on farm equity	123,007	-38,102	55,172	446,014
Average farm equity	1,182,477	622,585	868,569	2,747,528
Value of farm production	663,477	206,349	438,059	1,775,802

**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	577	115	116	116
<b>Liquidity</b>				
Current ratio	1.9	1.12	1.72	2.24
Working capital	240,631	19,112	139,023	751,881
Working capital to gross inc.	30.50%	7.80%	28.30%	35.00%
Current assets	508,521	181,440	332,046	1,356,296
Current liabilities	267,890	162,327	193,023	604,414
Gross revenues (accrual)	789,932	245,111	490,690	2,146,999
<b>Repayment capacity</b>				
Net farm income from operations	154,368	-40,433	86,995	518,476
Depreciation	49,447	27,406	34,738	118,979
Personal income	39,596	66,465	34,379	19,713
Family living/owner withdrawals	-50,655	-38,926	-43,739	-80,306
Cash discrepancy	-2	8	12	-32
Payments on personal debt	-3,269	-4,130	-3,786	-1,905
Income taxes paid	-6,550	-3,940	-5,830	-14,302
Interest on term debt	28,719	19,195	22,328	55,759
Capital debt repayment capacity	211,654	25,646	125,097	616,381
Scheduled term debt payments	-89,054	-55,950	-67,333	-186,093
Capital debt repayment margin	122,600	-30,304	57,764	430,288
Cash replacement allowance	-23,900	-14,207	-15,778	-58,796
Replacement margin	98,699	-44,511	41,986	371,492
Term debt coverage ratio	2.38	0.46	1.86	3.31
Replacement coverage ratio	1.87	0.37	1.51	2.52





# AGRICULTURAL SCIENCE DEGREE

With the Agricultural Science Degree, you'll experience a broad-based curriculum with internship options, allowing it to be a standalone degree or lead to a 4-year degree in agriculture and agriculture education, food science, horticulture and natural resources.

For more information visit  
[clcmn.edu/agricultural-science-a-s-degree/](http://clcmn.edu/agricultural-science-a-s-degree/)  
Or call us at 218-855-8000



**Serving Minnesota's Farmers Through  
Farm Business Management**



**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	74	12	20	13
Average family size	3.5	2.1	3.8	4.3
<b>Family Living Expenses</b>				
Food and meals expense	9,234	5,008	11,051	10,133
Medical care	3,085	1,663	2,954	4,300
Health insurance	3,315	555	3,415	6,165
Cash donations	1,299	1,074	878	1,077
Household supplies	5,139	1,862	6,358	8,583
Clothing	1,831	468	1,453	2,736
Personal care	3,021	2,104	2,641	5,966
Child / Dependent care	610	211	88	857
Alimony and child support	155	-	-	590
Gifts	1,676	2,971	1,848	1,367
Education	1,126	210	2,099	1,578
Recreation	3,007	1,333	3,957	1,471
Utilities (household share)	2,354	2,167	2,346	1,906
Personal vehicle operating exp	3,077	2,447	2,939	3,775
Household real estate taxes	230	65	292	213
Dwelling rent	466	32	170	-
Household repairs	2,532	1,072	2,735	2,032
Personal interest	1,515	3,042	2,512	343
Disability / Long term care ins	379	178	112	48
Life insurance payments	2,946	1,129	3,525	5,646
Personal property insurance	418	1,207	201	302
Miscellaneous	7,514	10,004	4,438	7,711
Total cash family living expense	54,928	38,803	56,009	66,800
Family living from the farm	422	350	664	457
Total family living	55,350	39,153	56,673	67,257
<b>Other Nonfarm Expenditures</b>				
Income taxes	6,495	3,163	5,385	8,868
Furnishing & appliance purchases	-	-	-	-
Nonfarm vehicle purchases	1,987	521	533	2,533
Nonfarm real estate purchases	-7,266	-37,517	532	796
Other nonfarm capital purchases	676	-	800	1,000
Nonfarm savings & investments	5,670	-1,370	15,543	5,233
Total other nonfarm expenditures	7,562	-35,204	22,793	18,430
Total cash family living investment & nonfarm capital purch	62,491	3,599	78,802	85,230

**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	577	115	116	116
<b>Nonfarm Income</b>				
Personal wages & salary	25,984	47,026	22,495	8,532
Net nonfarm business income	4,662	7,686	1,564	3,523
Personal rental income	831	852	325	1,948
Personal interest income	234	8	128	240
Personal cash dividends	455	978	759	145
Tax refunds	1,964	3,327	1,864	1,113
Other nonfarm income	5,465	6,586	7,244	4,211
Total nonfarm income	39,596	66,465	34,379	19,713
Gifts and inheritances	2,766	4,945	2,728	1,666
<b>Nonfarm Assets (market)</b>				
Checking & savings	10,332	9,485	10,434	10,963
Stocks & bonds	7,996	5,283	9,754	14,492
Other current assets	2,598	1,771	2,838	5,804
Furniture & appliances	8,036	9,896	7,923	4,556
Nonfarm vehicles	16,447	16,506	16,008	15,347
Cash value of life ins.	5,674	3,269	6,845	4,949
Retirement accounts	68,131	59,948	82,538	62,127
Other intermediate assets	5,139	4,820	3,133	6,334
Nonfarm real estate	78,082	66,353	87,878	73,150
Personal bus. investment	19,158	3,059	4,231	65,648
Other long term assets	6,506	5,378	13,937	2,437
Total nonfarm assets	228,098	185,770	245,518	265,807
<b>Nonfarm Liabilities</b>				
Accrued interest	134	253	91	33
Accounts payable	582	1,333	349	216
Current notes	1,087	2,920	806	378
Princ due on term debt	3,201	4,216	3,550	1,566
Total current liabilities	6,366	8,971	5,472	5,821
Intermediate liabilities	5,770	8,147	4,933	1,610
Long term liabilities	23,794	24,881	32,236	11,190
Total nonfarm liabilities	35,929	41,998	42,641	18,621
Nonfarm net worth	192,169	143,772	202,877	247,186
Nonfarm debt to asset ratio	16 %	23 %	17 %	7 %

**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	577	115	116	116
<b>Operator Information</b>				
Average number of operators	1.2	1.1	1.1	1.7
Average age of operators	46.8	47.9	45.7	47.9
Average number of years farming	22.1	21.7	22.0	24.1
<b>Results Per Operator</b>				
Working capital	195,246	17,569	122,683	454,735
Total assets (market)	2,087,548	1,365,049	1,741,185	3,308,752
Total liabilities	915,498	660,284	764,687	1,362,299
Net worth (market)	1,172,050	704,765	976,498	1,946,453
Net worth excl deferred liabs	1,345,431	791,059	1,103,947	2,265,860
Gross farm income	640,943	225,322	433,017	1,298,498
Total farm expense	515,690	262,490	356,247	984,926
Net farm income from operations	125,253	-37,169	76,770	313,572
Net nonfarm income	32,128	61,099	30,339	11,922
Family living & tax withdrawals	46,418	39,398	43,732	57,238
Total acres owned	262.0	186.3	273.9	307.3
Total crop acres	672.1	362.4	612.7	1,091.5
Crop acres owned	199.3	125.4	221.1	247.2
Crop acres cash rented	467.3	232.7	379.2	838.2
Crop acres share rented	5.5	4.3	12.4	6.1
Total pasture acres	41.2	85.0	36.5	14.4
<b>Labor Analysis</b>				
Number of farms	577	115	116	116
Total unpaid labor hours	2,576	1,765	2,386	4,212
Total hired labor hours	2,216	556	752	7,929
Total labor hours per farm	4,792	2,321	3,138	12,142
Unpaid hours per operator	2,090	1,623	2,106	2,548
Value of farm production / hour	138.47	88.89	139.61	146.26
Net farm income / unpaid hour	59.93	-22.91	36.46	123.09
Average hourly hired labor wage	18.68	19.53	17.87	18.49
<b>Partnerships &amp; LLCs</b>				
Number of farms	80	9	10	42
Number of operators	2.2	1.9	2.3	2.3
Owner withdrawals per farm	109,753	111,783	-	123,050
Withdrawals per operator	50,283	74,522	-	49,885
<b>Corporations</b>				
Number of farms	18	1	2	10
Number of operators	2.2	-	-	2.3

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

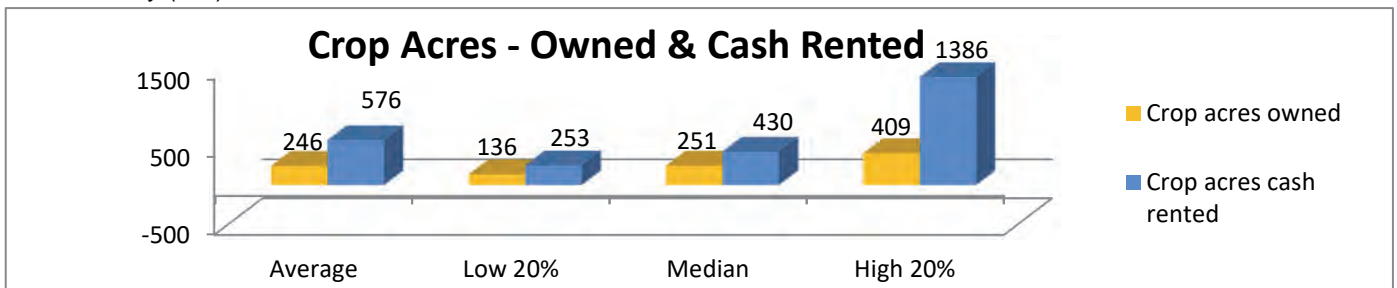
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	577	115	116	116
<b>Acreage Summary</b>				
Total acres owned	323	203	310	508
Total crop acres	828	394	694	1805
Crop acres owned	246	136	251	409
Crop acres cash rented	576	253	430	1,386
Crop acres share rented	7	5	14	10
Total pasture acres	51	92	41	24
Percent crop acres owned	30%	35%	36%	23%
Mach invest/crop acre cost	525	592	430	582
Mach invest/crop acre market	608	726	528	656

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

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Soybeans per bushel	8.79	9.24	8.74	8.7
Corn per bushel	3.31	3.22	3.32	3.39
Wheat, Spring per bushel	4.98	4.97	4.76	5.03
Hay, Alfalfa per ton	117.03	116.73	116.91	123.33
Oats per bushel	2.56	2.47	2.28	2.81
Barley per bushel	4.27	-	-	4.31
Hay, Grass per ton	95.58	103.96	91.19	-
Hay per ton	115.25	104.17	89.43	109.26
Corn Silage per ton	35.64	-	29.71	37.57
Rye per bushel	5.04	4.55	4.93	5.35
Sunflowers per cwt	19.06	-	-	-
Grass Seed, Perennial Rye per lb	0.604	-	0.597	0.605
Soybeans, Food per bushel	11.31	-	-	-
Beans, Navy per cwt	25.8	-	-	25.93

**Average Yield Per Acre**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Soybeans (bushel)	40.58	37.31	41.14	40.99
Corn (bushel)	173.19	148.99	176.43	178.07
Corn Silage (ton)	20.87	16.78	18.9	21.37
Hay, Alfalfa (ton)	4.01	3.11	3.89	4.5
Wheat, Spring (bushel)	57.32	53.57	56.18	59.45
Hay (ton)	2.4	2.03	3.02	3.76
Hay, Grass (ton)	2.04	1.69	2.51	2.27
Oats (bushel)	83.86	41.66	90.29	91.73
Barley (bushel)	57.12	34.26	-	67.46
Rye (bushel)	33.01	23.28	-	32.62
Soybeans, Food (bushel)	37.44	-	-	-
Sunflowers (cwt)	17.16	-	-	-
Beans, Navy (cwt)	18.48	-	-	19.87



---

## ***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.

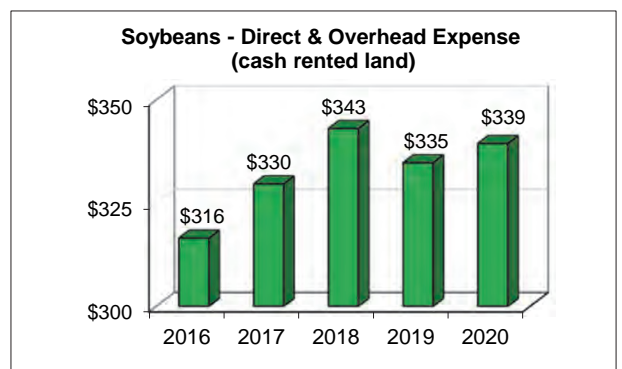
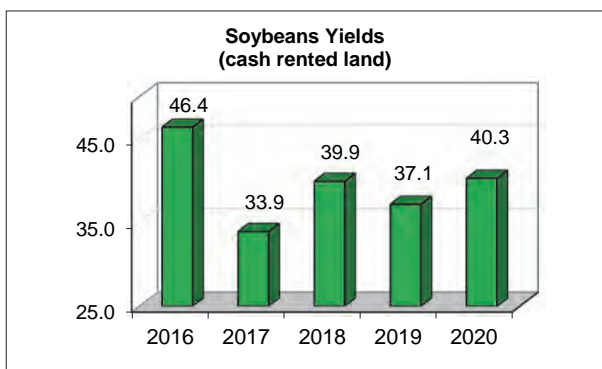
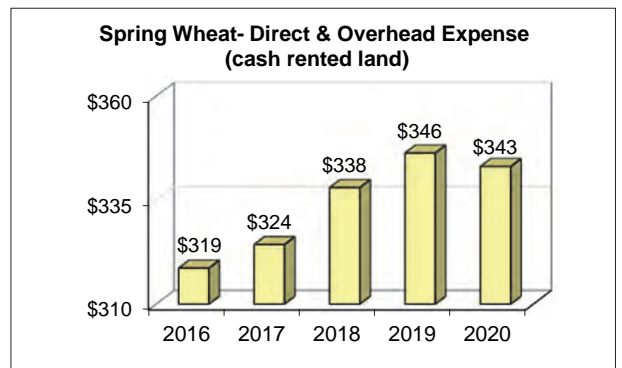
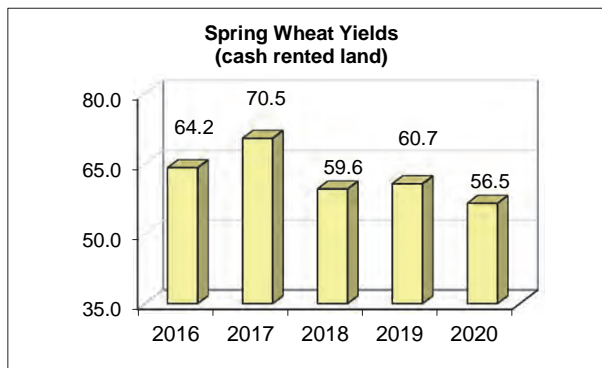
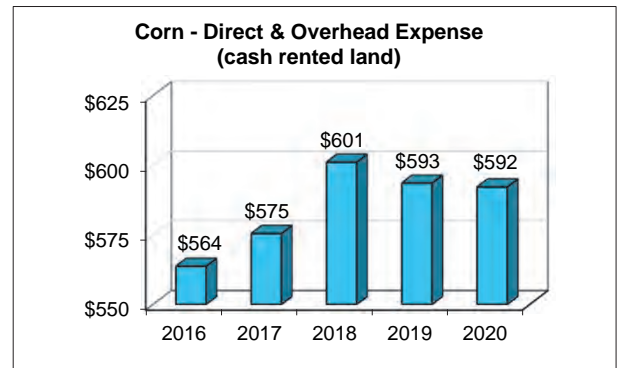
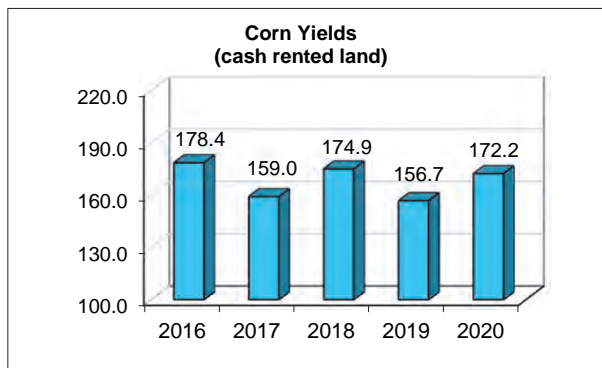
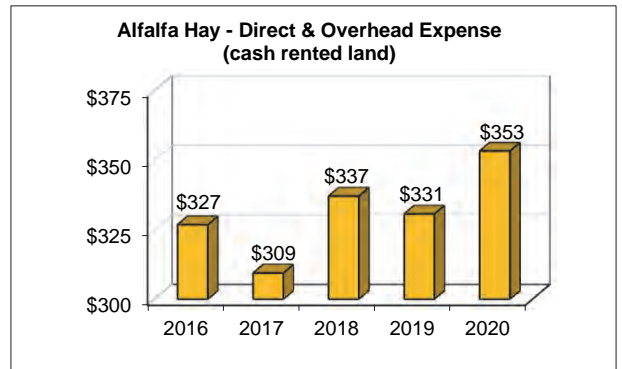
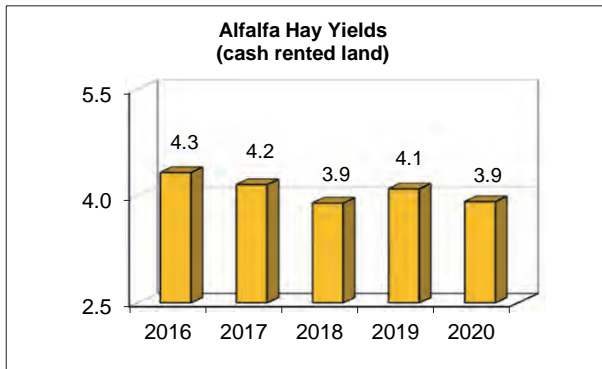
---

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>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Alfalfa Hay	\$169.50	\$171.76	\$177.01	\$161.73	\$168.16
Corn	\$151.43	\$153.51	\$161.45	\$160.80	\$166.17
Corn Silage	\$204.12	\$214.87	\$206.32	\$224.53	\$224.95
Soybeans	\$88.15	\$83.66	\$88.20	\$84.51	\$94.38
Spring Wheat	\$84.95	\$83.56	\$87.85	\$87.90	\$92.53

## 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</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	175	35	35
Acres	108.47	143.67	110.57
Yield per acre (bu.)	176.16	177.93	207.76
Operator's share of yield %	100.00	100.00	100.00
Value per bu.	3.78	3.82	3.89
Other product return per acre	7.94	4.37	21.04
Total product return per acre	674.32	683.34	830.16
Hedging gains/losses per acre	-3.65	-8.12	-
Crop insurance per acre	7.11	8.59	13.09
Other crop income per acre	39.79	34.11	48.40
Gross return per acre	717.56	717.92	891.65
<b>Direct Expenses</b>			
Seed and plants	92.40	96.47	95.90
Fertilizer	101.96	109.47	103.85
Crop chemicals	27.91	30.92	29.47
Crop insurance	18.81	20.15	19.50
Drying expense	9.69	12.12	7.29
Storage	2.50	7.12	0.35
Packaging and supplies	1.45	1.01	0.85
Fuel & oil	24.97	25.29	19.76
Repairs	57.19	57.70	50.83
Custom hire	18.26	12.12	12.26
Hired labor	2.60	2.33	1.85
Machinery leases	1.77	1.61	0.85
Utilities	0.94	1.40	0.57
Hauling and trucking	2.50	2.44	3.22
Marketing	3.26	4.56	1.48
Operating interest	10.02	9.74	8.17
Miscellaneous	2.53	3.74	2.28
Total direct expenses per acre	378.76	398.20	358.50
Return over direct exp per acre	338.80	319.72	533.16
<b>Overhead Expenses</b>			
Hired labor	12.60	10.28	9.48
Machinery leases	2.58	2.92	0.70
Building leases	1.11	0.64	0.14
RE & pers. property taxes	18.16	17.75	19.64
Farm insurance	10.88	9.10	12.49
Utilities	6.87	4.99	7.25
Dues & professional fees	4.76	3.87	4.24
Interest	59.75	60.40	54.48
Mach & bldg depreciation	58.74	66.78	50.25
Miscellaneous	4.87	5.29	4.38
Total overhead expenses per acre	180.32	182.02	163.04
Total dir & ovhd expenses per acre	559.08	580.22	521.54
Net return per acre	158.49	137.70	370.11
Government payments	27.62	26.02	29.15
Net return with govt pmts	186.11	163.73	399.26
Labor & management charge	45.22	45.07	38.30
Net return over lbr & mgt	140.89	118.66	360.96
<b>Cost of Production</b>			
Total direct expense per bu.	2.15	2.24	1.73
Total dir & ovhd exp per bu.	3.17	3.26	2.51
Less govt & other income	2.73	2.90	1.97
With labor & management	2.98	3.15	2.16
Net value per unit	3.76	3.77	3.89
Machinery cost per acre	166.17	167.08	137.02
Est. labor hours per acre	3.39	2.86	3.60



**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	240	48	48
Acres	252.15	248.56	323.58
Yield per acre (bu.)	172.20	171.09	188.61
Operator's share of yield %	100.00	100.00	100.00
Value per bu.	3.85	3.83	4.05
Other product return per acre	3.63	1.58	6.87
Total product return per acre	667.17	657.54	771.18
Hedging gains/losses per acre	-6.33	-4.47	-
Crop insurance per acre	5.66	6.93	7.49
Other crop income per acre	44.50	40.14	51.27
Gross return per acre	710.99	700.14	829.94
<b>Direct Expenses</b>			
Seed and plants	87.87	90.23	83.18
Fertilizer	114.17	120.50	110.00
Crop chemicals	26.54	30.54	28.40
Crop insurance	19.71	20.00	17.92
Drying expense	11.08	9.32	14.26
Storage	1.28	0.34	0.77
Packaging and supplies	1.06	0.66	0.59
Fuel & oil	22.32	24.51	18.21
Repairs	48.82	52.70	45.29
Custom hire	15.22	12.27	7.13
Hired labor	3.33	3.45	1.64
Land rent	121.49	103.37	115.49
Machinery leases	3.26	3.70	4.63
Utilities	0.70	1.64	0.71
Hauling and trucking	1.68	1.62	1.66
Marketing	3.11	4.12	0.95
Operating interest	12.50	16.06	7.43
Miscellaneous	2.89	2.40	4.24
Total direct expenses per acre	497.05	497.44	462.51
Return over direct exp per acre	213.95	202.70	367.44
<b>Overhead Expenses</b>			
Hired labor	11.90	14.03	13.43
Machinery leases	5.25	2.52	5.53
Building leases	2.54	0.23	0.69
Farm insurance	8.36	10.34	8.28
Utilities	5.00	4.49	5.03
Dues & professional fees	4.67	5.09	3.96
Interest	7.36	9.58	5.27
Mach & bldg depreciation	46.14	45.55	53.13
Miscellaneous	3.81	4.96	3.59
Total overhead expenses per acre	95.04	96.79	98.91
Total dir & ovhd expenses per acre	592.09	594.23	561.42
Net return per acre	118.90	105.91	268.53
Government payments	29.28	29.95	30.55
Net return with govt pmts	148.19	135.85	299.07
Labor & management charge	39.04	40.78	41.85
Net return over lbr & mgt	109.15	95.08	257.23
<b>Cost of Production</b>			
Total direct expense per bu.	2.89	2.91	2.45
Total dir & ovhd exp per bu.	3.44	3.47	2.98
Less govt & other income	2.99	3.04	2.47
With labor & management	3.22	3.28	2.69
Net value per unit	3.82	3.81	4.05
Machinery cost per acre	144.18	146.76	134.58
Est. labor hours per acre	2.79	3.01	2.79

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

**Soybeans on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	155	31	31
Acres	220.10	215.19	262.08
Yield per acre (bu.)	41.52	40.40	46.71
Operators share of yield %	100.00	100.00	100.00
Value per bu.	10.23	10.24	11.11
Other product return per acre	0.28	0.39	0.72
Total product return per acre	424.97	414.00	519.68
Hedging gains/losses per acre	-2.56	-	-6.14
Crop insurance per acre	13.10	15.53	19.86
Other crop income per acre	29.45	28.95	35.45
Gross return per acre	464.96	458.48	568.85
<b>Direct Expenses</b>			
Seed and plants	54.58	54.40	51.04
Fertilizer	25.16	28.50	17.80
Crop chemicals	29.60	28.71	24.68
Crop insurance	14.04	13.56	14.85
Fuel & oil	15.30	15.52	14.86
Repairs	31.04	30.17	25.08
Custom hire	8.07	5.94	10.40
Hired labor	1.33	0.51	2.16
Machinery leases	3.02	3.95	2.06
Utilities	0.50	0.15	0.65
Hauling and trucking	0.88	1.47	0.26
Marketing	1.43	0.96	1.12
Operating interest	6.91	10.70	5.80
Miscellaneous	1.88	2.24	0.96
Total direct expenses per acre	193.72	196.79	171.72
Return over direct exp per acre	271.24	261.69	397.13
<b>Overhead Expenses</b>			
Hired labor	6.97	5.97	3.53
Machinery leases	2.71	4.42	4.85
Building leases	0.80	1.05	1.48
RE & pers. property taxes	15.63	14.13	15.67
Farm insurance	7.25	7.90	6.98
Utilities	4.58	4.05	4.15
Dues & professional fees	2.63	2.10	2.04
Interest	39.94	34.89	41.28
Mach & bldg depreciation	33.16	24.77	44.70
Miscellaneous	2.40	2.32	1.64
Total overhead expenses per acre	116.07	101.61	126.30
Total dir & ovhd expenses per acre	309.79	298.39	298.02
Net return per acre	155.17	160.09	270.83
Government payments	23.17	22.59	27.99
Net return with govt pmts	178.33	182.68	298.82
Labor & management charge	30.16	29.99	31.11
Net return over lbr & mgt	148.17	152.69	267.72
<b>Cost of Production</b>			
Total direct expense per bu.	4.67	4.87	3.68
Total dir & ovhd exp per bu.	7.46	7.39	6.38
Less govt & other income	5.93	5.72	4.71
With labor & management	6.66	6.46	5.38
Net value per unit	10.17	10.24	10.98
Machinery cost per acre	94.38	89.51	100.77
Est. labor hours per acre	1.69	1.51	1.47

**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	236	47	48
Acres	369.05	413.21	300.01
Yield per acre (bu.)	40.25	39.34	49.29
Operators share of yield %	100.00	100.00	100.00
Value per bu.	10.01	9.82	10.77
Other product return per acre	0.11	0.20	0.38
Total product return per acre	403.09	386.57	531.06
Hedging gains/losses per acre	-2.32	-	-
Crop insurance per acre	15.59	19.31	7.51
Other crop income per acre	29.74	23.79	33.04
Gross return per acre	446.10	429.67	571.62
<b>Direct Expenses</b>			
Seed and plants	53.30	47.87	61.18
Fertilizer	23.65	28.01	28.54
Crop chemicals	34.45	33.19	38.08
Crop insurance	13.43	10.77	13.37
Fuel & oil	13.43	13.28	13.88
Repairs	28.03	27.46	28.86
Custom hire	7.22	5.17	6.69
Hired labor	1.07	0.44	1.03
Land rent	96.04	84.58	89.92
Machinery leases	2.51	2.06	0.45
Hauling and trucking	0.78	0.59	1.39
Marketing	1.21	0.57	2.35
Operating interest	6.84	4.93	2.57
Miscellaneous	2.45	2.57	2.94
Total direct expenses per acre	284.42	261.49	291.26
Return over direct exp per acre	161.68	168.18	280.36
<b>Overhead Expenses</b>			
Hired labor	7.77	6.56	16.62
Machinery leases	2.70	3.34	1.57
Building leases	1.00	0.24	0.90
Farm insurance	5.55	5.12	5.73
Utilities	3.63	2.97	4.13
Dues & professional fees	2.60	2.79	1.84
Interest	4.67	5.33	2.61
Mach & bldg depreciation	24.95	24.53	35.28
Miscellaneous	2.09	1.85	1.69
Total overhead expenses per acre	54.96	52.73	70.37
Total dir & ovhd expenses per acre	339.38	314.22	361.62
Net return per acre	106.71	115.45	209.99
Government payments	21.57	22.14	21.83
Net return with govt pmts	128.29	137.58	231.82
Labor & management charge	26.94	25.63	29.12
Net return over lbr & mgt	101.35	111.95	202.70
<b>Cost of Production</b>			
Total direct expense per bu.	7.07	6.65	5.91
Total dir & ovhd exp per bu.	8.43	7.99	7.34
Less govt & other income	6.83	6.32	6.06
With labor & management	7.49	6.98	6.65
Net value per unit	9.96	9.82	10.77
Machinery cost per acre	81.44	78.83	86.66
Est. labor hours per acre	1.67	1.47	2.15

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

**Wheat, Spring on Owned Land**

	<u>Avg. Of</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	86	17	18
Acres	239.86	275.43	331.92
Yield per acre (bu.)	59.88	55.66	69.70
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.48	5.44	5.64
Other product return per acre	1.30	2.68	1.03
Total product return per acre	329.40	305.72	393.85
Hedging gains/losses per acre	-0.54	-	-1.87
Crop insurance per acre	28.15	25.73	46.50
Other crop income per acre	32.66	30.34	34.98
Gross return per acre	389.68	361.79	473.46
<b>Direct Expenses</b>			
Seed and plants	20.95	24.84	18.21
Fertilizer	81.84	82.96	86.09
Crop chemicals	31.58	32.61	34.99
Crop insurance	12.14	14.21	14.61
Drying expense	1.21	0.69	1.37
Fuel & oil	14.39	14.17	14.63
Repairs	28.24	27.74	27.09
Custom hire	12.55	2.45	5.79
Hired labor	0.41	0.29	0.63
Machinery leases	0.54	0.89	0.14
Hauling and trucking	0.58	0.05	0.26
Marketing	0.79	0.70	0.52
Operating interest	6.27	5.52	4.21
Miscellaneous	1.39	1.90	0.74
Total direct expenses per acre	212.89	209.02	209.29
Return over direct exp per acre	176.79	152.77	264.16
<b>Overhead Expenses</b>			
Hired labor	8.53	10.23	7.46
Machinery leases	3.26	7.97	2.86
Building leases	0.58	0.31	1.21
RE & pers. property taxes	13.94	13.95	14.61
Farm insurance	6.71	5.15	7.00
Utilities	5.51	4.75	4.35
Dues & professional fees	2.65	3.98	2.11
Interest	33.81	42.59	24.70
Mach & bldg depreciation	33.80	28.01	42.70
Miscellaneous	2.35	1.91	2.02
Total overhead expenses per acre	111.15	118.86	109.01
Total dir & ovhd expenses per acre	324.04	327.88	318.30
Net return per acre	65.64	33.91	155.16
Government payments	25.36	27.15	32.47
Net return with govt pmts	91.00	61.06	187.63
Labor & management charge	29.74	28.20	28.54
Net return over lbr & mgt	61.26	32.86	159.08
<b>Cost of Production</b>			
Total direct expense per bu.	3.56	3.76	3.00
Total dir & ovhd exp per bu.	5.41	5.89	4.57
Less govt & other income	3.96	4.35	2.94
With labor & management	4.46	4.85	3.35
Net value per unit	5.47	5.44	5.61
Machinery cost per acre	92.53	80.37	91.66
Est. labor hours per acre	1.56	1.58	1.45

**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	130	26	26
Acres	381.74	335.26	485.60
Yield per acre (bu.)	56.52	51.17	69.96
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.49	5.46	5.63
Other product return per acre	1.21	2.75	1.92
Total product return per acre	311.48	282.19	395.76
Hedging gains/losses per acre	-0.16	-	-
Crop insurance per acre	24.79	23.34	25.42
Other crop income per acre	30.48	33.61	29.28
Gross return per acre	366.60	339.13	450.45
<b>Direct Expenses</b>			
Seed and plants	21.15	19.39	22.25
Fertilizer	84.51	77.28	82.42
Crop chemicals	31.08	29.19	32.39
Crop insurance	11.35	9.80	10.48
Drying expense	1.58	0.59	2.49
Fuel & oil	14.03	13.35	15.13
Repairs	26.16	29.39	25.05
Custom hire	8.20	10.73	4.60
Hired labor	0.19	0.77	-
Land rent	77.90	81.75	76.04
Machinery leases	1.46	0.69	2.18
Marketing	0.80	0.63	0.92
Operating interest	6.00	8.43	4.36
Miscellaneous	2.51	3.11	0.90
Total direct expenses per acre	286.92	285.10	279.21
Return over direct exp per acre	79.68	54.04	171.24
<b>Overhead Expenses</b>			
Hired labor	11.57	10.23	18.87
Machinery leases	2.87	3.26	3.46
Building leases	0.57	0.07	0.69
Farm insurance	5.74	6.09	5.98
Utilities	4.54	4.62	5.31
Dues & professional fees	2.27	2.76	2.80
Interest	3.77	3.52	3.01
Mach & bldg depreciation	22.75	21.77	24.97
Miscellaneous	2.07	2.23	2.25
Total overhead expenses per acre	56.15	54.55	67.36
Total dir & ovhd expenses per acre	343.07	339.65	346.57
Net return per acre	23.53	-0.51	103.89
Government payments	22.34	19.76	27.90
Net return with govt pmts	45.87	19.25	131.79
Labor & management charge	27.19	25.30	28.27
Net return over lbr & mgt	18.67	-6.05	103.51
<b>Cost of Production</b>			
Total direct expense per bu.	5.08	5.57	3.99
Total dir & ovhd exp per bu.	6.07	6.64	4.95
Less govt & other income	4.68	5.08	3.75
With labor & management	5.16	5.58	4.15
Net value per unit	5.49	5.46	5.63
Machinery cost per acre	77.53	81.71	76.51
Est. labor hours per acre	1.65	1.69	1.88

**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	117	24	24
Acres	72.64	71.10	59.20
Yield per acre (ton)	21.03	21.09	26.61
Operators share of yield %	100.00	100.00	100.00
Value per ton	34.35	33.07	34.52
Total product return per acre	722.45	697.63	918.42
Crop insurance per acre	1.02	-	5.27
Other crop income per acre	37.08	37.96	42.51
Gross return per acre	760.55	735.59	966.19
<b>Direct Expenses</b>			
Seed and plants	89.98	83.28	92.51
Fertilizer	78.74	52.05	65.30
Crop chemicals	31.92	28.91	26.06
Crop insurance	18.83	19.19	20.25
Packaging and supplies	15.85	13.20	21.53
Fuel & oil	32.76	36.81	28.27
Repairs	70.81	68.00	69.36
Custom hire	63.24	67.36	29.98
Hired labor	3.59	3.07	0.70
Machinery leases	2.45	5.60	1.81
Operating interest	5.20	5.79	6.70
Miscellaneous	3.91	1.37	1.31
Total direct expenses per acre	417.29	384.64	363.79
Return over direct exp per acre	343.27	350.95	602.40
<b>Overhead Expenses</b>			
Hired labor	23.81	25.74	22.58
Machinery leases	2.74	4.83	2.25
RE & pers. property taxes	12.80	14.37	13.16
Farm insurance	10.73	13.19	12.74
Utilities	6.91	8.34	6.74
Dues & professional fees	4.15	4.74	4.55
Interest	62.28	74.18	53.51
Mach & bldg depreciation	52.17	39.77	60.58
Miscellaneous	4.91	6.04	4.97
Total overhead expenses per acre	180.49	191.19	181.08
Total dir & ovhd expenses per acre	597.78	575.83	544.87
Net return per acre	162.77	159.76	421.32
Government payments	31.62	21.58	41.35
Net return with govt pmts	194.39	181.35	462.67
Labor & management charge	47.55	43.42	47.75
Net return over lbr & mgt	146.85	137.92	414.93
<b>Cost of Production</b>			
Total direct expense per ton	19.84	18.24	13.67
Total dir & ovhd exp per ton	28.43	27.30	20.48
Less govt & other income	25.11	24.48	17.13
With labor & management	27.37	26.53	18.92
Net value per unit	34.35	33.07	34.52
Machinery cost per acre	224.95	224.49	195.65
Est. labor hours per acre	4.56	5.48	4.28

**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	109	22	22
Acres	94.68	79.59	84.53
Yield per acre (ton)	20.75	19.41	24.98
Operators share of yield %	100.00	100.00	100.00
Value per ton	34.77	34.37	34.92
Total product return per acre	721.33	667.12	872.55
Crop insurance per acre	1.39	-	1.60
Other crop income per acre	27.18	31.91	39.67
Gross return per acre	749.90	699.03	913.82
<b>Direct Expenses</b>			
Seed and plants	91.63	91.22	86.52
Fertilizer	93.51	87.41	71.71
Crop chemicals	33.81	21.82	33.18
Crop insurance	15.84	9.10	16.41
Storage	0.32	-	1.75
Packaging and supplies	15.80	6.31	14.82
Fuel & oil	38.40	26.70	27.29
Repairs	62.62	51.01	62.02
Custom hire	79.48	55.55	12.03
Hired labor	3.23	1.88	1.75
Land rent	108.12	80.53	101.32
Machinery leases	2.61	4.70	2.32
Hauling and trucking	6.55	2.54	-
Operating interest	2.39	2.02	0.88
Miscellaneous	3.66	1.09	2.55
Total direct expenses per acre	557.97	441.89	434.55
Return over direct exp per acre	191.93	257.14	479.27
<b>Overhead Expenses</b>			
Hired labor	20.11	11.56	13.81
Machinery leases	3.74	1.50	1.00
Building leases	1.02	0.01	3.33
Farm insurance	7.01	6.54	11.99
Utilities	4.25	4.06	3.20
Dues & professional fees	3.60	3.15	6.17
Interest	8.81	3.93	11.53
Mach & bldg depreciation	44.67	52.98	46.88
Miscellaneous	3.08	3.37	3.53
Total overhead expenses per acre	96.30	87.10	101.44
Total dir & ovhd expenses per acre	654.27	528.99	535.99
Net return per acre	95.63	170.04	377.83
Government payments	40.05	25.86	39.52
Net return with govt pmts	135.68	195.90	417.34
Labor & management charge	41.61	42.09	33.99
Net return over lbr & mgt	94.06	153.82	383.35
<b>Cost of Production</b>			
Total direct expense per ton	26.89	22.77	17.39
Total dir & ovhd exp per ton	31.53	27.26	21.45
Less govt & other income	28.23	24.28	18.22
With labor & management	30.23	26.45	19.58
Net value per unit	34.77	34.37	34.92
Machinery cost per acre	234.02	177.58	160.62
Est. labor hours per acre	3.47	3.87	4.02

**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	97	20	20
Acres	67.64	54.16	68.13
Yield per acre (ton)	4.15	3.79	5.58
Operators share of yield %	100.00	100.00	100.00
Value per ton	136.11	156.34	148.80
Total product return per acre	565.25	592.72	830.69
Crop insurance per acre	1.26	0.40	0.58
Other crop income per acre	17.01	17.69	20.70
Gross return per acre	583.52	610.82	851.97
<b>Direct Expenses</b>			
Fertilizer	37.26	20.74	37.50
Crop chemicals	2.66	1.91	2.57
Crop insurance	7.90	2.13	0.72
Packaging and supplies	11.42	15.08	9.83
Fuel & oil	27.49	28.35	30.08
Repairs	63.53	58.20	71.61
Custom hire	19.07	45.61	6.34
Hired labor	2.74	1.63	-
Machinery leases	2.07	3.37	-
Operating interest	9.74	7.04	4.61
Miscellaneous	2.57	1.90	1.10
Total direct expenses per acre	186.46	185.97	164.37
Return over direct exp per acre	397.06	424.85	687.60
<b>Overhead Expenses</b>			
Hired labor	18.26	18.21	17.94
Machinery leases	2.97	0.46	9.89
Building leases	0.76	0.72	0.27
RE & pers. property taxes	14.25	13.31	14.93
Farm insurance	11.59	12.66	9.86
Utilities	7.15	7.20	5.29
Dues & professional fees	4.32	5.24	4.59
Interest	49.02	43.64	71.93
Mach & bldg depreciation	51.93	54.27	66.41
Miscellaneous	4.47	6.70	2.20
Total overhead expenses per acre	164.71	162.41	203.30
Total dir & ovhd expenses per acre	351.17	348.37	367.67
Net return per acre	232.35	262.44	484.30
Government payments	11.47	9.57	15.30
Net return with govt pmts	243.82	272.01	499.60
Labor & management charge	44.47	47.29	37.51
Net return over lbr & mgt	199.35	224.72	462.09
<b>Cost of Production</b>			
Total direct expense per ton	44.90	49.05	29.44
Total dir & ovhd exp per ton	84.56	91.89	65.86
Less govt & other income	77.40	84.59	59.31
With labor & management	88.10	97.06	66.03
Net value per unit	136.11	156.34	148.80
Machinery cost per acre	168.16	188.68	191.28
Est. labor hours per acre	4.24	4.75	3.68



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

**Hay, Alfalfa on Cash Rent**

	<u>Avg. Of</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	117	24	24
Acres	86.29	112.78	73.18
Yield per acre (ton)	3.92	3.92	5.66
Operators share of yield %	100.00	100.00	100.00
Value per ton	144.42	141.54	155.72
Total product return per acre	566.22	554.16	881.72
Crop insurance per acre	1.24	3.14	-
Other crop income per acre	18.65	13.99	24.71
Gross return per acre	586.10	571.29	906.43
<b>Direct Expenses</b>			
Fertilizer	42.73	33.56	36.53
Crop chemicals	4.77	3.32	9.31
Crop insurance	1.21	1.10	1.36
Storage	0.52	-	-
Packaging and supplies	9.37	13.75	9.13
Fuel & oil	24.91	33.20	24.07
Repairs	54.81	63.12	59.07
Custom hire	23.85	10.11	14.27
Hired labor	1.58	0.10	-
Land rent	90.86	112.36	103.46
Machinery leases	1.46	1.47	0.77
Hauling and trucking	0.84	-	0.23
Operating interest	5.11	6.36	2.87
Miscellaneous	2.39	2.67	4.23
Total direct expenses per acre	264.43	281.11	265.31
Return over direct exp per acre	321.68	290.18	641.12
<b>Overhead Expenses</b>			
Hired labor	14.35	22.29	18.69
Machinery leases	3.32	8.88	2.25
Building leases	1.10	1.40	0.62
Farm insurance	8.06	7.84	14.85
Utilities	4.82	5.05	5.55
Dues & professional fees	4.71	6.77	5.95
Interest	7.94	11.44	6.21
Mach & bldg depreciation	41.63	56.01	48.45
Miscellaneous	2.85	2.16	3.78
Total overhead expenses per acre	88.79	121.83	106.35
Total dir & ovhd expenses per acre	353.21	402.94	371.66
Net return per acre	232.89	168.35	534.77
Government payments	9.96	5.23	17.20
Net return with govt pmts	242.85	173.58	551.97
Labor & management charge	40.65	35.00	42.22
Net return over lbr & mgt	202.20	138.58	509.75
<b>Cost of Production</b>			
Total direct expense per ton	67.45	71.80	46.86
Total dir & ovhd exp per ton	90.09	102.92	65.64
Less govt & other income	82.48	97.21	58.24
With labor & management	92.85	106.14	65.69
Net value per unit	144.42	141.54	155.72
Machinery cost per acre	152.66	178.91	148.15
Est. labor hours per acre	3.45	3.59	4.29

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

**Hay, Mixed on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	32	7	7
Acres	113.38	219.71	109.04
Yield per acre (ton)	2.45	2.14	3.58
Operators share of yield %	100.00	100.00	100.00
Value per ton	100.87	87.55	111.22
Total product return per acre	247.25	186.95	398.68
Crop insurance per acre	0.84	1.98	-
Other crop income per acre	4.63	1.76	9.72
Gross return per acre	252.72	190.68	408.41
<b>Direct Expenses</b>			
Fertilizer	17.04	15.63	10.00
Crop chemicals	0.60	0.27	-
Packaging and supplies	2.83	0.45	2.28
Fuel & oil	15.84	9.62	20.04
Repairs	39.40	28.78	34.96
Custom hire	4.30	0.41	10.50
Hired labor	1.53	2.10	-
Land rent	43.30	19.26	63.92
Machinery leases	0.53	0.41	1.49
Utilities	0.30	0.18	0.70
Operating interest	5.15	2.07	5.23
Miscellaneous	0.79	1.03	0.97
Total direct expenses per acre	131.62	80.20	150.09
Return over direct exp per acre	121.10	110.49	258.32
<b>Overhead Expenses</b>			
Hired labor	3.86	1.99	4.61
Machinery leases	1.41	1.44	0.93
Building leases	0.34	0.81	-
Farm insurance	5.06	3.33	10.03
Utilities	3.09	1.96	2.45
Dues & professional fees	1.66	1.50	2.07
Interest	5.93	7.51	5.37
Mach & bldg depreciation	24.13	14.70	30.24
Miscellaneous	1.14	0.37	1.60
Total overhead expenses per acre	46.64	33.62	57.30
Total dir & ovhd expenses per acre	178.26	113.82	207.39
Net return per acre	74.46	76.87	201.02
Government payments	2.77	2.73	4.77
Net return with govt pmts	77.23	79.60	205.78
Labor & management charge	22.17	10.11	31.28
Net return over lbr & mgt	55.06	69.49	174.51
<b>Cost of Production</b>			
Total direct expense per ton	53.69	37.56	41.87
Total dir & ovhd exp per ton	72.72	53.30	57.85
Less govt & other income	69.36	50.27	53.81
With labor & management	78.41	55.01	62.54
Net value per unit	100.87	87.55	111.22
Machinery cost per acre	89.28	60.56	102.00
Est. labor hours per acre	1.97	1.03	2.85

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

**Hay, Grass on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	57	12	12
Acres	71.56	124.09	38.90
Yield per acre (ton)	1.97	1.73	2.78
Operators share of yield %	100.00	100.00	100.00
Value per ton	89.42	94.45	104.92
Total product return per acre	176.37	163.54	291.39
Other crop income per acre	4.03	1.69	0.96
Gross return per acre	180.41	165.23	292.35
<b>Direct Expenses</b>			
Seed and plants	0.74	0.34	-
Fertilizer	6.35	5.49	5.24
Crop chemicals	0.10	-	0.76
Packaging and supplies	4.31	3.80	2.95
Fuel & oil	14.95	15.21	15.77
Repairs	26.50	24.35	27.57
Custom hire	7.49	0.80	13.29
Hired labor	1.68	3.54	-
Land rent	68.73	52.65	31.36
Operating interest	2.36	1.59	3.60
Miscellaneous	1.04	1.39	0.74
Total direct expenses per acre	134.24	109.15	101.29
Return over direct exp per acre	46.17	56.08	191.07
<b>Overhead Expenses</b>			
Hired labor	5.99	6.59	4.84
Machinery leases	4.14	4.67	1.59
Farm insurance	5.58	2.64	8.98
Utilities	2.17	1.44	4.57
Dues & professional fees	1.95	1.98	3.27
Interest	5.13	3.76	3.00
Mach & bldg depreciation	28.73	24.15	27.56
Miscellaneous	2.27	1.40	5.06
Total overhead expenses per acre	55.97	46.62	58.87
Total dir & ovhd expenses per acre	190.20	155.77	160.16
Net return per acre	-9.80	9.46	132.20
Government payments	0.55	-	-
Net return with govt pmts	-9.25	9.46	132.20
Labor & management charge	22.28	14.99	24.64
Net return over lbr & mgt	-31.53	-5.54	107.56
<b>Cost of Production</b>			
Total direct expense per ton	68.06	63.04	36.47
Total dir & ovhd exp per ton	96.43	89.96	57.67
Less govt & other income	94.11	88.99	57.32
With labor & management	105.40	97.65	66.19
Net value per unit	89.42	94.45	104.92
Machinery cost per acre	84.91	72.10	86.72
Est. labor hours per acre	2.18	1.94	1.98

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

	<u>Establish</u> <u>Alfalfa Hay</u>	<u>Oatlage</u>	<u>Fescue</u> <u>Grass Seed</u>	<u>Perennial Rye</u> <u>Grass Seed</u>
Number of farms	49	18	8	8
Acres	54.20	46.57	315.56	797.63
Yield per acre	2.36	3.49	506.61	692.08
Operators share of yield %	100.00	100.00	100.00	100.00
Value	136.29	43.08	0.63	0.64
Total product return per acre	321.93	150.31	322.66	439.98
Other crop income per acre	15.31	17.77	14.15	51.63
Gross return per acre	337.24	168.09	336.81	491.61
<b>Direct Expenses</b>				
Seed	121.55	25.08	5.60	14.97
Fertilizer	30.64	15.61	102.92	81.47
Crop chemicals	8.12	4.44	33.01	40.02
Crop insurance	1.57	1.38	6.02	13.66
Packaging and supplies	15.20	2.16	-	-
Fuel & oil	28.96	17.98	14.84	20.09
Repairs	71.10	38.45	26.75	35.79
Custom hire	17.42	14.26	8.25	18.98
Machinery Leases	1.47	1.54	0.60	-
Land Rent	59.83	69.63	67.50	40.54
Operating interest	4.28	0.78	11.00	7.97
Miscellaneous	6.29	2.74	1.91	0.14
Total direct expenses per acre	366.42	194.06	278.40	273.61
Return over direct exp per acre	-29.18	-25.97	58.41	218.00
<b>Overhead Expenses</b>				
Hired labor	15.39	13.14	14.25	6.08
Mach and bldg leases	3.34	1.45	0.79	10.16
RE & pers. property taxes	6.65	3.17	6.42	3.65
Farm insurance	8.79	9.57	6.14	10.04
Utilities	4.65	4.21	5.87	4.63
Dues & professional fees	3.75	4.46	2.46	1.67
Interest	31.59	18.93	10.01	14.74
Mach & bldg depreciation	52.94	26.15	24.49	40.72
Miscellaneous	4.54	5.67	2.11	2.36
Total overhead expenses per acre	131.63	86.75	72.53	94.05
Total dir & ovhd expenses per acre	498.05	280.81	350.93	367.67
Net return per acre	-160.81	-112.72	-14.12	123.94
Government payments	7.89	26.10	20.63	17.58
Net return with govt pmts	-152.92	-86.63	6.51	141.53
Labor & management charge	37.65	26.45	24.26	41.81
Net return over lbr & mgt	-190.57	-113.08	-17.75	99.71
<b>Cost of Production</b>				
Total direct expense per bu.	155.48	55.62	0.55	0.40
Total dir & ovhd exp per bu.	211.33	80.48	0.69	0.53
Less govt & other income	201.18	67.91	0.61	0.43
With labor & management	217.15	75.49	0.66	0.49
Net value per unit	136.29	43.08	0.63	0.64
Machinery cost per acre	175.20	102.40	75.50	125.82
Est. labor hours per acre	3.95	2.88	1.72	1.70

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

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

	<u>Corn</u>	<u>Corn Silage</u>	<u>Hay, Alfalfa</u>	<u>Soybeans</u>	<u>Beans, Dark Red Kidney</u>
Number of farms	55	22	15	24	6
Acres	243.42	115.10	123.91	159.84	356.53
Yield per acre	195.17	23.62	5.26	50.90	29.05
Operators share of yield %	100.00	100.00	100.00	100.00	100.00
Value	3.72	34.60	158.90	9.70	40.37
Total product return per acre	734.89	817.37	836.28	493.67	1,173.01
Crop insurance per acre	-	2.16	-	0.90	67.20
Other crop income per acre	47.13	38.58	13.82	31.35	11.91
Gross return per acre	782.02	858.11	850.10	525.92	1,252.12
<b>Direct Expenses</b>					
Seed	94.36	94.77	-	51.90	103.28
Fertilizer	140.68	79.73	88.39	26.69	130.31
Crop chemicals	29.54	35.87	5.98	35.14	108.95
Crop insurance	13.32	13.74	3.13	11.84	26.75
Marketing	3.87	-	-	1.64	0.66
Irrigation energy	29.14	25.98	28.50	25.29	27.00
Packaging and supplies/Drying Corn	13.85	13.01	18.01	-	-
Fuel & oil	20.17	37.86	43.40	10.93	14.08
Repairs	49.39	59.84	61.59	28.40	57.42
Custom hire and Trucking	15.45	60.33	7.89	13.22	27.65
Hired labor	2.65	0.93	1.61	0.68	-
Land Rent	86.64	42.78	61.32	78.74	100.79
Operating interest	6.33	4.31	1.68	3.27	2.12
Miscellaneous	5.64	5.03	4.25	4.02	2.67
Total direct expenses per acre	524.78	475.33	325.77	306.30	601.68
Return over direct exp per acre	257.24	382.78	524.33	219.62	650.43
<b>Overhead Expenses</b>					
Hired labor	21.52	39.52	33.62	10.28	15.83
Mach and bldg leases	2.55	4.47	4.84	1.32	33.15
RE & pers. property taxes	4.56	6.37	6.20	4.19	2.67
Farm insurance	10.57	9.92	7.21	7.22	4.39
Utilities	5.15	4.50	4.84	3.06	10.86
Dues & professional fees	6.95	6.59	5.44	5.75	2.69
Interest	27.54	34.88	38.82	20.80	16.97
Mach & bldg depreciation	48.31	66.66	51.37	28.81	36.63
Miscellaneous	5.56	5.56	4.09	2.36	8.42
Total overhead expenses per acre	132.71	178.47	156.43	83.79	101.99
Total dir & ovhd expenses per acre	657.49	653.81	482.20	390.09	733.28
Net return per acre	124.53	204.30	367.90	135.83	518.84
Government payments	30.18	40.24	8.65	20.75	-
Net return with govt pmnts	154.71	244.54	376.56	156.58	518.84
Labor & management charge	44.78	52.09	33.59	26.85	42.67
Net return over lbr & mgt	109.93	192.46	342.97	129.74	476.17
<b>Cost of Production</b>					
Total direct expense per bu.	2.69	20.12	61.93	6.02	20.71
Total dir & ovhd exp per bu.	3.37	27.68	91.62	7.66	25.24
Less govt & other income	2.93	24.25	87.35	6.62	22.52
With labor & management	3.16	26.45	93.73	7.15	23.98
Net value per unit	3.72	34.60	158.90	9.66	40.37
Machinery cost per acre	147.78	233.92	175.77	98.56	160.10
Est. labor hours per acre	3.06	3.98	3.43	1.76	2.86

\* 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>Canola</u>	<u>Sunflowers</u>
Number of farms	11	40	18	5	10
Acres	248.04	97.98	107.22	412.00	300.51
Yield per acre	57.12	83.86	33.01	16.66	17.16
Operators share of yield %	100.00	100.00	100.00	100.00	100.00
Value	4.71	2.70	4.86	20.52	19.97
Other product return per acre	0.88	18.45	37.36	-	-
Total product return per acre	269.67	244.60	197.83	341.88	342.64
Crop insurance per acre	27.88	1.44	-	-	21.36
Other crop income per acre	35.36	28.42	17.39	32.29	29.00
Gross return per acre	332.91	274.46	215.22	374.17	393.00
<b>Direct Expenses</b>					
Seed	22.35	14.93	20.51	50.65	42.17
Fertilizer	71.22	36.83	29.29	97.71	57.48
Crop chemicals	26.70	13.03	2.57	49.56	36.27
Crop insurance	13.89	5.80	1.19	10.38	13.16
Fuel & oil	15.23	13.86	14.52	13.62	11.89
Repairs	28.48	22.83	25.50	25.64	26.60
Custom hire & trucking	7.95	4.67	10.62	6.66	16.81
Hired labor	0.47	1.40	2.18	-	-
Land Rent	70.07	32.35	70.21	58.19	55.98
Machine Leases	0.39	1.25	-	-	-
Operating interest	5.95	5.16	6.30	6.50	7.26
Miscellaneous	2.92	3.72	7.19	0.14	3.61
Total direct expenses per acre	267.26	155.53	190.08	318.44	271.25
Return over direct exp per acre	65.66	118.93	25.14	55.73	121.75
<b>Overhead Expenses</b>					
Hired labor	8.11	10.37	7.24	5.45	12.36
Machinery leases	4.33	1.83	1.13	4.48	1.98
Building leases	1.71	1.25	0.70	0.24	1.44
RE & pers. property taxes	0.24	4.94	1.23	0.99	2.27
Farm insurance	5.10	4.50	6.52	7.94	5.95
Utilities	3.75	3.56	3.23	3.31	6.23
Dues & professional fees	3.00	1.72	2.94	0.65	1.98
Interest	5.62	16.85	6.02	7.50	7.31
Mach & bldg depreciation	15.41	23.47	31.21	27.01	22.39
Miscellaneous	1.69	2.03	4.16	1.45	2.54
Total overhead expenses per ac	48.94	70.52	64.39	59.01	64.45
Total dir & ovhd expenses per a	316.20	226.05	254.47	377.45	335.70
Net return per acre	16.71	48.41	-39.25	-3.28	57.30
Government payments	30.16	20.42	11.19	25.82	23.57
Net return with govt pmts	46.87	68.82	-28.06	22.54	80.87
Labor & management charge	22.37	23.08	24.63	30.45	28.37
Net return over lbr & mgt	24.50	45.74	-52.70	-7.91	52.51
<b>Cost of Production</b>					
Total direct expense per bu.	4.68	1.85	5.76	19.12	15.81
Total dir & ovhd exp per bu.	5.54	2.70	7.71	22.66	19.57
Less govt & other income	3.89	1.88	5.71	19.17	15.26
With labor & management	4.28	2.15	6.46	21.00	16.91
Net value per unit	4.71	2.70	4.86	20.52	19.97
Machinery cost per acre	72.81	67.73	81.32	78.77	80.75
Est. labor hours per acre	1.28	2.03	2.13	1.33	1.74

\* 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>Field Peas</b>	<b>Soybeans, Seed</b>
Number of farms	7	7	5	14
Acres	281.63	163.79	205.20	447.55
Yield per acre	18.48	21.41	36.92	43.62
Operators share of yield %	100.00	100.00	100.00	100.00
Value	28.39	25.33	6.80	10.85
Total product return per acre	524.58	542.48	251.12	473.16
Crop insurance per acre	132.76	1.92	-	21.88
Other crop income per acre	21.84	54.79	4.73	40.48
Gross return per acre	679.19	599.19	255.85	535.52
<b>Direct Expenses</b>				
Seed	55.89	71.81	34.78	52.45
Fertilizer	36.47	131.14	27.58	33.16
Crop chemicals	66.00	91.12	19.29	33.47
Crop insurance	27.26	25.79	12.50	10.53
Fuel & oil	18.90	10.87	13.10	11.97
Repairs	32.66	44.91	33.64	27.80
Custom hire	1.89	48.82	1.94	6.75
Hired labor	0.76	13.25	-	0.59
Land Rent	100.73	101.63	79.41	68.18
Machinery Leases	0.86	7.05	-	2.84
Operating interest	10.95	3.73	7.65	9.84
Miscellaneous	2.52	27.98	2.36	5.66
Total direct expenses per acre	354.90	578.11	232.23	263.24
Return over direct exp per acre	324.29	21.08	23.62	272.28
<b>Overhead Expenses</b>				
Hired labor	18.22	11.58	14.34	18.61
Machinery leases	6.39	0.39	1.80	4.91
Building leases	2.37	0.21	1.34	0.18
RE & pers. property taxes	5.09	2.78	1.85	6.84
Farm insurance	4.89	3.48	4.35	5.23
Utilities	4.21	2.88	2.74	4.16
Dues & professional fees	4.75	3.02	3.53	2.89
Interest	25.49	1.40	11.01	16.96
Mach & bldg depreciation	24.44	29.54	18.19	30.62
Miscellaneous	3.02	3.90	3.31	2.05
Total overhead expenses per acre	98.87	59.17	62.45	92.45
Total dir & ovhd expenses per acre	453.77	637.28	294.68	355.68
Net return per acre	225.42	-38.10	-38.83	179.84
Government payments	-	-	1.18	22.52
Net return with govt pmts	225.42	-38.10	-37.65	202.36
Labor & management charge	13.95	43.47	22.17	27.18
Net return over lbr & mgt	211.47	-81.57	-59.82	175.18
<b>Cost of Production</b>				
Total direct expense per bu.	19.21	27.00	6.29	6.04
Total dir & ovhd exp per bu.	24.56	29.76	7.98	8.15
Less govt & other income	16.19	27.11	7.82	6.21
With labor & management	16.95	29.14	8.42	6.83
Net value per unit	28.39	25.33	6.80	10.85
Machinery cost per acre	88.99	139.85	71.24	83.79
Est. labor hours per acre	1.55	2.51	1.61	1.50


\* 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 Oats</b>
Number of farms	9	8	9	5
Acres	57.87	32.03	150.78	48.80
Yield per acre	107.74	12.87	2.57	29.32
Operators share of yield %	100.00	100.00	100.00	100.00
Value	7.17	73.88	157.13	4.52
Total product return per acre	772.44	950.72	403.92	141.00
Crop insurance per acre	13.49	-	3.37	51.92
Other crop income per acre	22.04	41.43	12.96	20.63
Gross return per acre	807.97	992.15	420.25	213.54
<b>Direct Expenses</b>				
Seed and Plants	82.49	103.75	1.02	16.05
Fertilizer	133.54	60.95	8.99	-
Organic Crop Protection	3.22	3.50	0.29	-
Crop insurance	9.60	14.78	0.37	11.26
Drying expense	5.99	-	-	-
Packaging and Supplies	0.95	17.26	10.25	0.25
Fuel & oil	23.51	25.44	18.29	13.98
Repairs	39.01	72.56	39.56	36.10
Custom hire and Trucking	6.56	21.97	19.90	2.35
Land Rent	59.69	20.20	12.59	39.65
Marketing	0.25	-	-	-
Organic Certification	4.03	4.06	2.13	3.04
Operating interest	10.75	5.58	9.49	2.20
Miscellaneous	8.57	6.84	8.04	6.57
Total direct expenses per acre	388.17	356.89	130.94	131.46
Return over direct exp per acre	419.80	635.26	289.31	82.08
<b>Overhead Expenses</b>				
Hired labor	11.43	16.98	11.24	8.37
Mach and bldg leases	2.45	-	1.96	2.61
RE & pers. property taxes	4.18	8.90	5.99	1.97
Farm insurance	6.19	5.45	10.54	6.18
Utilities	6.19	9.98	4.20	5.55
Dues & professional fees	3.61	3.43	2.76	2.29
Interest	13.63	39.21	20.07	4.36
Mach & bldg depreciation	61.15	39.39	29.57	16.55
Miscellaneous	5.71	7.73	1.20	2.78
Total overhead expenses per acre	114.56	131.07	87.55	50.66
Total dir & ovhd expenses per acre	502.72	487.96	218.49	182.12
Net return per acre	305.24	504.20	201.76	31.42
Government payments	32.29	40.99	3.27	32.88
Net return with govt pmts	337.54	545.19	205.03	64.30
Labor & management charge	46.01	72.20	37.86	38.99
Net return over lbr & mgt	291.53	472.99	167.17	25.31
<b>Cost of Production</b>				
Total direct expense / Unit of Production	3.60	27.73	50.94	4.48
Total dir & ovhd exp / Unit of Production	4.67	37.92	84.99	6.21
Less govt & other income	4.04	31.51	77.37	2.33
With labor & management	4.46	37.12	92.10	3.66
Net value per unit	7.17	73.88	157.13	4.52
Machinery cost per acre	142.59	170.63	117.15	80.05
Est. labor hours per acre	4.39	4.83	4.54	2.17

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







**ALEXANDRIA**  
TECHNICAL & COMMUNITY COLLEGE

A member of Minnesota State

**RANKED BEST  
COMMUNITY COLLEGE  
IN MINNESOTA**  
AND #8 NATIONALLY BY WALLETHUB.COM

**YOUR JOURNEY  
STARTS HERE.**

[www.alextech.edu](http://www.alextech.edu) | [info@alextech.edu](mailto:info@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.

**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>	
	275		55		55	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	99.43	19.66	99.60	19.72	99.12	20.03
Dairy Calves sold (hd)	0.00	0.16	0.00	0.13	0.00	0.17
Transferred out (hd)	0.00	0.19	0.00	0.27	0.00	0.18
Cull sales (hd)	0.00	0.80	0.00	0.84	0.00	0.82
Insurance income		0.11		0.09		0.19
Government payments		2.27		2.24		2.27
Other income		0.21		0.33		0.34
Purchased (hd)	0.00	-0.28	0.00	-0.73	0.00	-0.05
Transferred in (hd)	0.00	-0.15	0.00	-0.07	0.00	-0.23
Inventory change (hd)	0.00	0.33	0.00	0.59	0.00	0.28
Dairy repl net cost		-2.70		-2.73		-2.27
Gross margin		20.60		20.67		21.73
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	14.49	2.91	16.86	3.17	14.41	3.22
Complete Ration (lb.)	7.85	1.86	10.04	1.98	4.25	1.13
Corn (bu.)	0.26	0.93	0.23	0.81	0.26	0.93
Corn Silage (lb.)	79.81	1.40	72.82	1.28	77.65	1.35
Hay, Alfalfa (lb.)	10.74	0.78	12.19	0.85	9.38	0.69
Other feed stuffs (lb)	19.15	0.84	19.69	0.95	16.01	0.73
Breeding fees		0.20		0.16		0.23
Veterinary		0.45		0.52		0.47
Supplies		0.59		0.50		0.47
Fuel & oil		0.28		0.32		0.24
Repairs		0.81		0.80		0.81
Custom hire		0.35		0.27		0.28
Hired labor		1.47		1.95		0.29
Hauling and trucking		0.34		0.31		0.29
Bedding		0.33		0.35		0.28
Miscellaneous		0.58		0.65		0.43
Total direct expenses		14.14		14.87		11.85
Return over direct expense		6.46		5.79		9.88
<b>Overhead Expenses</b>						
Hired labor		0.49		0.26		1.32
Utilities		0.24		0.21		0.34
Interest		0.40		0.42		0.35
Mach & bldg depreciation		0.77		0.73		0.95
Miscellaneous		0.70		0.77		0.59
Total overhead expenses		2.60		2.38		3.55
Total dir & ovhd expenses		16.74		17.26		15.40
Net return		3.86		3.41		6.34
Labor & management charge		0.77		0.65		0.96
Net return over lbr & mgt		3.09		2.76		5.37
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		14.14		14.87		11.85
Total dir & ovhd expense per unit		16.74		17.26		15.40
With other revenue adjustments		15.88		16.36		13.81
With labor and management		16.65		17.01		14.77
Est. labor hours per unit		0.15		0.15		0.14
<b>Other Information</b>						
Number of cows		243.4		307.2		258.0
Milk produced per cow		24,983		25,460		27,568
Lbs of protein & fat per cow		1,745		1,745		1,916
Lb. of milk sold per FTE		1,803,750		1,831,440		2,007,189
Culling percentage		29.2		28.9		30.3
Turnover rate		35.6		35.2		35.7
Cow death loss percent		6.0		5.9		4.7
Cows per milking unit		21		22		24
Feed cost per cwt. of milk		8.73		9.04		8.06
Feed cost per cow		2,180.21		2,301.55		2,221.16
Hired labor per cow		490.44		562.61		445.24
Avg. milk price per cwt.		19.77		19.80		20.21
Milk price / feed margin		11.05		10.76		12.15

**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>	
	275		55		55	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	24,842.0	4,912.24	25,357.1	5,021.44	27,325.2	5,521.31
Dairy Calves sold (hd)	0.3	39.90	0.3	32.93	0.4	46.86
Transferred out (hd)	0.7	48.51	0.8	68.28	0.7	50.37
Cull sales (hd)	0.3	200.20	0.3	213.02	0.3	226.12
Insurance income		26.88		22.05		51.41
Government payments		565.94		571.37		625.32
Other income		52.70		82.93		93.30
Purchased (hd)	0.1	-70.29	0.1	-185.62	0.0	-14.10
Transferred in (hd)	0.4	-38.27	0.4	-18.18	0.4	-62.21
Inventory change (hd)	0.1	83.58	0.1	149.23	0.0	78.47
Dairy repl net cost		-674.35		-695.85		-625.44
Gross margin		5,147.05		5,261.61		5,991.40
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	3,620.7	727.80	4,291.3	808.29	3,972.6	887.57
Complete Ration (lb.)	1,962.0	465.12	2,557.3	504.11	1,170.5	312.23
Corn (bu.)	65.1	233.41	57.7	205.64	72.6	257.22
Corn Silage (lb.)	19,939.9	348.96	18,539.3	326.07	21,406.9	371.68
Hay, Alfalfa (lb.)	2,682.2	195.18	3,104.7	215.69	2,585.8	190.36
Other feed stuffs (lb)	4,783.6	209.74	5,013.5	241.75	4,414.6	202.09
Breeding fees		49.97		41.51		62.52
Veterinary		113.40		131.29		128.95
Supplies		147.98		128.51		129.80
Fuel & oil		69.01		80.42		67.37
Repairs		203.53		204.00		224.10
Custom hire		88.06		67.53		77.26
Hired labor		368.37		497.06		81.04
Hauling and trucking		84.46		79.90		80.92
Bedding		82.33		89.02		75.84
Miscellaneous		145.27		165.48		117.42
Total direct expenses		3,532.59		3,786.26		3,266.38
Return over direct expense		1,614.45		1,475.35		2,725.02
<b>Overhead Expenses</b>						
Hired labor		122.07		65.55		364.20
Utilities		59.30		53.06		93.30
Interest		100.42		107.67		95.20
Mach & bldg depreciation		192.39		184.89		263.06
Miscellaneous		175.99		195.75		162.19
Total overhead expenses		650.17		606.92		977.95
Total dir & ovhd expenses		4,182.76		4,393.17		4,244.33
Net return		964.28		868.43		1,747.07
Labor & management charge		192.41		165.26		265.57
Net return over lbr & mgt		771.87		703.17		1,481.50
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		14.14		14.87		11.85
Total dir & ovhd expense per unit		16.74		17.26		15.40
With other revenue adjustments		15.88		16.36		13.81
With labor and management		16.65		17.01		14.77
Est. labor hours per unit		38.56		38.77		38.12
<b>Other Information</b>						
Number of cows		243.4		307.2		258.0
Milk produced per cow		24,983		25,460		27,568
Lbs of protein & fat per cow		1,745		1,745		1,916
Lb. of milk sold per FTE		1,803,750		1,831,440		2,007,189
Culling percentage		29.2		28.9		30.3
Turnover rate		35.6		35.2		35.7
Cow death loss percent		6.0		5.9		4.7
Cows per milking unit		21		22		24
Feed cost per cwt. of milk		8.73		9.04		8.06
Feed cost per cow		2,180.21		2,301.55		2,221.16
Hired labor per cow		490.44		562.61		445.24
Avg. milk price per cwt.		19.77		19.80		20.21
Milk price / feed margin		11.05		10.76		12.15

**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>	
	22		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	13,934.2	4,110.93	11,817.8	3,504.27	16,582.0	4,732.19
Dairy Calves sold (hd)	0.4	98.68	0.3	22.56	0.6	53.88
Transferred out (hd)	0.3	28.10	0.3	42.64	0.2	20.37
Cull sales (hd)	0.2	204.29	0.2	138.44	0.3	261.74
Insurance income		15.42		8.61		78.27
Government payments		431.13		400.45		305.92
Other income		76.70		71.06		43.04
Purchased (hd)	0.1	-74.16	-	-	0.4	-479.32
Transferred in (hd)	0.2	-28.34	0.2	-50.64	0.2	-
Inventory change (hd)	0.0	32.54	0.0	18.76	0.3	534.72
Dairy repl net cost		-742.57		-488.68		-462.50
Gross margin		4,152.72		3,667.47		5,088.32
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	1,145.0	342.01	918.1	317.56	1,171.0	326.63
Corn (bu.)	4.4	24.44	4.7	32.84	21.9	110.40
Soybeans, Organic (bu.)	1.1	19.05	-	-	6.8	123.11
Corn, Organic (bu.)	46.8	352.14	40.2	306.77	69.0	528.44
Corn Silage, Organic (lb.)	9,417.5	306.87	10,306.2	372.41	6,180.8	156.58
Hay, Alfalfa, Organic (lb.)	3,862.4	406.72	1,816.6	250.00	3,132.7	268.75
Hay, Mixed, Organic (lb.)	1,431.7	95.72	2,614.1	175.57	-	-
Hay, Baleage (lb.)	816.6	30.62	3,646.1	136.73	-	-
Haylage, Alfalfa Organic (lb.)	3,084.0	140.26	-	-	4,135.2	243.86
Other feed stuffs (lb)	2,297.1	270.21	1,283.2	192.47	4,194.6	327.49
Breeding fees		22.50		21.54		17.70
Supplies		114.05		90.08		90.55
Repairs		177.89		176.32		203.51
Hired labor		141.18		115.14		65.40
Hauling and trucking		129.32		42.28		33.78
Miscellaneous		411.45		285.01		274.47
Total direct expenses		2,984.45		2,514.70		2,770.66
Return over direct expense		1,168.27		1,152.77		2,317.66
<b>Overhead Expenses</b>						
Hired labor		45.82		14.33		145.63
Building leases		60.50		31.44		295.22
Interest		89.82		134.82		55.97
Mach & bldg depreciation		170.19		303.89		68.15
Miscellaneous		175.18		182.98		199.94
Total overhead expenses		541.51		667.45		764.91
Total dir & ovhd expenses		3,525.95		3,182.15		3,535.56
Net return		626.76		485.32		1,552.75
Labor & management charge		298.10		418.04		560.26
Net return over lbr & mgt		328.66		67.28		992.49
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		21.03		20.88		16.60
Total dir & ovhd expense per unit		24.84		26.43		21.18
With other revenue adjustments		25.00		25.56		19.20
With labor and management		27.10		29.03		22.55
Est. labor hours per unit		36.70		40.41		41.88
<b>Other Information</b>						
Number of cows		95.2		93.8		64.8
Milk produced per cow		14,194		12,041		16,696
Lbs of protein & fat per cow		984		849		1,137
Lb. of milk sold per FTE		1,063,050		818,890		1,108,600
Culling percentage		21.3		15.4		29.0
Turnover rate		25.9		20.3		34.6
Cow death loss percent		3.5		4.5		4.3
Cows per milking unit		13		13		9
Feed cost per cwt. of milk		14.01		14.82		12.49
Feed cost per cow		1,988.05		1,784.33		2,085.25
Hired labor per cow		187.00		129.47		211.03
Avg. milk price per cwt.		29.50		29.65		28.54
Milk price / feed margin		15.50		14.83		16.05

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

**Dairy -- Average Per Cow**

	<u>Up to 50</u>		<u>50 100</u>		<u>100 200</u>		<u>200 500</u>		<u>Over 500</u>	
Number of farms	29		69		79		69		29	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	16,059.9	3,138.96	20,592.2	4,040.08	22,158.0	4,389.53	24,743.6	4,836.77	27,243.6	5,436.14
Dairy Calves sold (hd)	0.2	29.37	0.2	27.72	0.3	32.38	0.3	37.41	0.4	47.90
Transferred out (hd)	0.5	66.53	0.7	53.01	0.6	59.21	0.7	43.09	0.8	46.70
Cull sales (hd)	0.2	145.54	0.3	189.09	0.3	214.07	0.3	209.98	0.3	190.89
Insurance income		21.32		30.18		23.66		40.63		16.85
Government payments		468.00		539.52		538.36		675.09		499.74
Other income		33.16		64.83		73.76		71.96		26.82
Purchased (hd)	0.0	-41.14	0.0	-26.33	0.0	-63.29	0.0	-20.59	0.1	-122.74
Transferred in (hd)	0.3	-40.36	0.3	-95.92	0.4	-39.69	0.4	-34.10	0.4	-29.40
Inventory change (hd)	0.0	43.58	0.0	17.29	0.0	45.88	0.0	26.39	0.1	159.84
Dairy repl net cost		-436.21		-561.71		-734.86		-670.54		-683.58
Gross margin		3,428.76		4,277.75		4,539.01		5,216.09		5,589.16
<b>Direct Expenses</b>										
Protein Vit Minerals (lb.)	2,120.8	450.87	2,558.5	650.28	3,006.4	697.89	3,376.9	719.48	4,344.7	773.32
Complete Ration (lb.)	853.6	178.81	1,471.6	266.36	1,999.2	340.13	1,893.7	534.11	2,141.6	513.75
Corn (bu.)	58.1	202.59	65.6	224.97	66.8	233.91	61.0	214.51	67.8	251.14
Corn Silage (lb.)	16,804.0	284.68	17,569.8	289.94	17,969.5	308.51	20,565.5	361.05	20,868.7	370.68
Hay, Alfalfa (lb.)	3,502.3	259.73	3,559.2	259.17	3,373.7	254.36	2,959.3	208.65	1,962.7	144.18
Other feed stuffs (lb)	4,427.2	247.19	6,469.6	252.34	4,661.8	210.71	4,197.4	173.06	4,979.4	228.59
Breeding fees		39.22		44.89		42.33		46.68		57.25
Veterinary		66.36		83.70		87.21		107.83		136.65
Supplies		129.79		129.25		121.55		137.34		172.07
Repairs		132.47		175.87		188.68		208.31		214.27
Custom hire		16.52		39.94		65.36		69.13		125.12
Hired labor		22.87		83.05		115.51		344.94		564.19
Hauling and trucking		84.31		78.15		75.44		71.73		99.67
Bedding		46.90		79.55		88.47		98.69		68.64
Miscellaneous		220.66		219.03		196.99		231.66		206.54
Total direct expenses		2,382.97		2,876.49		3,027.05		3,527.17		3,926.07
Return over direct expense		1,045.79		1,401.27		1,511.96		1,688.92		1,663.09
<b>Overhead Expenses</b>										
Hired labor		11.49		60.42		132.84		133.52		125.02
Building leases		34.47		20.82		21.06		84.94		66.94
Interest		93.42		86.97		126.43		111.20		83.79
Mach & bldg depreciation		165.04		186.47		203.98		203.65		180.77
Miscellaneous		142.28		198.06		199.53		165.81		167.80
Total overhead expenses		446.70		552.73		683.84		699.12		624.32
Total dir & ovhd expenses		2,829.67		3,429.21		3,710.89		4,226.29		4,550.39
Net return		599.09		848.54		828.12		989.80		1,038.77
Labor & management charge		401.88		320.99		225.95		212.54		128.40
Net return over lbr & mgt		197.22		527.55		602.17		777.26		910.37
<b>Cost of Production Per Cwt. Of Milk</b>										
Total direct expense per unit		14.69		13.85		13.59		14.16		14.35
Total dir& ovhd expense per unit		17.45		16.51		16.66		16.97		16.63
With other revenue adjustments		15.80		15.47		16.08		15.54		16.12
With labor and management		18.27		17.02		17.10		16.39		16.59
Est. labor hours per unit		44.25		33.90		31.74		38.18		42.46
<b>Other Information</b>										
Number of cows		36.6		78.8		145.6		314.4		939.1
Milk produced per cow		16,218		20,770		22,277		24,909		27,367
Lbs of protein & fat per cow		1,210		1,489		1,553		1,742		1,902
Lb. of milk sold per FTE		1,016,331		1,700,998		1,954,938		1,814,647		1,796,546
Culling percentage		23.1		26.1		30.2		30.3		28.7
Turnover rate		29.5		33.6		37.4		36.8		34.6
Cow death loss percent		6.1		6.0		6.3		6.0		5.9
Cows per milking unit		9		11		15		23		32
Feed cost per cwt. of milk		10.01		9.36		9.18		8.88		8.34
Feed cost per cow		1,623.86		1,943.05		2,045.52		2,210.85		2,281.67
Hired labor per cow		34.37		143.47		248.35		478.46		689.21
Avg. milk price per cwt.		19.55		19.62		19.81		19.55		19.95
Milk price / feed margin		9.53		10.26		10.63		10.67		11.62

**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>	
	237		48		48	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	25,103.2	4,958.63	26,037.8	5,148.75	27,336.2	5,496.40
Dairy Calves sold (hd)	-	67.60	-	38.08	-	102.29
Transferred out (hd)	-	39.33	-	55.94	-	32.27
Cull sales (hd)	-	207.15	-	214.69	-	236.20
Insurance income		26.82		24.01		48.73
Government payments		594.02		600.79		645.94
Other income		27.85		52.96		68.80
Purchased (hd)	-	-74.26	-	-191.75	-	-16.92
Transferred in (hd)	-	-3.35	-	-9.09	-	-0.03
Inventory change (hd)	-	110.31	-	217.82	-	89.88
Gross margin		5,954.10		6,152.19		6,703.57
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	3,974.8	785.40	4,132.4	741.96	4,376.7	966.94
Complete Ration (lb.)	2,691.6	563.42	3,198.8	728.29	1,485.0	390.54
Corn (bu.)	68.3	245.35	66.2	240.11	74.6	260.05
Corn Silage (lb.)	24,312.0	427.03	22,465.0	399.74	26,453.6	457.23
Hay, Alfalfa (lb.)	3,783.7	264.74	4,204.5	288.18	4,378.7	295.39
Other feed stuffs (lb)	6,227.8	282.43	6,239.3	267.74	6,090.8	293.42
Breeding fees		66.26		61.57		75.16
Veterinary		133.79		151.04		145.82
Supplies		155.40		132.05		129.87
Contract production exp.		134.51		186.81		42.01
Repairs		232.69		236.22		241.81
Hired labor		417.73		579.88		85.09
Bedding		104.47		100.35		101.42
Miscellaneous		409.06		443.38		355.00
Total direct expenses		4,222.27		4,557.33		3,839.74
Return over direct expense		1,731.83		1,594.86		2,863.83
<b>Overhead Expenses</b>						
Hired labor		133.64		41.64		410.26
Building leases		69.47		102.10		40.77
Utilities		67.18		46.71		101.77
Interest		110.79		105.46		103.17
Mach & bldg depreciation		216.32		198.62		311.59
Miscellaneous		128.25		150.19		134.95
Total overhead expenses		725.64		644.72		1,102.52
Total dir & ovhd expenses		4,947.91		5,202.05		4,942.26
Net return		1,006.20		950.14		1,761.31
Labor & management charge		217.67		181.05		301.95
Net return over lbr & mgt		788.53		769.09		1,459.36
<b>Cost of Production Per Cwt. Of Milk</b>						
Total direct expense per unit		16.72		17.45		13.90
Total dir & ovhd expense per unit		19.59		19.92		17.89
With other revenue adjustments		15.73		16.12		13.66
With labor and management		16.59		16.81		14.75
Est. labor hours per unit		44.83		44.34		44.48
<b>Other Information</b>						
Number of cows		256.0		337.6		269.8
Milk produced per cow		25,253		26,109		27,632
Lbs of protein & fat per cow		1,760		1,797		1,917
Lb. of milk sold per FTE		1,568,077		1,644,106		1,720,838
Culling percentage		29.5		28.9		31.5
Turnover rate		35.8		35.2		36.5
Cow death loss percent		5.8		5.9		4.3
Cows per milking unit		22		23		24
Feed cost per cwt. of milk		10.17		10.21		9.64
Feed cost per cow		2,568.37		2,666.03		2,663.57
Hired labor per cow		551.37		621.52		495.35
Avg. milk price per cwt.		19.75		19.77		20.11
Milk price / feed margin		9.58		9.56		10.47

**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>	
	258		51		52	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Replacements sold (hd)	0.1	46.29	0.1	19.02	0.1	94.98
Transferred out (hd)	0.4	568.97	0.4	525.58	0.5	718.77
Cull sales (hd)	0.0	4.27	0.0	5.42	0.0	3.05
Government payments		0.08		-		-
Other income		1.42		1.47		1.36
Purchased (hd)	0.0	-8.63	0.0	-2.36	0.0	-14.32
Transferred in (hd)	0.6	-107.78	0.6	-104.16	0.6	-121.54
Inventory change (hd)	0.0	29.73	0.0	13.09	0.1	77.83
Gross margin		534.34		458.05		760.12
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	370.2	81.49	394.2	88.44	277.1	41.62
Milk Replacer (lb.)	20.0	23.60	28.5	36.80	4.7	5.96
Milk (lb.)	106.4	14.52	110.4	12.14	117.9	16.48
Complete Ration (lb.)	759.0	88.70	426.7	72.33	420.3	94.06
Corn (bu.)	5.6	19.25	7.5	25.41	4.3	14.55
Corn Silage (lb.)	5,270.9	89.98	5,618.3	96.69	4,222.0	69.61
Hay, Alfalfa (lb.)	1,078.6	68.94	1,175.9	80.99	551.5	35.75
Hay, Grass (lb.)	682.9	34.49	703.9	32.45	642.3	31.51
Other feed stuffs (lb)	1,637.6	50.55	1,711.7	57.83	1,399.2	30.99
Breeding fees		16.85		16.59		17.54
Veterinary		21.30		21.08		23.65
Supplies		14.03		12.62		16.87
Contract production exp.		106.50		36.90		150.61
Repairs		33.32		42.65		28.93
Hired labor		37.39		37.31		24.89
Bedding		23.55		23.21		19.57
Miscellaneous		28.39		23.07		25.30
Total direct expenses		752.84		716.51		647.89
Return over direct expense		-218.49		-258.46		112.23
<b>Overhead Expenses</b>						
Hired labor		22.12		27.89		23.13
Interest		17.22		17.43		15.07
Mach & bldg depreciation		34.58		45.90		32.35
Miscellaneous		36.25		37.38		42.35
Total overhead expenses		110.17		128.60		112.89
Total dir & ovhd expenses		863.01		845.11		760.78
Net return		-328.67		-387.06		-0.66
Labor & management charge		33.83		48.34		25.92
Net return over lbr & mgt		-362.50		-435.40		-26.58
<b>Cost of Production Per Head Per Day</b>						
Total direct expense per unit		2.29		2.20		1.92
Total dir & ovhd expense per unit		2.59		2.55		2.23
With other revenue adjustments		2.59		2.55		2.23
With labor and management		2.68		2.68		2.30
Est. labor hours per unit		6.10		7.09		5.49
<b>Other Information</b>						
No. purchased or trans in		128		122		188
Number sold or trans out		114		108		158
Average number of head		211		208		277
Percentage death loss		3.8		4.5		2.4
Feed cost per average head		471.51		503.09		340.54
Hired labor per average head		59.51		65.21		48.01
Feed cost/head sold/trans		875.16		969.34		596.52
Total cost/head sold/trans		1,814.78		1,888.23		1,472.01
Feed cost per head per day		1.29		1.38		0.93
Avg. purch price / head		547.20		895.54		406.74
Avg. sales price / head		473.63		208.35		833.28

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

**Dairy Feeder -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>High 34%</u>	
Number of farms	13		5	
	Quantity	Value	Quantity	Value
Dairy Feeder sold (lb)	65.58	71.77	100.40	114.24
Transferred out (lb)	79.42	84.77	-	-
Government payments		22.36		41.01
Purchased (lb)	-55.22	-80.26	-19.05	-23.57
Transferred in (lb)	-6.28	-10.36	-5.20	-12.45
Inventory change (lb)	16.50	21.04	23.84	43.59
Gross margin		109.32		162.82
<b>Direct Expenses</b>				
Protein Vit Minerals (lb.)	62.75	12.83	28.66	7.29
Milk Replacer (lb.)	1.99	2.56	0.11	0.11
Milk (lb.)	16.57	2.15	46.55	6.03
Complete Ration (lb.)	60.97	10.60	152.64	28.25
Corn (bu.)	3.93	14.47	3.23	11.51
Hay, Alfalfa (lb.)	68.92	5.15	-	-
Other feed stuffs (lb)	87.18	3.85	36.49	0.95
Veterinary		5.03		8.45
Fuel & oil		1.47		2.90
Repairs		3.04		4.12
Custom hire		2.94		-
Hired labor		1.17		3.12
Bedding		3.36		5.55
Miscellaneous		3.41		2.00
Total direct expenses		72.01		80.28
Return over direct expense		37.31		82.54
<b>Overhead Expenses</b>				
Hired labor		2.61		1.64
Utilities		1.22		1.64
Interest		2.36		4.81
Mach & bldg depreciation		3.27		5.71
Miscellaneous		2.09		2.97
Total overhead expenses		11.56		16.77
Total dir & ovhd expenses		83.57		97.05
Net return		25.75		65.77
Labor & management charge		5.09		6.03
Net return over lbr & mgt		20.66		59.73
<b>Cost of Production Per Cwt. Produced</b>				
Total direct expense per unit		97.65		72.42
Total dir & ovhd expense per unit		105.62		89.13
With other revenue adjustments		90.20		48.28
With labor and management		93.71		54.29
Est. labor hours per unit		0.57		0.56
<b>Other Information</b>				
No. purchased or trans in		163		150
Number sold or trans out		144		107
Percentage death loss		3.4		4.1
Avg. daily gain (lb.)		1.85		1.79
Lb. of conc / lb. of gain		3.53		3.62
Lb. of feed / lb. of gain		5.09		4.37
Feed cost per cwt. of gain		51.60		54.14
Feed cost per head		170.95		160.02
Hired labor per head		12.54		14.07
Average purchase weight		240		90
Avg wgt / Dairy Feeder sold		448		422
Avg purch price / head		348.53		111.52
Avg sales price / cwt.		109.43		113.79

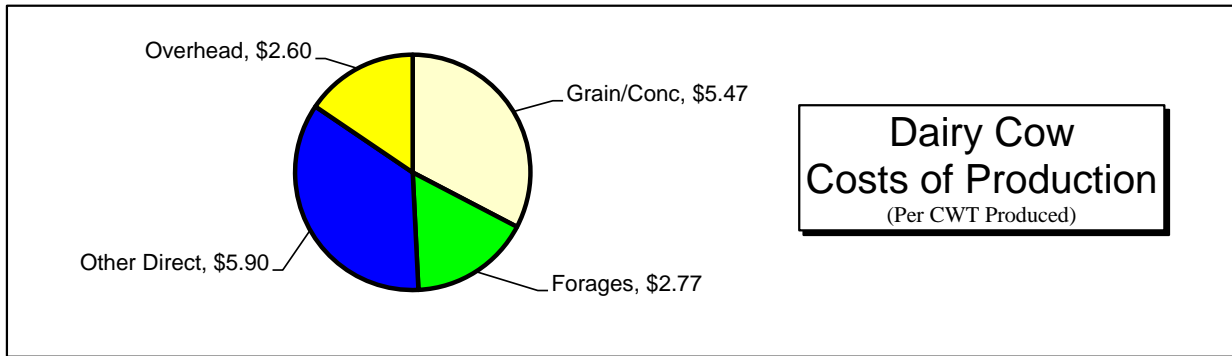


**Livestock Enterprise Analysis**  
**Farm Business Management Statewide Data**  
**Excluding Organic and Organic Transition**  
**(Farms Sorted By Return to Overhead)**

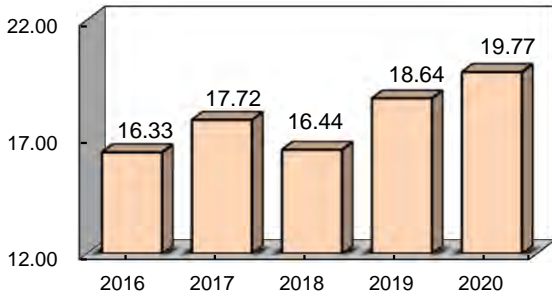
**Dairy Finishing -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	79		16		16	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Dairy Finish sold (lb)	140.00	134.44	120.61	111.00	117.57	116.49
Transferred out (lb)	0.79	0.92	0.36	0.42	-	-
Government payments		12.85		7.87		14.86
Other income		3.85		5.66		2.08
Purchased (lb)	-44.75	-47.43	-26.69	-34.94	-38.08	-35.11
Transferred in (lb)	-7.09	-7.76	-2.53	-2.81	-1.58	-2.96
Inventory change (lb)	9.30	12.17	6.71	9.89	21.15	28.86
Gross margin		109.03		97.10		124.23
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	63.61	12.90	72.56	14.66	55.83	11.76
Milk (lb.)	6.26	0.95	2.40	0.36	18.20	2.89
Complete Ration (lb.)	25.53	5.11	18.14	2.30	22.32	4.30
Corn (bu.)	10.50	34.78	8.78	28.02	7.73	25.60
DDGS, wet (lb.)	57.80	2.04	78.98	3.90	56.34	2.13
Corn snaplage (lb.)	49.13	1.77	80.38	2.67	157.21	5.90
Other feed stuffs (lb)	163.54	5.34	168.15	5.36	78.44	2.60
Veterinary		2.24		2.17		1.23
Contract production exp.		0.60		0.43		2.54
Repairs		3.01		3.85		2.77
Hired labor		1.45		0.91		2.89
Marketing		1.95		0.88		1.21
Bedding		1.30		2.49		0.25
Operating interest		1.71		1.61		1.10
Miscellaneous		4.63		4.13		3.74
Total direct expenses		79.79		73.74		70.90
Return over direct expense		29.25		23.36		53.33
<b>Overhead Expenses</b>						
Interest		2.05		2.14		1.27
Mach & bldg depreciation		3.93		4.22		2.66
Miscellaneous		4.33		5.54		3.24
Total overhead expenses		10.31		11.90		7.18
Total dir & ovhd expenses		90.09		85.64		78.08
Net return		18.94		11.46		46.15
Labor & management charge		4.61		4.97		3.44
Net return over lbr & mgt		14.32		6.49		42.70
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		85.86		82.82		66.36
Total dir & ovhd expense per unit		93.19		92.65		72.47
With other revenue adjustments		82.69		82.64		59.83
With labor and management		85.96		86.75		62.76
Est. labor hours per unit		0.44		0.45		0.39
<b>Other Information</b>						
No. purchased or trans in		226		209		193
Number sold or trans out		193		172		164
Percentage death loss		3.2		5.0		2.7
Avg. daily gain (lb.)		2.40		2.51		2.44
Lb. of conc / lb. of gain		7.96		7.49		7.33
Lb. of feed / lb. of gain		8.75		8.34		7.29
Feed cost per cwt. of gain		62.90		57.27		55.17
Feed cost per head		595.67		643.24		665.78
Hired labor per head		23.04		26.98		45.27
Average purchase weight		501		342		693
Avg wgt / Dairy Finish sold		1,402		1,437		1,349
Avg purch price / head		531.12		447.79		638.61
Avg sales price / cwt.		96.03		92.04		99.08

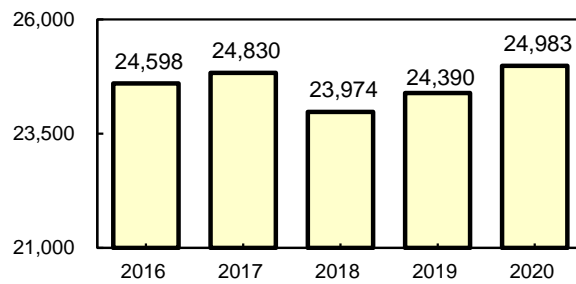
## Summary of Selected Dairy Enterprise Factors



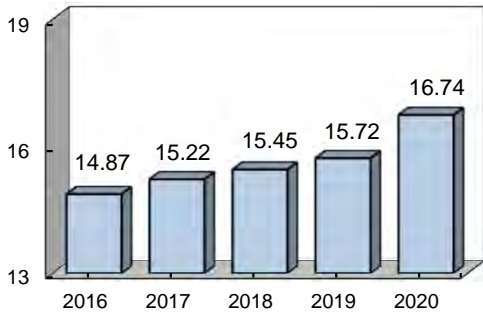
**Ave Milk Price Recv'd**



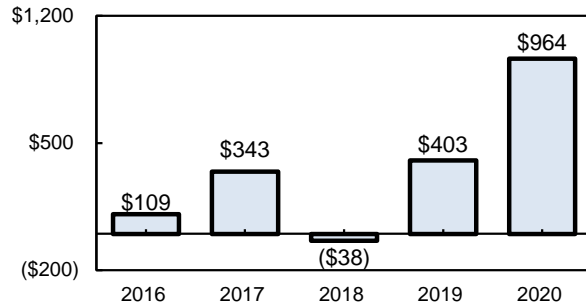
**Milk Production per Cow**



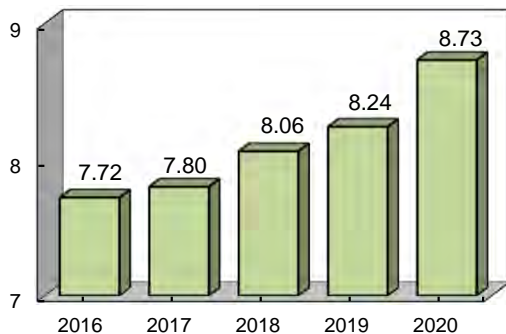
**Dir & Ovhd Exp per CWT**



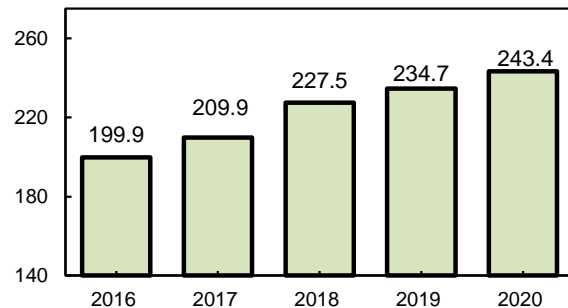
**Net Return per Cow**



**Feed Cost per CWT**



**Ave. Number of Cows**





**RIDGEWATER**  
COLLEGE

## Ag Excellence for Today and Tomorrow



### Meeting Industry Needs for 50+ Years

- Agricultural Science & Technology (Ag Ed & Ag Transfer)
- Agriculture Power & Equipment Technician
- Agri-business
- Agronomy Technology
- Dairy Management
- Farm Operation & Management
- Dairy Management
- GPS/GIS Technology for Agriculture
- Poultry - NEW in 2020, Online Partnership with the U of MN

*Minnesota's #1 Best Community College and US Top 20, 2020 & 2021 niche.com*



Ridgewater College is a member of Minnesota State and an affirmative action, equal opportunity employer and educator.

[ridgewater.edu/agriculture](http://ridgewater.edu/agriculture) • 800-722-1151 • Willmar Campus



Learn how to grow a strong, sustainable farming business.

# FARM MANAGEMENT



A member of Minnesota State

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

- Individualized curriculum for the needs of each farm owner
- Faculty work one-on-one with you on your farm
- Instruction based on economic, social, and cultural goals of the family and business unit

**PROGRAM OPTIONS:**

- Farm Business Management Diploma
- Advanced Farm Business Management Certificate

For more information, visit:

[www.sctcc.edu/farm-management](http://www.sctcc.edu/farm-management)

SCTCC is a member of Minnesota State and accredited by the Higher Learning Commission. ADA Accessible Facility. Affirmative Action/Equal Opportunity Education and Employer.

**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>	
	89		18		18	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Beef Calves sold (lb)	134.6	214.35	143.1	271.57	141.0	207.75
Transferred out (lb)	230.6	376.51	229.0	365.15	267.0	476.77
Cull sales (lb)	79.5	89.74	60.4	84.50	106.7	116.86
Government payments		106.57		113.89		113.06
Other income		14.56		12.36		20.18
Purchased (lb)	-15.0	-35.61	-2.6	-7.69	-9.1	-15.09
Transferred in (lb)	-29.4	-59.14	-52.2	-112.33	-38.0	-50.78
Inventory change (lb)	34.6	41.22	-27.2	21.58	4.3	126.85
Gross margin		748.21		749.02		995.60
<b>Direct Expenses</b>						
Beet Pulp (dry) (lb.)	320.1	6.40	1,367.4	27.35	-	-
Protein Vit Minerals (lb.)	152.3	34.43	219.9	50.58	72.3	18.51
Corn Silage (lb.)	3,963.0	68.15	3,938.6	67.55	2,548.3	42.56
Hay, Alfalfa (lb.)	1,653.8	72.31	1,053.3	55.09	3,808.6	127.56
Hay, Grass (lb.)	2,015.8	77.15	2,171.2	75.05	1,195.5	45.11
Pasture (aum)	2.2	40.19	3.6	41.49	1.2	24.24
Hay (lb.)	1,916.2	66.45	3,061.2	102.08	822.8	28.02
Other feed stuffs (lb)	2,550.5	68.88	454.1	37.06	7,744.7	98.92
Veterinary		26.92		31.48		19.92
Fuel & oil		24.96		28.30		26.27
Repairs		46.30		53.07		38.16
Custom hire		13.88		27.27		9.24
Operating interest		24.60		27.93		18.22
Miscellaneous		40.83		26.97		29.93
Total direct expenses		611.45		651.27		526.67
Return over direct expense		136.76		97.76		468.93
<b>Overhead Expenses</b>						
Hired labor		11.20		11.19		24.31
Utilities		17.12		21.43		12.04
Interest		35.12		26.06		28.76
Mach & bldg depreciation		56.84		41.39		65.83
Miscellaneous		45.77		40.20		43.87
Total overhead expenses		166.05		140.28		174.80
Total dir & ovhd expenses		777.50		791.55		701.47
Net return		-29.30		-42.53		294.13
Labor & management charge		99.65		97.23		110.61
Net return over lbr & mgt		-128.95		-139.76		183.52
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		139.24		184.32		110.60
Total dir & ovhd expense per unit		177.06		224.02		147.30
With other revenue adjustments		153.87		197.17		84.01
With labor and management		176.56		224.69		107.23
Est. labor hours per unit		9.39		7.51		8.10
<b>Other Information</b>						
Number of cows		75.1		86.9		81.8
Pregnancy percentage		92.3		92.9		94.0
Pregnancy loss percentage		2.6		0.9		4.0
Culling percentage		10.5		8.4		12.8
Calving percentage		90.0		92.1		90.2
Weaning percentage		84.6		87.4		85.8
Calves sold per cow		0.73		0.83		0.72
Calf death loss percent		6.1		4.1		4.4
Cow death loss percent		3.2		3.0		2.2
Cows per FTE		298.3		372.6		345.5
Average weaning weight		531		487		558
Lb. weaned/exposed female		449		426		479
Feed cost per cow		433.96		456.26		384.93
Avg wgt/ Beef Calves sold		510		456		583
Avg price / cwt.		159.21		189.83		147.36

**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</u> <u>All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	39		8		8	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Beef Calves sold (lb)	342.7	486.16	476.8	705.08	327.6	441.97
Transferred out (lb)	113.4	159.97	-	-	121.4	171.78
Cull sales (lb)	66.7	98.68	76.4	150.54	53.6	106.76
Government payments		157.99		219.39		174.01
Other income		27.25		9.80		3.80
Purchased (lb)	-27.9	-64.60	-62.5	-78.76	-8.5	-62.30
Transferred in (lb)	-20.8	-26.42	-	-2.38	-21.9	-37.81
Inventory change (lb)	30.5	78.85	45.5	-52.34	-100.7	261.76
Gross margin		917.88		951.33		1,059.97
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	292.1	48.39	331.9	51.29	514.1	70.43
Complete Ration (lb.)	315.2	22.19	66.8	4.01	6.8	0.64
Corn (bu.)	5.8	19.82	4.7	14.70	7.8	26.87
Corn Silage (lb.)	4,447.2	70.68	4,721.8	78.42	5,458.3	82.37
Hay, Alfalfa (lb.)	1,317.0	77.85	-	-	193.2	12.07
Hay, Grass (lb.)	2,854.5	118.91	3,759.9	149.28	4,179.0	191.35
Haylage, Grass (lb.)	164.4	4.93	963.4	28.90	-	-
Pasture (aum)	4.4	73.14	3.1	45.99	3.5	70.06
Hay (lb.)	3,198.3	115.04	3,529.4	107.63	304.1	9.44
Other feed stuffs (lb)	363.8	8.49	1,161.1	15.04	257.7	14.53
Veterinary		37.51		41.36		36.40
Fuel & oil		19.40		28.17		7.69
Repairs		40.41		49.53		19.68
Hired labor		5.78		-		20.08
Marketing		12.33		21.49		14.78
Miscellaneous		58.50		72.99		28.94
Total direct expenses		733.38		708.80		605.33
Return over direct expense		184.51		242.53		454.64
<b>Overhead Expenses</b>						
Interest		33.80		24.68		20.83
Mach & bldg depreciation		35.68		13.72		10.77
Miscellaneous		44.98		26.34		17.94
Total overhead expenses		114.47		64.74		49.55
Total dir & ovhd expenses		847.84		773.54		654.88
Net return		70.04		177.79		405.09
Labor & management charge		69.53		53.42		37.76
Net return over lbr & mgt		0.51		124.37		367.33
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		142.06		130.64		161.74
Total dir & ovhd expense per unit		164.23		142.57		174.98
With other revenue adjustments		111.91		100.17		13.62
With labor and management		125.38		110.02		23.71
Est. labor hours per unit		6.32		5.59		3.96
<b>Other Information</b>						
Number of cows		94.5		78.6		109.8
Pregnancy percentage		96.3		95.6		99.1
Pregnancy loss percentage		3.5		7.1		1.0
Culling percentage		11.3		16.1		9.6
Calving percentage		92.9		88.8		98.1
Weaning percentage		87.6		83.4		89.6
Calves sold per cow		0.73		0.78		0.63
Calf death loss percent		3.5		2.5		1.9
Cow death loss percent		4.1		2.4		5.0
Cows per FTE		443.1		501.2		706.4
Average weaning weight		550		555		580
Lb. weaned/exposed female		482		463		520
Feed cost per cow		559.44		495.27		477.75
Avg wgt/ Beef Calves sold		658		611		777
Avg price / cwt.		141.86		147.88		134.93

**Livestock Enterprise Analysis**  
**Farm Business Management Statewide Data**  
**Excluding 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	45		22		18		4	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	227.3	337.99	209.0	305.02	111.2	205.51	3.3	5.10
Transferred out (lb)	166.4	234.89	199.7	306.70	221.4	414.26	347.9	523.63
Cull sales (lb)	52.1	82.04	106.6	81.44	117.8	100.93	1.2	85.01
Government payments		100.09		80.10		115.12		126.37
Other income		18.46		22.70		5.50		19.12
Purchased (lb)	-12.7	-43.06	-29.6	-50.08	-15.3	-38.30	-	-6.47
Transferred in (lb)	-9.9	-34.89	-34.5	-43.12	-51.3	-76.67	-0.4	-67.34
Inventory change (lb)	28.2	72.98	-57.4	-49.69	53.4	28.91	108.6	136.51
Gross margin		768.49		653.08		755.26		821.93
<b>Direct Expenses</b>								
Beet Pulp (dry) (lb.)	-	-	-	-	-	-	1,628.6	32.57
Protein Vit Minerals (lb.)	241.0	48.82	151.3	33.48	162.7	33.15	44.1	23.61
Complete Ration (lb.)	7,006.9	32.80	54.5	8.77	29.6	4.77	79.1	11.51
Corn (bu.)	3.9	13.72	2.6	7.87	9.5	33.08	4.3	13.17
Corn Silage (lb.)	2,632.0	41.26	2,971.8	49.96	6,017.5	105.83	2,404.9	42.09
Hay, Alfalfa (lb.)	2,136.6	115.71	1,197.7	66.11	939.8	51.25	3,082.2	77.05
Hay, Grass (lb.)	2,532.7	112.79	3,192.1	123.25	1,169.5	43.54	1,818.9	54.91
Pasture (aum)	1.7	37.90	2.8	49.67	1.2	29.41	4.2	52.82
Hay (lb.)	1,405.2	57.39	2,289.1	70.19	1,633.8	63.66	2,557.1	76.71
Other feed stuffs (lb)	528.3	16.99	1,262.6	32.21	1,043.8	32.61	1,734.3	69.18
Veterinary		26.62		24.30		30.68		22.84
Fuel & oil		38.36		19.19		28.42		11.30
Repairs		78.83		42.99		44.74		20.56
Operating interest		21.89		9.02		34.96		24.74
Miscellaneous		63.26		52.87		65.26		27.59
Total direct expenses		706.33		589.86		601.35		560.65
Return over direct expense		62.15		63.22		153.91		261.27
<b>Overhead Expenses</b>								
Farm insurance		30.84		17.47		18.98		8.19
Interest		52.69		31.49		33.25		25.30
Mach & bldg depreciation		81.01		53.76		59.52		30.89
Miscellaneous		67.80		42.41		61.41		45.14
Total overhead expenses		232.33		145.13		173.16		109.52
Total dir & ovhd expenses		938.67		734.98		774.51		670.18
Net return		-170.18		-81.91		-19.26		151.75
Labor & management charge		143.36		92.03		86.21		90.79
Net return over lbr & mgt		-313.54		-173.94		-105.47		60.96
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		155.03		147.41		136.92		120.14
Total dir & ovhd expense per unit		206.03		183.68		176.35		143.60
With other revenue adjustments		170.31		163.80		160.96		115.13
With labor and management		201.77		186.80		180.59		134.58
Est. labor hours per unit		14.05		8.47		8.39		7.69
<b>Other Information</b>								
Number of cows		29.2		67.7		142.6		328.5
Pregnancy percentage		90.8		92.4		92.2		93.9
Pregnancy loss percentage		2.5		3.1		2.9		1.5
Culling percentage		8.9		11.1		10.9		10.8
Calving percentage		88.6		89.6		89.5		92.5
Weaning percentage		83.2		82.6		85.2		87.1
Calves sold per cow		0.72		0.79		0.72		0.67
Calf death loss percent		6.4		9.2		4.5		5.5
Cow death loss percent		3.5		2.8		4.1		1.5
Cows per FTE		199.3		330.6		333.6		364.1
Average weaning weight		522		530		547		512
Lb. weaned/exposed female		434		438		466		446
Feed cost per cow		477.37		441.49		397.29		453.62
Avg wgt/ Beef Calves sold		523		557		457		550
Avg price / cwt.		148.70		145.96		184.76		152.27

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

**Beef Finishing -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	75		15		15	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Finish Beef sold (lb)	194.33	213.50	186.85	202.00	206.90	225.47
Transferred out (lb)	0.74	0.75	1.35	1.27	0.57	0.77
Government payments		16.85		20.58		20.04
Other income		7.89		8.84		11.09
Purchased (lb)	-96.00	-135.29	-101.83	-143.08	-67.88	-83.74
Transferred in (lb)	-7.93	-11.39	-6.60	-9.67	-23.63	-33.72
Inventory change (lb)	7.13	0.59	19.61	9.62	-21.57	-21.14
Gross margin		92.89		89.56		118.78
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	63.47	9.51	60.77	10.18	24.52	5.53
Complete Ration (lb.)	45.98	3.00	5.30	1.13	277.32	12.90
Corn (bu.)	8.17	26.99	8.33	27.85	7.57	25.09
Corn Silage (lb.)	338.07	5.66	403.32	6.51	373.79	6.43
Hay, Grass (lb.)	39.41	1.84	63.24	2.85	13.70	0.54
Haylage, Alfalfa (lb.)	16.12	0.62	13.13	0.49	93.39	3.61
DDGS, dry (lb.)	49.82	3.03	76.38	4.75	45.25	3.65
DDGS, wet (lb.)	99.38	2.82	38.38	1.08	57.80	2.43
Other feed stuffs (lb)	213.87	6.45	128.30	2.77	76.71	4.32
Veterinary		2.33		1.62		3.03
Repairs		3.21		4.37		1.25
Hauling and trucking		2.23		3.02		0.41
Operating interest		2.47		3.35		0.54
Miscellaneous		4.35		3.05		4.50
Total direct expenses		74.52		73.03		74.22
Return over direct expense		18.37		16.53		44.56
<b>Overhead Expenses</b>						
Hired labor		1.79		3.46		0.84
Farm insurance		1.31		2.35		0.43
Interest		1.87		1.98		0.44
Mach & bldg depreciation		2.87		2.89		2.35
Miscellaneous		2.50		3.43		1.19
Total overhead expenses		10.34		14.11		5.26
Total dir & ovhd expenses		84.86		87.14		79.48
Net return		8.03		2.42		39.30
Labor & management charge		4.10		4.83		3.05
Net return over lbr & mgt		3.93		-2.41		36.25
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		112.10		114.42		99.42
Total dir & ovhd expense per unit		117.39		121.92		101.95
With other revenue adjustments		105.71		106.72		90.11
With labor and management		107.81		109.29		91.58
Est. labor hours per unit		0.31		0.37		0.21
<b>Other Information</b>						
No. purchased or trans in		244		360		163
Number sold or trans out		230		324		165
Percentage death loss		1.2		0.7		2.1
Avg. daily gain (lb.)		2.62		2.76		2.23
Lb. of conc / lb. of gain		7.62		6.69		8.29
Lb. of feed / lb. of gain		10.25		9.29		10.82
Feed cost per cwt. of gain		59.93		57.61		64.51
Feed cost per head		415.66		396.75		519.27
Hired labor per head		13.69		24.31		6.79
Average purchase weight		745		790		645
Avg wgt / Finish Beef sold		1,445		1,479		1,397
Avg purch price / cwt.		140.92		140.51		123.37
Avg sales price / cwt.		109.87		108.11		108.98

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

**Beef Backgrounding -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
	21		4		5	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Backgnd Beef sold (lb)	225.92	291.75	211.21	295.98	211.70	312.32
Transferred out (lb)	20.29	23.46	53.70	61.96	15.52	18.60
Government payments		32.08		43.80		32.45
Other income		5.39		2.35		40.99
Purchased (lb)	-129.86	-199.71	-108.67	-180.68	-	-
Transferred in (lb)	-70.53	-101.87	-78.71	-116.66	-108.98	-151.72
Inventory change (lb)	53.60	68.48	22.48	34.54	-25.07	-40.58
Gross margin		119.58		141.30		212.06
<b>Direct Expenses</b>						
Protein Vit Minerals (lb.)	22.03	4.85	16.28	4.38	61.93	13.00
Creep / Starter (lb.)	11.87	2.81	-	-	20.47	5.33
Complete Ration (lb.)	130.09	14.99	264.31	26.45	16.45	3.60
Corn (bu.)	2.67	7.62	0.38	1.30	2.15	7.51
Corn Silage (lb.)	882.90	13.96	864.84	14.98	54.59	0.96
Hay, Alfalfa (lb.)	64.73	2.93	42.85	2.68	252.49	12.62
Hay (lb.)	348.06	14.37	485.21	23.58	144.33	5.78
Other feed stuffs (lb)	194.98	5.46	81.06	3.08	54.20	3.91
Veterinary		3.67		2.66		2.26
Contract production exp.		5.18		17.73		-
Repairs		4.49		2.64		0.86
Hauling and trucking		1.55		3.71		-
Marketing		2.25		3.95		3.48
Bedding		1.59		4.42		1.97
Operating interest		6.07		6.56		0.18
Miscellaneous		5.29		2.36		3.75
Total direct expenses		97.09		120.49		65.21
Return over direct expense		22.49		20.80		146.86
<b>Overhead Expenses</b>						
Interest		3.60		2.78		1.44
Mach & bldg depreciation		7.19		8.44		2.67
Miscellaneous		6.17		3.60		2.28
Total overhead expenses		16.96		14.82		6.39
Total dir & ovhd expenses		114.04		135.32		71.59
Net return		5.53		5.98		140.47
Labor & management charge		10.81		14.38		2.94
Net return over lbr & mgt		-5.28		-8.40		137.53
<b>Cost of Production Per Cwt. Produced</b>						
Total direct expense per unit		133.87		144.69		110.32
Total dir & ovhd expense per unit		140.76		150.29		113.13
With other revenue adjustments		125.77		132.86		83.81
With labor and management		130.17		138.29		85.11
Est. labor hours per unit		0.77		0.65		1.15
<b>Other Information</b>						
No. purchased or trans in		164		242		36
Number sold or trans out		129		218		45
Percentage death loss		0.8		0.2		1.6
Avg. daily gain (lb.)		1.27		1.36		0.80
Lb. of conc / lb. of gain		4.37		3.23		2.32
Lb. of feed / lb. of gain		11.97		11.97		7.01
Feed cost per cwt. of gain		66.99		76.46		52.72
Feed cost per head		206.22		258.80		116.66
Hired labor per head		5.34		2.51		-
Average purchase weight		541		581		-
Avg wgt / Backgnd Beef sold		804		791		569
Avg purch price / cwt.		153.80		166.26		-
Avg sales price / cwt.		129.14		140.13		147.53



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

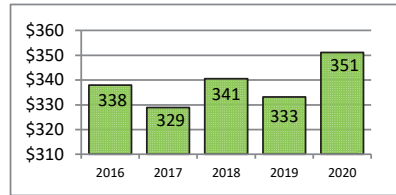
**Hogs, Weaning to Finish (Per Head) and Finish Feeder Pigs (Per Cwt. Carcass Sold)**

Number of Farms	<u>Weaning to Finish</u>		<u>Finish Feeder Pigs</u>	
	12	15	12	15
	Quantity	Value	Quantity	Value
Pigs / Hogs sold (lb)	270.40	122.96	134.81	59.60
Transferred out (lb)	0.00	0.01	0.91	0.53
Insurance income	-	0.83	-	0.76
Government payments	-	28.64	-	12.63
Other income	-	6.96	-	2.12
Purchased (lb)	-15.50	-45.66	-20.02	-24.65
Transferred in (lb)	-	-	-4.19	-5.07
Inventory change (lb)	8.50	8.22	-2.54	0.38
Gross margin		121.96		46.31
<b>Direct Expenses</b>				
Protein Vit Minerals (lb.)	135.2	29.53	43.5	8.25
Complete Ration (lb.)	140.2	16.78	115.4	10.12
Corn (bu.)	7.4	25.61	2.9	10.59
DDGS, dry (lb.)	-	-	5.1	0.43
Other feed stuffs (lb)	0.4	0.04	2.1	0.18
Veterinary		3.36		-
Contract production exp.		3.73		2.23
Repairs		-		0.97
Custom hire		0.69		-
Livestock leases		0.76		-
Utilities		0.74		-
Hauling and trucking		1.47		0.75
Marketing		0.54		-
Operating interest		1.39		0.53
Miscellaneous		2.98		1.38
Total direct expenses		87.62		35.44
Return over direct expense		34.34		10.87
<b>Overhead Expenses</b>				
Hired labor		1.47		1.15
Building leases		9.72		1.15
Farm insurance		-		0.54
Utilities		-		0.87
Interest		1.62		0.70
Mach & bldg depreciation		1.63		0.97
Miscellaneous		2.45		0.61
Total overhead expenses		16.88		5.99
Total dir & ovhd expenses		104.50		41.42
Net return		17.46		4.88
Labor & management charge		4.90		1.97
Net return over lbr & mgt		12.56		2.91
<b>Cost of Production/Cwt. Carcass Sold</b>				
Total direct expense per unit		62.25		64.58
Total dir & ovhd expense per unit		70.66		70.56
With other revenue adjustments		52.54		55.25
With labor and management		54.98		57.23
Est. labor hours per unit		0.32		0.14
<b>Other Information</b>				
No. purchased or trans in		12243		6488
Number sold or trans out		10757		6203
Percentage death loss		4.6		3.7
Percent substandard hogs		1		1
Avg. daily gain (lb.)		1.43		1.50
Lb. of feed / lb. of gain		2.62		2.99
Feed cost per cwt. of gain		27.31		27.04
Feed cost per head		71.96		61.58
Hired labor per head		1.61		2.68
Average purchase weight		14		49
Avg wgt /Fin Pig/Hog sold		278		280
Avg purch price / head		41.20		60.20
Avg sales price / cwt.		45.48		44.21
Average carcass weight		209		210
Average price / cwt. carcass		60.99		59.13

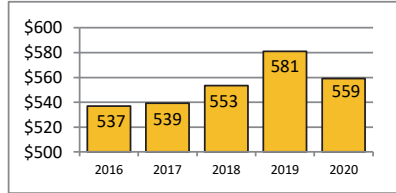
**Selected Crop & Livestock Enterprise Trend Summary**  
**Northern Minnesota Farm Business Management Data**

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
<b><u>Alfalfa Hay</u></b>					
Yield per Acre	5.0	4.5	4.1	4.0	4.2
Value per Ton	\$110.40	\$108.87	\$134.75	\$148.97	\$136.11
Fuel, Oil, Repairs per Acre	\$79.40	\$82.42	\$93.70	\$87.41	\$91.02
Total Dir & Ovhd Exp per Acre	\$338.03	\$328.96	\$340.55	\$333.24	\$351.17
Net Return per Acre	\$209.56	\$167.85	\$210.75	\$301.16	\$232.35
Total Direct Expenses per Ton	\$32.55	\$35.05	\$39.82	\$41.84	\$44.90
Total Dir & Ovhd Exp per Ton	\$68.35	\$73.25	\$83.41	\$82.69	\$84.56

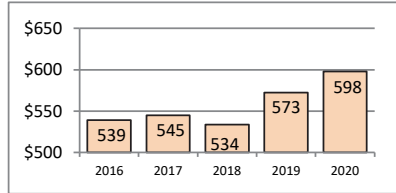
**Total Dir&Ovhd Expense**



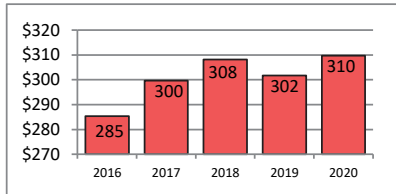
<b><u>Corn</u></b>					
Yield per Acre	179.5	164.6	179.0	160.2	176.2
Value per Bushel	\$2.95	\$3.08	\$3.22	\$3.40	\$3.78
Fuel, Oil, Repairs per Acre	\$71.55	\$74.43	\$82.18	\$83.95	\$82.16
Total Dir & Ovhd Exp per Acre	\$537.05	\$539.30	\$553.48	\$580.96	\$559.08
Net Return per Acre	\$1.65	-\$14.68	\$38.76	\$35.63	\$158.49
Total Direct Expenses per Bu.	\$1.98	\$2.17	\$2.11	\$2.42	\$2.15
Total Dir & Ovhd Exp per Bushel	\$2.99	\$3.28	\$3.09	\$3.63	\$3.17



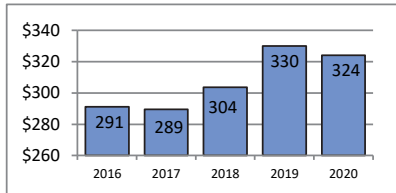
<b><u>Corn Silage</u></b>					
Yield per Acre	19.4	19.8	20.6	18.7	21.0
Value per Ton	\$33.91	\$30.45	\$29.98	\$31.58	\$34.35
Fuel, Oil, Repairs per Acre	\$88.07	\$93.48	\$95.29	\$94.18	\$103.57
Total Dir & Ovhd Exp per Acre	\$539.19	\$545.06	\$533.70	\$572.60	\$597.78
Net Return per Acre	\$119.00	\$68.81	\$86.46	\$75.40	\$162.77
Total Direct Expenses per Ton	\$18.88	\$18.82	\$17.55	\$20.73	\$19.84
Total Dir & Ovhd Exp per Ton	\$27.80	\$27.48	\$25.94	\$30.63	\$28.43



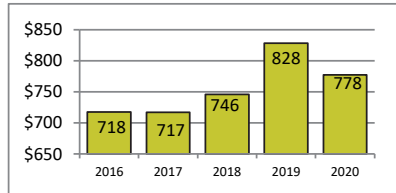
<b><u>Soybeans</u></b>					
Yield per Acre	46.7	35.2	41.0	37.8	41.5
Value per Bushel	\$9.27	\$9.05	\$8.38	\$8.17	\$10.23
Fuel, Oil, Repairs per Acre	\$38.23	\$39.35	\$44.13	\$42.10	\$46.34
Total Dir & Ovhd Exp per Acre	\$285.42	\$299.63	\$308.24	\$301.73	\$309.79
Net Return per Acre	\$151.42	\$38.07	\$118.57	\$68.79	\$155.17
Total Direct Expenses per Bu.	\$3.80	\$5.55	\$4.95	\$5.09	\$4.67
Total Dir & Ovhd Exp per Bushel	\$6.12	\$8.51	\$7.52	\$7.98	\$7.46



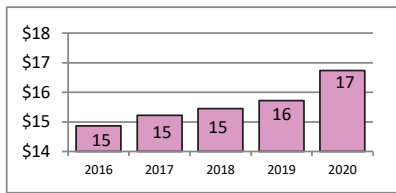
<b><u>Spring Wheat</u></b>					
Yield per Acre	66.0	72.3	65.8	59.8	59.9
Value per Bushel	\$4.95	\$5.90	\$5.47	\$5.09	\$5.48
Fuel, Oil, Repairs per Acre	\$35.53	\$39.62	\$45.25	\$41.94	\$42.63
Total Dir & Ovhd Exp per Acre	\$291.26	\$289.47	\$303.60	\$329.97	\$324.04
Net Return per Acre	\$39.56	\$146.74	\$80.69	\$53.62	\$65.64
Total Direct Expenses per Bu.	\$2.92	\$2.73	\$3.19	\$3.75	\$3.56
Total Dir & Ovhd Exp per Bushel	\$4.41	\$4.00	\$4.62	\$5.52	\$5.41



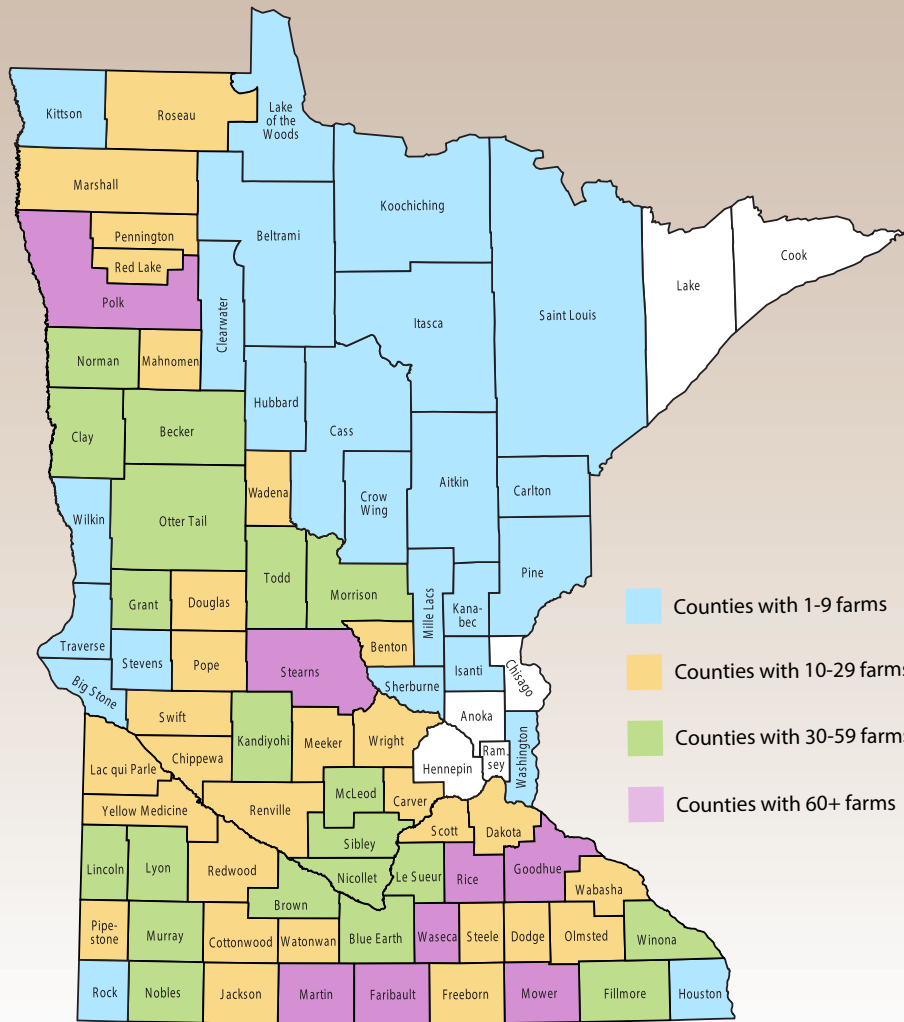
<b><u>Beef Cow Calf</u></b>					
Price Recv'd/Cwt Calf Sold	\$156.42	\$147.47	\$151.73	\$145.96	\$159.21
Total Feed Cost/Cow	\$412.74	\$395.34	\$422.72	\$469.02	\$433.96
Return over Feed/Cow	\$220.55	\$302.85	\$269.10	\$136.18	\$314.25
Net Return/Cow	-\$84.29	-\$19.01	-\$54.31	-\$223.06	-\$29.30
Total Direct & Ovhd Expenses	\$717.58	\$717.20	\$746.13	\$828.25	\$777.50



<b><u>Dairy Cows</u></b>					
Production/Cow	24,598	24,830	23,974	24,390	24,983
Price Recv'd/Cwt Milk	\$16.33	\$17.72	\$16.44	\$18.64	\$19.77
Total Feed Cost/Cwt Milk	\$7.72	\$7.80	\$8.06	\$8.24	\$8.73
Return over Feed/Cwt Milk	\$8.61	\$9.92	\$8.38	\$10.40	\$11.05
Net Return/Cwt Milk	\$0.44	\$1.38	-\$0.16	\$1.65	\$3.86
Total Direct & Ovhd Expenses	\$14.87	\$15.22	\$15.45	\$15.72	\$16.74



# 2020 FARM BUSINESS MANAGEMENT FINANCIAL ANALYSIS BY COUNTY



## SOURCES OF DATA

The 2,246 producers who provided data for three MN regional reports are located in 81 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 Rural Communities
2. Achievement of Student Goals
3. Awareness of the Global Importance of Agriculture
4. Integrity in Student Interaction
5. Timely and Student-Focused Programming



**MINNESOTA STATE**  
Northern Agricultural Center of Excellence

### Keith Olander

Director of AgCentric,  
the Northern Agricultural  
Center of Excellence

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

agcentric.org



### Brad Schloesser

Director of the  
Southern Agricultural  
Center of Excellence

Brad.Schloesser@southcentral.edu  
(507) 389-7263

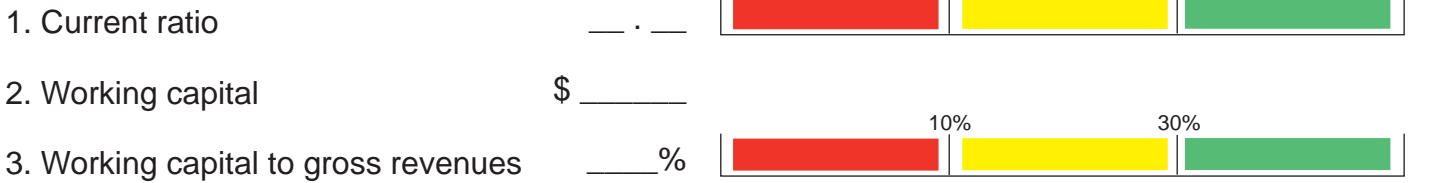
centerofagriculture.org



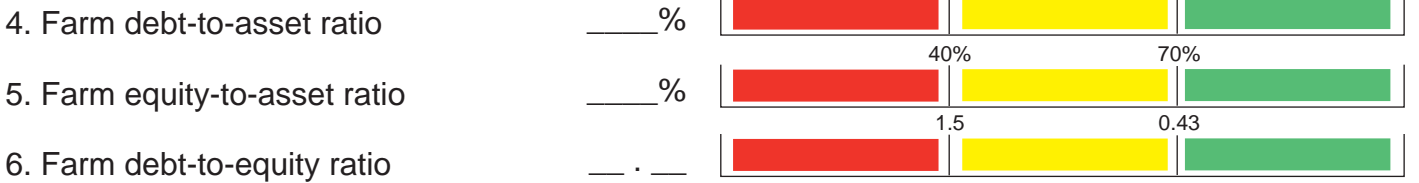
**MINNESOTA STATE**  
Southern Agricultural Center of Excellence

# Farm Finance Scorecard

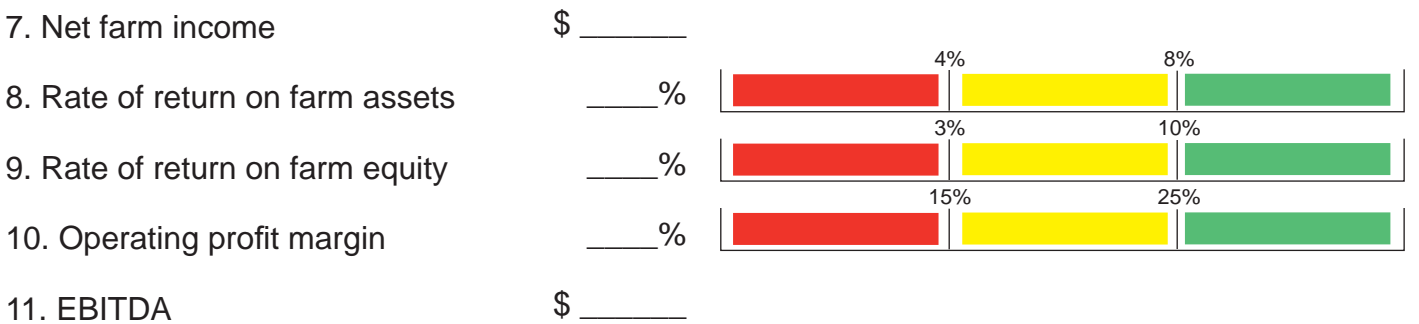
## Liquidity



## Solvency



## Profitability



## Repayment capacity



## Financial efficiency

