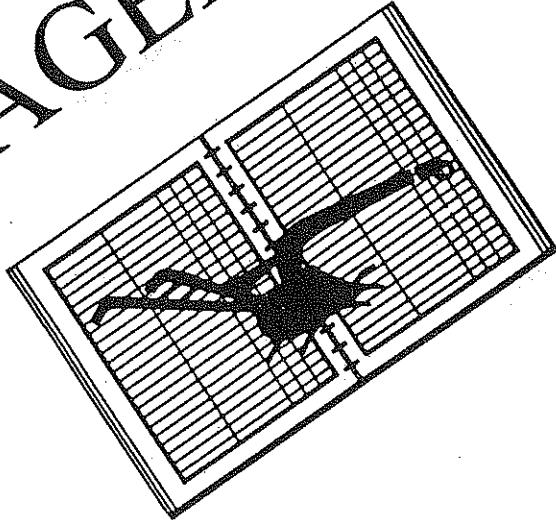


# FARM BUSINESS MANAGEMENT



1999 ANNUAL REPORT  
NORTHWESTERN MINNESOTA  
Report No. 45  
April 2000

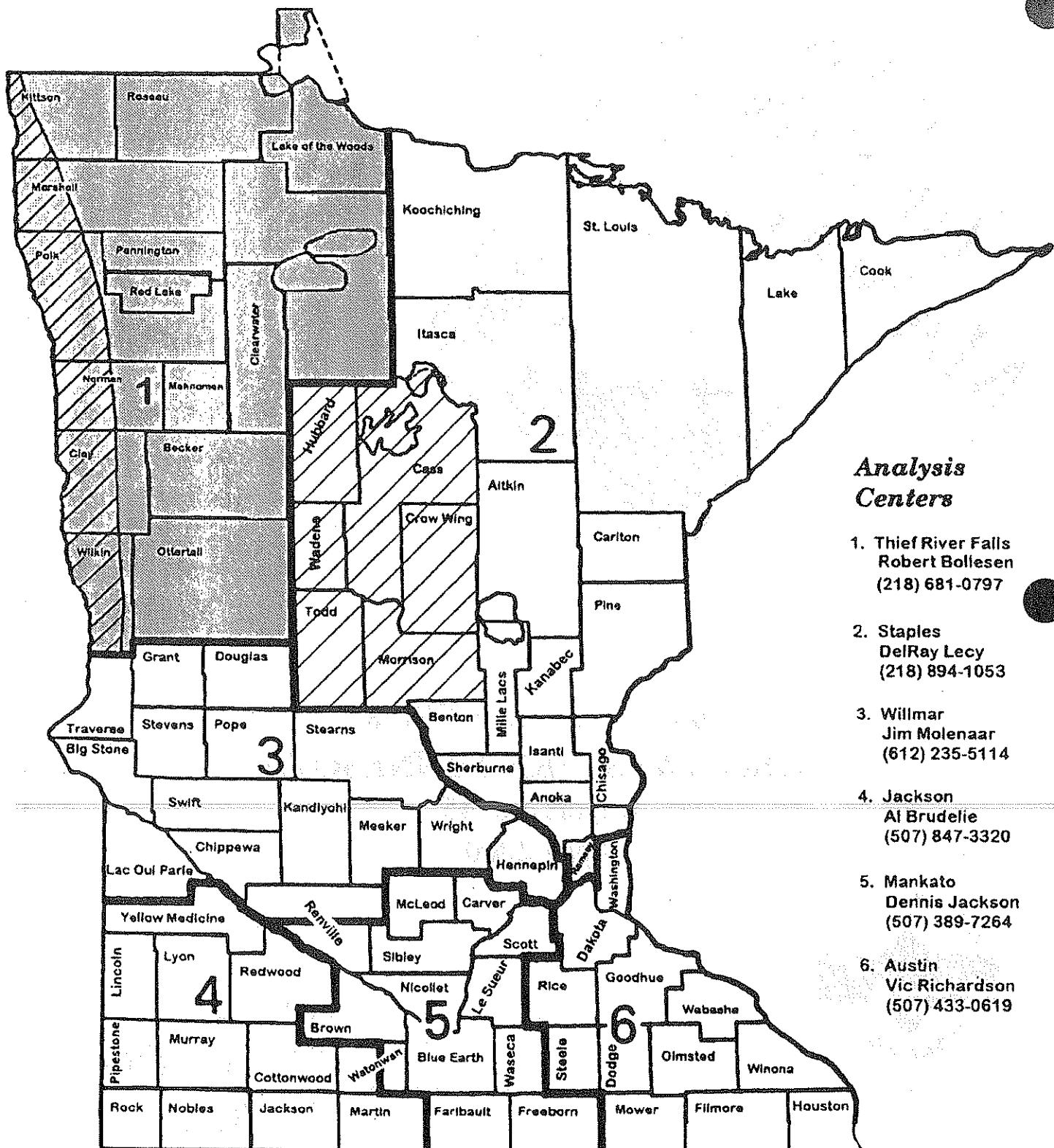


*AN ADULT  
EDUCATION  
PROGRAM*

Northland Community and Technical College  
Thief River Falls

Price \$5.00

# FARM MANAGEMENT AREA



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## What's in the 1999 Annual Report

The 1999 Northwestern Minnesota Farm Business Management Education Program Annual Report has continued the three changes started with the 1997 Annual Report. They are an enlarged database, statewide livestock tables and the two books – Valley and Northwestern.

The continued disparity of input cost, land cost, production and return between the farming operations in the heart of the Red River Valley and those out of the Valley, the 1999 Annual Report continues the changes of dividing Northwest Minnesota into two separate reports. On the inside front cover of this report is a map of Minnesota, which shows what areas are included in this report as well as the 1999 Red River Valley Report. We believe that by separating the reports, each report will provide truer benchmarks and representative data for the respective areas.

The Northwestern Minnesota Annual Report contains at least some student data from all Northland Community and Technical College Instructors listed on page three. In addition to including data from students enrolled in Northland Community and Technical College Programs, farm records are included in this report from North Central Minnesota. We have identified programs with similar farming operations and have added them to our databases. Farm records have been included from the following counties along our Eastern Border: Cass, Hubbard, Wadena, Todd, Crow Wing, and Morrison. These students are enrolled in the Farm Business Management Program through Central Lakes Community and Technical College in Staples. The instructors participating are listed on page three of this report. We believe that merging this data, from similar farming operations and environments, enables us to provide more complete farm financial information.

This report and the five other regional reports include only statewide data for each of the livestock enterprises. Minnesota Farm Business Management Education Programs are committed to developing an even more valuable database of information for farmers. The increase in the number of farms included in each enterprise enhances the reliability and accuracy of the database. Regional livestock enterprise information will be available, however, from each of the six Regional Farm Business Management Offices or a Farm Business Management Instructor in that area.

Additional Note: The state database, which has been developed, includes over 2,000 farms. This information is unique to Minnesota and provides a wealth of information for farmers and the agriculture businesses that support those farmers. In addition to this information being available from the regional offices listed on the inside front cover, it is also available on the statewide Internet website. Included on the statewide website is information about Management Programs, instructor location and information, regional and state databases, and links to other agriculture web pages. The website is located at: <http://www.mgt.org>

## LOCATIONS PARTICIPATING

This report includes data from farmers enrolled through Northland Community and Technical College at 15 sites in Northwestern Minnesota and 4 sites from Central Lakes Community and Technical College. A list of sites and instructors follows:

### Northland Community and Technical College

#### Site

#### Instructor

Barnesville	Sheldon Schmiess
Baudette	Gerald Ausmus
Bemidji	Jim Sackett Steve Ziegler
Detroit Lakes	Mark Berg Paul Ramsey
East Grand Forks	Ron Dvergsten
Fergus Falls	Rudy Hasbargen
Fertile	Ron Dvergsten/Dennis Olsen
Fosston	Doug Fjerstad
Hallock	Chad Ahvinson
Hawley	Dennis Olsen
Mahnomen, Ulen	Mike Lockhart
Moorhead	Greg Tullis
Red Lake Falls	Greg Kalinoski
Roseau	Duane Jaenicke
Thief River Falls	Greg Dvergsten Danie Packard

### Central Lakes Community and Technical College

#### Site

#### Instructor

Aitkin	Brad Irwin
Little Falls	Dave Stish
Pierz	Ben Jorgensen
Staples	Bob Anderson Tom Schulz

The analysis of records and preparation of this report is done under the direction of Robert E. Bolleson, Regional Dean of Management Education at Northland Community and Technical College - Thief River Falls. Directing in a supervisory capacity are: Dr. Orley Gunderson, Campus President, NCTC Thief River Falls; John Murray, Program Manager, Minnesota State Colleges and Universities. The FINPACK computer program from the Center for Farm Financial Management at the University of Minnesota in St. Paul was used for data processing. 396 farms are included in the averages.

A thank you is due to Robin Langevin for her assistance in preparing and assembling this report.

## SUMMARY OF 1999 FARM ANALYSIS FOR NORTHWESTERN MINNESOTA

The 1999 Northwestern Farm Business Management Analysis indicates an increase of \$8,117 in Net Farm Income over last year (chart page 23). This figure must be tempered with the understanding of what is included in those dollars. Net Farm Income is defined as gross cash income minus gross cash expense and adjusted on the accrual basis for changes in inventory and accounts receivable and payable. This year the fall Market Loss payments, any Loan Deficiency Payments (LDP), the anticipated disaster payment, and the regular transition payment are providing a large percent of the cash income. The combination of \$28,799 of government payments and \$14,690 of insurance income total \$1,331 more than the net farm income. This figure will vary considerably depending on the farmers' locations. Without those payments, the average Net Farm Income would have been negative. This year we saw an increase in both yield and acres of corn and soybeans. Even with the increased yields, the net return per acre was low due to the prices. Corn still remained a negative, while soybeans showed a slight profit. This year there was disparity depending on type and location of the farming operation (charts and graphs on pages 6-9). Dairy farms were the most profitable this year due to the higher milk prices early in the year. This year, only 19 of 396 farms were categorized as crop farm (70% of gross cash income from the sale of crops) compared to normal years of about 125 farms. Crops, in general, saw a decrease in yields and profitability, except for corn and soybeans mentioned earlier.

	1997 (Cash Rented)		1998 (Cash Rented)		1999 (Cash Rented)	
	Yield	Ret/Acre	Yield	Ret/Acre	Yield	Ret/Acre
Spring Wheat	30 bu	\$ -22	39 bu	\$ -6	28 bu	\$ -14
Barley	44 bu	\$ -28	52 bu	\$ -36	42 bu	\$ -32
Canola	1329 #	\$ 5	1531 #	\$ -5	928 #	\$ -38
Corn	92 bu	\$ -1	99 bu	\$ -24	106 bu	\$ -.15
Soybeans	29 bu	\$ 27	31 bu	\$ 17	34 bu	\$ 4

The two major livestock enterprises were again split between an increase and a decrease over the last year. The profitability for beef cow/calf operations increased to a net return of \$75.77 per cow, which is the first time they have not averaged in the red for five years. Dairy showed a decrease in net profit to \$643.05. The low average milk price in the last half of the year contributed tremendously to the decrease in profitability for the year. The pounds of milk per cow and the average herd size have continued to increase (charts page 62). The Net Return over Cost figures listed in the table below are Northwestern averages, while the reports on pages 62 - 77 are statewide data.

### Net Return per Unit

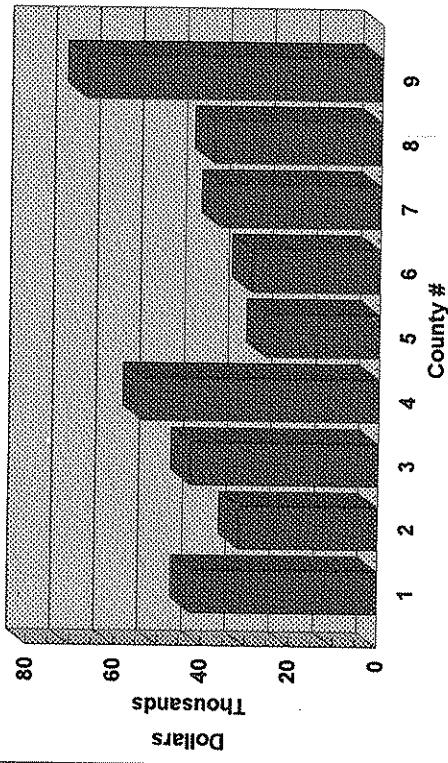
	1997	1998	1999
Dairy per Cow	\$ 312.64	\$ 719.20	\$ 643.05
Beef Cow/Calf per Cow	\$ -43.83	\$ -62.02	\$ 75.77

## Northwestern Minnesota Farm Financial Highlights Of 1995, 1996, 1997, 1998 And 1999

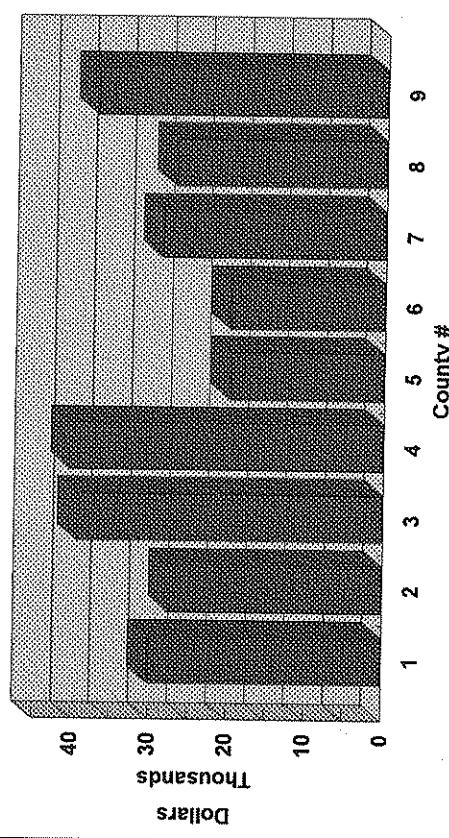
	<u>1995</u>	<u>1996</u>	<u>1997*</u>	<u>1998*</u>	<u>1999*</u>
Net Cash Farm Income	\$31,974	\$37,799	\$29,828	\$36,977	\$46,829
Net Farm Income (profit or loss)	21,434	58,326	13,345	34,041	42,158
Expenses per Dollar of Income	0.76	0.86	0.84	0.81	0.78
Change in Net Worth (Mkt.)	10,350	42,678	8,090	19,507	30,004
Rate of Return on Capital	5.20%	11.50%	2.80%	6.40%	7.20%
Rate of Return on Equity	3.90%	16.70%	-2.90%	6.90%	8.80%
Asset Turnover Rate	35.10%	40.90%	32.60%	35.80%	35.20%
Percent in Debt	45%	43%	52%	57%	52%
Total Investment (Cost)	\$432,094	\$487,094	\$376,682	\$373,609	\$401.38

\* 1997, 1998 and 1999 data includes only the data from this report and does not include the farms located in the valley farms which are included in a separate report.

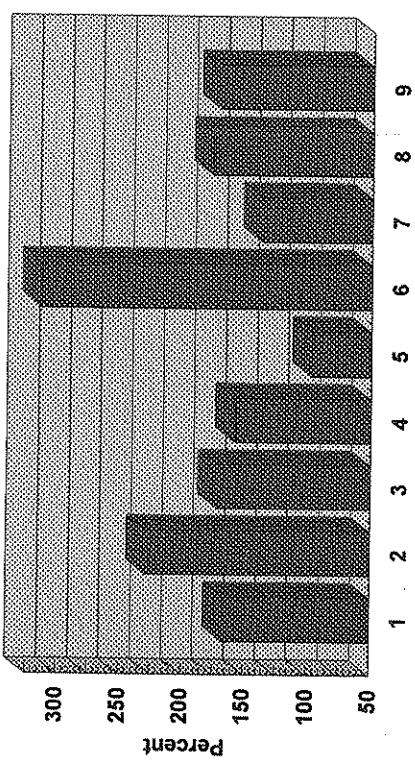
### Net Farm Income by County



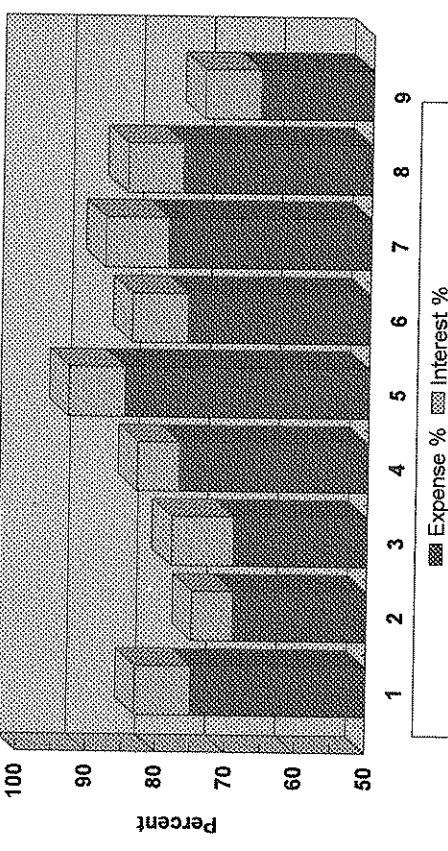
### Change in Net Worth



### Term Debt Coverage Ratio



### Expense and Interest as % of Income



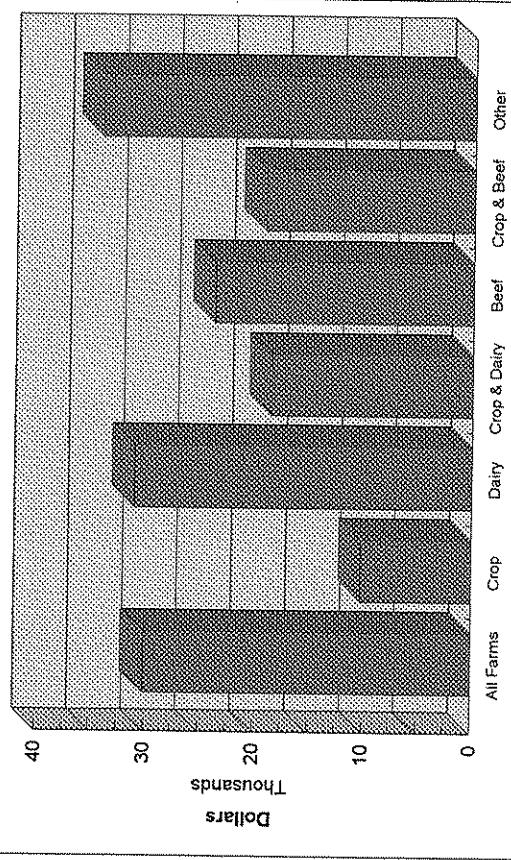
Counties	1	2	3	4	5	6	7	8	9
All Farms	Koochiching LOW Roseau	Kitson Marshall	Pennington Polk Red Lake	Mahnomen Norman	Beltrami Clearwater Hubbard	Becker Clay Otter Tail Wilkin	Cass Todd Wadena	Crow Wing Morrison	

## County F

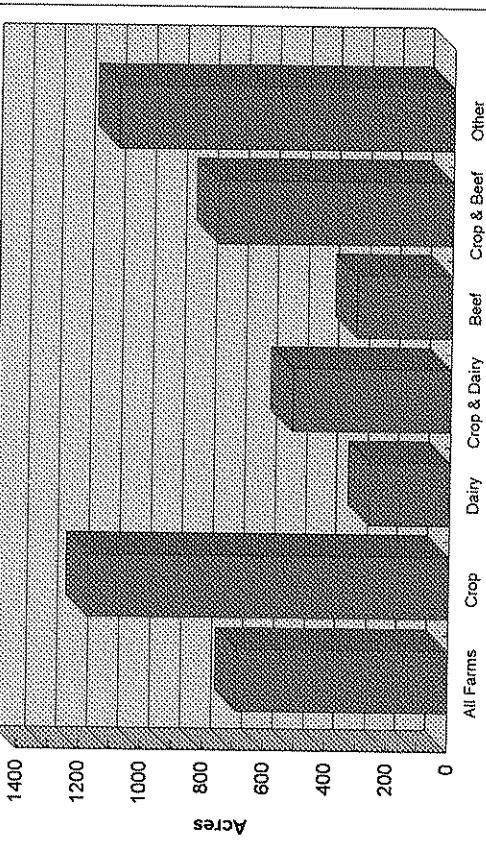
Northwestern Farm Business Management Averages  
Northland Community and Technical College

	Koochiching Low Roseau <u>42</u>	Kittrton Marshall <u>26</u>	Pennington Polk Red Lake <u>57</u>	Mahnomen Norman <u>24</u>	Beltrami Clearwater Hubbard <u>53</u>	Becker Clay Otter Tail Wilkin <u>77</u>	Cass Todd Wadena <u>51</u>	Crow Wing Morrison <u>63</u>
Number of farms								
Average All Farms	211776	133406	200080	285153	184120	180450	225954	198581
All Farms	164780	99664	142887	232222	155365	143267	183517	161923
Number of farms								
Gross cash farm income	46996	33742	57192	52931	28755	37183	42437	36658
Total cash farm expense	6903	8286	1178	12491	-2259	5166	5887	11658
Net cash farm income	-11490	-10403	-15643	-11507	-629	-13147	-11891	-10253
Inventory change								
Depreciation and capital adjustment								
Net farm income	42410	31625	42727	53915	25867	29202	36434	38063
Profitability (cost)								
Labor and management earnings	29228	16151	30852	39048	18002	17622	22004	31092
Rate of return on assets	9%	5%	9%	9%	7%	7%	7%	12%
Rate of return on equity	11%	5%	11%	13%	7%	6%	7%	16%
Operating profit margin	21%	18%	21%	15%	15%	18%	19%	24%
Asset turnover rate	42%	30%	42%	58%	45%	38%	39%	50%
Liquidity								
Term debt coverage ratio	167%	229%	172%	158%	97%	314%	137%	177%
Expense as a percent of income	75%	69%	69%	77%	85%	76%	79%	77%
Interest as a percent of income	8%	6%	9%	6%	8%	8%	9%	8%
Solvency (market)								
Number of sole proprietors	337	40	22	45	23	44	67	47
Ending farm assets	480403	458855	466731	549355	386934	425662	531602	345817
Ending farm liabilities	254279	151460	224151	325653	245939	212806	285040	219939
Ending total assets	553426	528263	578729	617085	414280	498734	622048	398693
Ending total liabilities	269312	160140	241698	342719	255924	220738	309987	231458
Ending net worth	284114	368123	337032	274365	158356	277996	312061	167235
Net worth change	30131	275558	39452	40437	19810	19893	28770	27111
Ending farm debt to asset ratio	53%	33%	48%	59%	64%	50%	54%	64%
Beg total debt to asset ratio	51%	34%	47%	59%	65%	46%	51%	62%
End total debt to asset ratio	49%	30%	42%	56%	62%	44%	50%	58%
Nonfarm Information								
Farms reporting living expenses	137	18	1	9	8	10	44	22
Total family living expense	22442	17473	-	25478	20536	27892	22159	20832
Total living, invest, & capital purch	31612	25111	-	27054	23875	33315	29269	32237
Net nonfarm income	15316	20838	19911	12838	18958	16902	14655	14408
Crop Acres								
Total acres owned	430	721	772	458	329	545	332	250
Total crop acres	690	969	1241	1456	523	551	586	210
Total crop acres owned	291	507	714	369	191	256	249	113
Total crop acres cash rented	369	364	468	1011	327	286	323	94
Total crop acres share rented	30	98	59	76	5	9	14	3

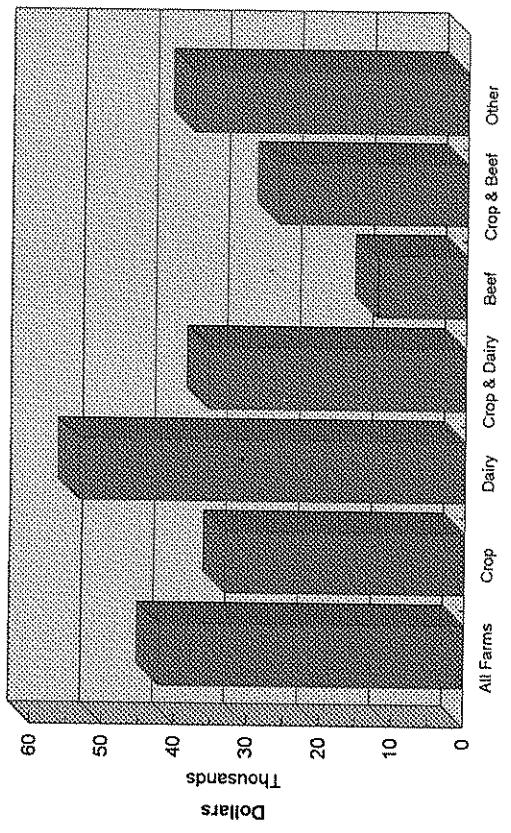
**Net Worth Change by Type of Farm**



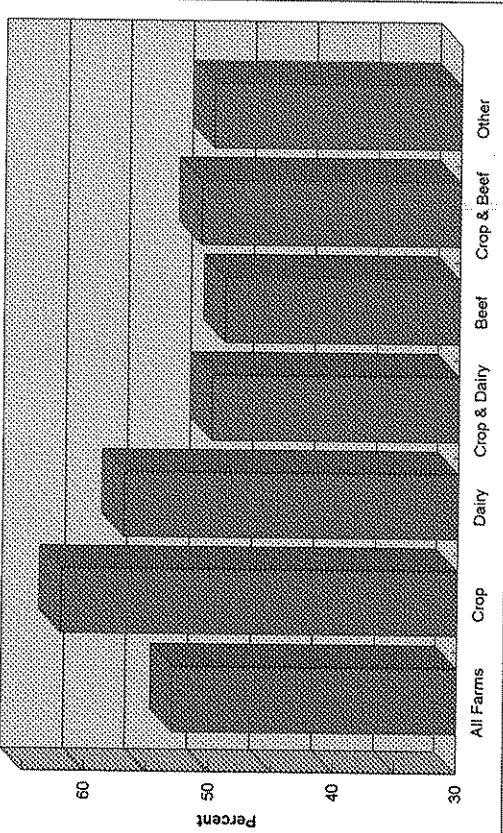
**Crop Acres by Type of Farm**



**Net Worth Change by Type of Farm**



**Debt to Asset Ratio by Type of Farm**

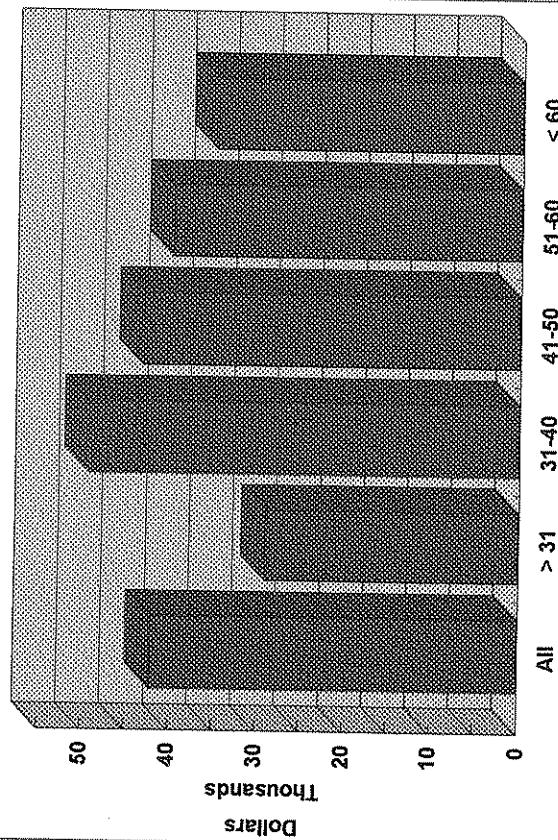


Type Of Farm Report, 1999

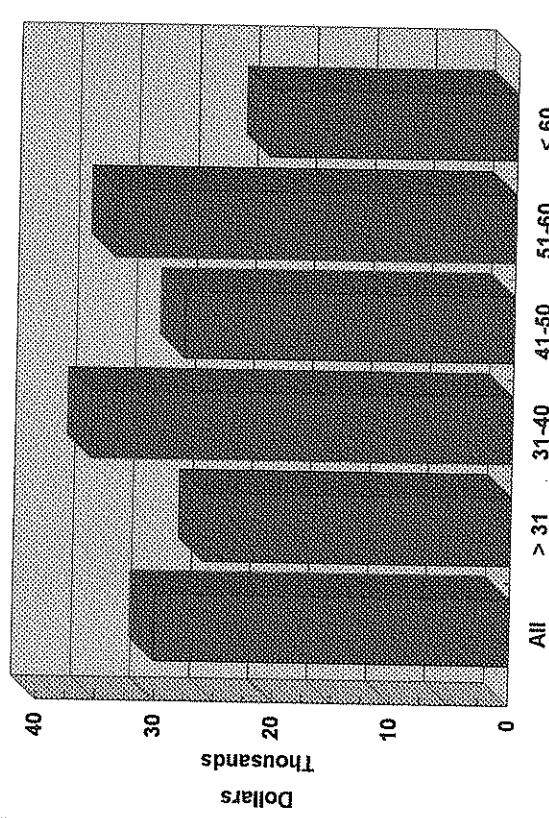
Northwestern Farm Business Management Averages  
Northland Community and Technical College  
( 70% of Gross Cash Income Determines Farm Type )

	Average All Farms 396	Crop 19	Dairy 157	Beef 25	Crop and Dairy 12	Crop and Beef 11	Other 170
<b>Number of farms</b>							
<b>Income Statement</b>							
Gross cash farm income	211,029	288,760	234,107	84,540	234,634	145,017	196,081
Total cash farm expense	164,200	272,771	174,048	69,240	172,096	114,578	153,318
Net cash farm income	46,829	15,989	60,059	15,300	62,538	30,439	42,763
Inventory change	6,743	28,336	3,999	4,356	-6,217	8,916	6,744
Depreciation and capital adjustment	-11,414	-11,165	-10,611	-7,219	-20,702	-13,218	-11,640
Net farm income	42,158	33,161	53,447	12,437	35,619	26,137	37,868
<b>Profitability (cost)</b>							
Labor and management earnings	29,014	21,953	39,593	3,431	18,133	13,964	25,538
Rate of return on assets	9%	8%	11%	3%	7%	6%	8%
Rate of return on equity	10%	8%	15%	-1%	6%	4%	9%
Operating profit margin	21%	12%	26%	13%	18%	17%	18%
Asset turnover rate	42%	63%	42%	21%	35%	34%	44%
<b>Liquidity</b>							
Term debt coverage ratio	167%	136%	165%	215%	138%	186%	171%
Expense as a percent of income	75%	85%	73%	78%	75%	74%	75%
Interest as a percent of income	8%	7%	7%	13%	9%	10%	8%
<b>Solvency (market)</b>							
Number of sole proprietors	340	17	132	21	11	11	147
Ending farm assets	479,525	444,193	478,423	389,790	654,949	477,481	479,726
Ending farm liabilities	254,175	276,551	270,677	190,136	329,313	245,598	238,313
Ending total assets	552,075	535,459	537,407	466,241	745,207	533,356	561,723
Ending total liabilities	269,048	306,897	285,722	195,710	342,122	253,117	253,039
Ending net worth	283,028	228,561	251,685	270,531	403,084	280,239	308,684
Net worth change	30,121	10,139	30,999	23,723	18,460	19,179	34,190
Ending farm debt to asset ratio	53%	62%	57%	49%	50%	51%	50%
Beg total debt to asset ratio	51%	56%	55%	45%	46%	47%	49%
End total debt to asset ratio	49%	57%	53%	42%	46%	47%	45%
<b>Nonfarm Information</b>							
Farms reporting living expenses	137	4	72	6	6	1	48
Total family living expense	22,442	-	23,240	18,403	23,342	-	21,716
Total living, invest, & capital purch	31,612	-	32,620	8,837	33,528	-	31,317
Net nonfarm income	15,361	11,912	9,756	26,088	12,067	13,216	19,863
<b>Crop Acres</b>							
Total acres owned	428	311	280	623	360	621	532
Total crop acres	688	1172	263	310	517	765	1087
Total crop acres owned	290	258	169	185	290	348	413
Total crop acres cash rented	368	895	94	105	227	414	609
Total crop acres share rented	30	19	1	20	-	3	64

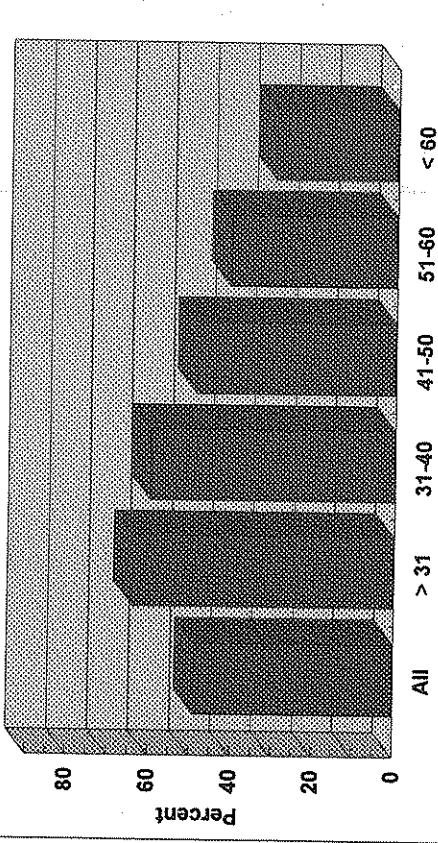
#### Net Farm Income by Age of Operator



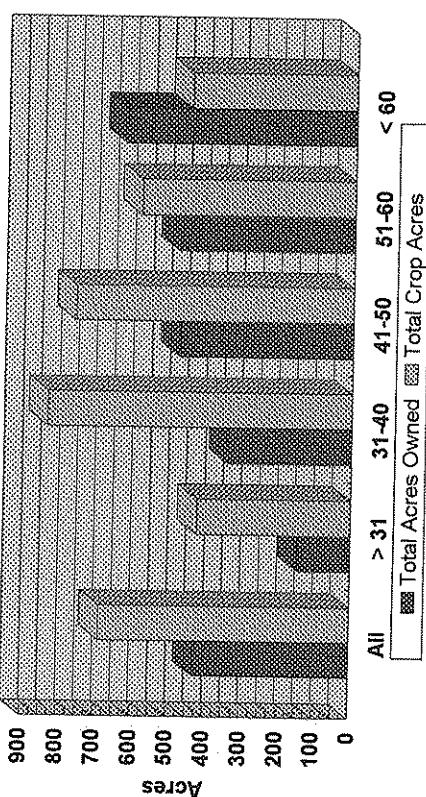
#### Change in Net Worth by Age of Operator



#### Debt to Asset Ratio by Age of Operator



#### Acres by Age of Operator



### Age Of Operation Report, 1999

#### Northwestern Farm Business Management Averages Northland Community and Technical College

	Average For All Farms	<u>Under 31</u>	<u>31 - 40</u>	<u>41 - 50</u>	<u>51 - 60</u>	<u>Over 60</u>
Number of farms	396	35	96	156	75	34
Income Statement						
Gross cash farm income	211,029	123,073	257,359	229,717	193,575	123,513
Total cash farm expense	164,200	92,753	206,452	175,862	154,249	86,897
Net cash farm income	46,829	30,320	50,908	53,855	39,327	36,616
Inventory change	6,743	4,031	10,154	1,884	13,880	6,452
Depreciation and capital adjustment	-11,414	-5,322	-11,675	-12,448	-13,329	-7,977
Net farm income	42,158	29,029	49,387	43,291	39,877	35,091
Profitability (cost)						
Labor and management earnings	29,014	18,325	38,048	29,327	25,557	20,090
Rate of return on assets	9%	8%	10%	9%	8%	7%
Rate of return on equity	10%	10%	14%	10%	9%	7%
Operating profit margin	21%	17%	21%	21%	21%	22%
Asset turnover rate	42%	48%	50%	41%	38%	31%
Liquidity						
Term debt coverage ratio	167%	240%	148%	159%	196%	181%
Expense as a percent of income	75%	72%	76%	76%	74%	67%
Interest as a percent of income	8%	6%	8%	8%	8%	7%
Solvency (market)						
Number of sole proprietors	340	31	78	136	66	29
Ending farm assets	479,525	194,573	489,371	531,877	499,762	466,079
Ending farm liabilities	254,175	129,165	305,457	285,396	228,293	162,364
Ending total assets	552,075	216,968	547,487	614,237	586,532	552,697
Ending total liabilities	269,048	139,213	325,834	303,189	238,338	164,882
Ending net worth	283,028	77,755	221,654	311,048	348,194	387,815
Net worth change	30,121	26,089	35,704	27,939	33,933	20,968
Ending farm debt to asset ratio	53%	66%	62%	54%	46%	35%
Beg total debt to asset ratio	51%	70%	62%	52%	44%	31%
End total debt to asset ratio	49%	64%	60%	49%	41%	30%
Nonfarm Information						
Farms reporting living expenses	137	7	36	60	18	16
Total family living expense	22,442	14,401	24,045	24,164	19,637	19,048
Total living, invest, & capital purch	31,612	24,451	35,695	33,733	21,828	28,613
Net nonfarm income	15,351	14,860	12,835	17,286	17,874	8,512
Crop Acres						
Total acres owned	428	146	340	476	481	630
Total crop acres	688	423	833	759	585	452
Total crop acres owned	290	81	226	349	329	322
Total crop acres cash rented	368	307	585	375	221	111
Total crop acres share rented	30	34	22	34	35	20

FARM INCOME STATEMENT, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	396	79	79
CASH FARM INCOME			
Barley	2029	1468	3835
Dark Red Kidney Beans	297	-	1487
Light Red Kidney Beans	113	568	-
Navy Beans	267	964	269
Pinto Beans	206	312	493
Canola	2236	2067	6005
Corn	6057	5533	11824
Corn Silage	340	550	1076
Kentucky Blue Grass Seed	541	262	1992
Timothy Grass Seed	143	34	77
Alfalfa Hay	693	777	219
Grass Hay	182	18	26
Mixed Hay	165	65	78
Oats	251	93	234
Potatoes	2068	46	10320
Soybeans	10554	11012	15618
Sugar Beets	414	867	787
Sunflowers	678	227	1903
Timber	113	51	-
Spring Wheat	13834	12330	26174
Winter Wheat	512	309	1409
Custom Work	576	12	-
Other crops	476	720	396
Miscellaneous crop income	698	710	1262
Beef Calves	5417	4093	4521
Custom Fed Beef	304	-	-
Background Beef	2931	585	5394
Finish Beef Calves	918	1521	647
Grazing Beef	614	-	-
Chicks	205	-	-
Milk	89119	25037	211006
Dairy Calves	856	299	1344
Dairy Heifers (for sale)	261	65	76
Dairy Replacement Heifers	327	829	170
Dairy Steers	2967	617	4826
Raised Hogs	2392	-	11213
Turkeys	1005	-	5040
Contract Turkeys	576	-	-
Eggs	925	-	4637
Cull breeding livestock	4422	2610	8669
Misc. livestock income	1380	733	888
Transistion payments	13760	10385	26333
CRP payments	931	1586	661
Other government payments	15039	8132	33238
Custom work income	1815	2507	2303
Patronage dividends, cash	925	520	1854
Insurance income	14690	5504	39180
Cash from hedging accts	113	-	484
Other farm income	5696	4222	15345
Gross Cash Farm Income	211029	108239	463312

FARM INCOME STATEMENT, 1999 (Continued)  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	396	79	79
<b>CASH FARM EXPENSE</b>			
Seed	6623	5483	13137
Fertilizer	11654	8210	26164
Crop chemicals	9117	7117	19549
Crop insurance	2686	2498	5478
Drying fuel	287	260	647
Irrigation energy	71	87	126
Crop marketing	2653	3510	5148
Crop miscellaneous	4245	1199	9132
Feeder livestock purchase	2651	562	4146
Purchased feed	27069	8398	66565
Breeding fees	970	211	2158
Veterinary	4177	1437	10351
Livestock supplies	4548	1541	10391
Livestock leases	573	310	1337
Grazing fees	194	36	298
Livestock marketing	2016	732	4068
Interest	16610	11316	31513
Fuel & oil	6229	4226	10568
Repairs	16037	11573	29813
Custom hire	4490	2218	12030
Hired labor	10569	5289	29483
Land rent	12614	9902	27038
Machinery & bldg leases	3424	2550	6498
Real estate taxes	2185	1798	3526
Farm insurance	2652	2007	4902
Utilities	4171	2429	7304
Dues & professional fees	999	891	1593
Hedging account deposits	513	1299	826
Miscellaneous	4173	3057	6609
Total cash expense	164200	100144	350400
Net cash farm income	46829	8095	112912
<b>INVENTORY CHANGES</b>			
Crops and feed	-1742	-6327	2931
Market livestock	1396	-8	2218
Accounts receivable	2233	-1486	9575
Prepaid expenses and supplies	2220	-620	7311
Accounts payable	2635	1164	9601
Total inventory change	6743	-7277	31635
Net operating profit	53572	818	144547
<b>DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS</b>			
Breeding livestock	-107	-5034	3667
Machinery and equipment	-9667	-7257	-18316
Buildings and improvements	-1887	-862	-5002
Other farm capital	247	-523	2586
Total depr. and other capital adj	-11414	-13675	-17066
Net farm income	42158	-12857	127481

STATEMENT OF CASH FLOWS, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	396	79	79
(a) Beginning cash balance (farm & nonfarm)	9542	5070	19183
<b>CASH FROM OPERATING ACTIVITIES</b>			
Gross cash farm income	211029	108239	463312
Net nonfarm income (+)	15351	28010	5728
Total cash farm expense (-)	164200	100144	350400
Apparent family living expense (-)	26560	20768	39166
Income and social security tax (-)	2280	2015	3627
(b) Cash from operations (=)	33340	13323	75847
<b>CASH FROM INVESTING ACTIVITIES</b>			
Sale of breeding livestock	1269	421	811
Sale of machinery & equipment (+)	1263	731	2790
Sale of farm land (+)	1374	1643	1266
Sale of farm buildings (+)	29	-	145
Sale of other farm assets (+)	269	18	879
Sale of nonfarm assets (+)	544	103	121
Purchase of breeding livestock (-)	6677	3639	18299
Purchase of machinery & equip. (-)	19765	11710	40475
Purchase of farm land (-)	3570	2576	3742
Purchase of farm buildings (-)	5887	1309	21922
Purchase of other farm assets (-)	1116	478	2580
Purchase of nonfarm assets (-)	4966	2675	9003
(c) Cash from investing activities (=)	-37233	-19472	-90008
<b>CASH FROM FINANCING ACTIVITIES</b>			
Money borrowed	92175	78126	185436
Cash gifts and inheritances (+)	596	245	1355
Principal payments (-)	88407	71268	173434
Dividends paid (-)	47	-	74
Gifts given (-)	41	85	33
(d) Cash from financing activities (=)	4277	7018	13251
(e) Net change in cash balance (b+c+d)	384	869	-911
Ending cash balance (farm & nonfarm)	9926	5939	18273

CROP, MARKETING, OPERATOR, NONFARM SUMMARY, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Net Farm Income)

	<u>Average Of All Farms</u>	<u>Average Of Low 20%</u>	<u>Average Of High 20%</u>
Number of Farms	396	79	79
<b>ACREAGE SUMMARY</b>			
Total Acres Owned	428	393	583
Total Crop Acres	688	523	1263
Crop Acres Owned	290	232	469
Crop Acres Cash Rented	368	283	730
Crop Acres Share Rented	30	9	65
Total Pasture Acres	33	34	46
<b>AVERAGE PRICE RECEIVED (Cash Sales Only)</b>			
Wheat, Spring per bu.	2.92	3.09	2.97
Corn per bu.	1.69	1.66	1.65
Soybeans per bu.	4.42	4.25	4.18
Barley per bu.	1.43	1.69	1.39
Grass Seed, Kentucky Blue per	0.61	-	-
Canola per cwt.	9.81	-	10.40
Wheat, Winter per bu.	2.49	-	2.29
Oats per bu.	1.01	-	-
Sunflowers per cwt.	8.74	-	8.92
<b>AVERAGE YIELD PER ACRE</b>			
Wheat, Spring (bu.)	29.20	33.18	28.72
Soybeans (bu.)	30.12	33.83	28.49
Corn (bu.)	105.34	100.84	111.19
Hay, Alfalfa (ton)	3.23	2.05	3.78
Hay, Mixed (ton)	2.06	1.56	2.16
Corn Silage (ton)	14.22	12.05	14.91
Canola (lb.)	9.49	11.07	9.55
CRP (\$)	42.42	39.87	45.05
Hay, Grass (ton)	1.89	1.03	1.62
<b>OPERATOR INFORMATION</b>			
Average number of operators	1.2	1.1	1.3
Average age of operators	45	46.3	45.2
Average number of years farmin	20.8	21.4	21.4
<b>NONFARM INCOME</b>			
Nonfarm wages & salary	\$11,365.00	\$21,487.00	\$5,940.00
Nonfarm business income	-83.00	270.00	-3,280.00
Nonfarm rental income	122.00	127.00	82.00
Nonfarm interest income	362.00	234.00	544.00
Nonfarm cash dividends	96.00	66.00	97.00
Tax refunds	1,407.00	1,575.00	874.00
Gifts and inheritances	596.00	245.00	1,355.00
Other nonfarm income	2,104.00	4,251.00	1,471.00
Total nonfarm income	\$15,968.00	\$28,255.00	\$7,083.00

BALANCE SHEET AT COST VALUES, 1999  
 Northwestern Farm Business Management Averages  
 (Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>ASSETS</b>						
Current Farm Assets						
Cash and checking balance	5926	6127	3035	4463	17191	16450
Prepaid expenses & supplies	4667	6258	2934	2535	13420	19212
Growing crops	151	89	57	35	429	418
Accounts receivable	7136	8583	4448	3294	18357	24128
Hedging accounts	104	187	24	6	77	987
Crops held for sale or feed	42698	43264	21532	20562	82271	92371
Crops under government loan	1472	309	1410	551	3408	100
Market livestock held for sale	12054	13315	5852	6449	13062	14731
Other current assets	2279	2509	89	95	6987	8511
Total current farm assets	76487	80642	39380	37989	155201	176908
Intermediate Farm Assets						
Breeding livestock	52286	56032	24195	22945	110159	127516
Machinery and equipment	81832	90137	47782	50301	166424	188906
Other intermediate assets	6122	6578	4261	4383	11244	14392
Total intermediate farm assets	140240	152747	76238	77629	287827	330815
Long-Term Farm Assets						
Farm land	113076	116827	93727	95130	189814	195948
Buildings and improvements	42077	44630	21667	21594	120908	135782
Other long-term assets	5740	6535	6445	6669	12220	15535
Total long-term farm assets	160894	167991	121839	123394	322943	347264
Total Farm Assets	377620	401380	237457	239012	765971	854987
Total Nonfarm Assets	60453	66603	45686	48757	91994	104096
Total Assets	438073	467983	283142	287769	857965	959083
<b>LIABILITIES</b>						
Current Farm Liabilities						
Accrued interest	3523	3529	2450	3243	6182	5461
Accounts payable	7057	5590	4951	4158	15369	8986
Current notes	22640	21286	11346	17172	41757	40978
Government crop loans	666	90	452	-	1768	-
Principal due on term debt	16720	18401	11041	11225	35685	38746
Total current farm liabilities	50620	48897	30246	35800	100761	94171
Intermediate Farm Liabilities	66951	66928	45709	47588	141306	141996
Long-term Farm Liabilities	92288	93463	82485	79034	169106	177633
Total Farm Liabilities	209859	209288	158440	162422	411173	413801
Total Nonfarm Liabilities	7985	9335	6647	7905	11302	12892
Total Liabilities	217844	218622	165087	170327	422476	426693
Net Worth (farm and nonfarm)	220230	249360	118055	117441	435489	532389
Net Worth Change		29131		-614		96900
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	66 %	61 %	77 %	94 %	65 %	53 %
Curr. & Interim Farm Liab / Assets	54 %	50 %	66 %	72 %	55 %	47 %
Long Term Farm Liab. / Assets	57 %	56 %	68 %	64 %	52 %	51 %
Total Liabilities / Assets	50 %	47 %	58 %	59 %	49 %	44 %

**BALANCE SHEET AT MARKET VALUES, 1999**  
**Northwestern Farm Business Management Averages**  
**(Farms sorted by Net Farm Income)**

Number of Farms	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>ASSETS</b>						
Current Farm Assets						
Cash and checking balance	5922	6050	3014	4411	16805	15746
Prepaid expenses & supplies	4621	6256	2894	2500	12953	18929
Growing crops	149	88	56	34	412	402
Accounts receivable	7115	8628	4387	3249	17931	24122
Hedging accounts	103	185	24	6	74	948
Crops held for sale or feed	42350	42990	21237	20300	79893	89962
Crops under government loan	1487	305	1391	543	3494	96
Market livestock held for sale	11925	13176	5772	6360	12624	14259
Other current assets	2262	2489	132	138	6713	8177
Total current farm assets	75933	80166	38906	37542	150898	172642
Intermediate Farm Assets						
Breeding livestock	53954	59509	24753	25969	113119	137559
Machinery and equipment	111074	120971	68256	73068	218258	242534
Other intermediate assets	6746	7153	5386	5234	11543	14298
Total intermediate farm assets	171773	187633	98396	104271	342921	394392
Long-Term Farm Assets						
Farm land	149907	153945	121815	124196	219241	227431
Buildings and improvements	46322	49248	27745	28465	126867	141943
Other long-term assets	5910	6609	6360	6565	13416	16548
Total long-term farm assets	202139	209801	155920	159225	359523	385922
Total Farm Assets	449846	477601	293221	301038	853343	952955
Total Nonfarm Assets	64931	72275	48428	51530	107985	121822
Total Assets	514776	549875	341650	352568	961327	1074777
<b>LIABILITIES</b>						
Current Farm Liabilities						
Accrued interest	3537	3519	2416	3206	5960	5257
Accounts payable	7126	5653	4883	4101	15593	9418
Current notes	22474	21175	11191	16937	40786	40301
Government crop loans	691	89	445	-	1919	-
Principal due on term debt	16701	18516	10935	11199	35213	38789
Total current farm liabilities	50544	48953	29877	35446	99472	93765
Intermediate Farm Liabilities	66883	67414	45180	47347	139754	143876
Long-term Farm Liabilities	92068	93453	81355	78943	165990	174398
Total Farm Liabilities	209495	209821	156413	161736	405216	412040
Total Nonfarm Liabilities	7916	9273	6556	7797	10977	12551
Total Deferred Liabilities	45297	48710	24803	25048	97945	107027
Total Liabilities	262708	267803	187772	194581	514138	531617
Net Worth (farm and nonfarm)	252068	282072	153878	157987	447189	543160
Net Worth Change		30004		4109		95971
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	67 %	61 %	77 %	94 %	66 %	54 %
Curr. & Interim Farm Liab. / Assets	47 %	43 %	55 %	58 %	48 %	42 %
Long Term Farm Liabilities / Assets	46 %	45 %	52 %	50 %	46 %	45 %
Total Liabilities / Assets	51 %	49 %	55 %	55 %	53 %	49 %

**PROFITABILITY AND LIQUIDITY ANALYSIS, 1999**  
**Northwestern Farm Business Management Averages**  
**(Farms sorted by Net Farm Income)**

	Avg. Of All Farms	Avg. Of Low 20%	Avg. Of High 20%	Avg. Of All Farms	Avg. Of Low 20%	Avg. Of High 20%
Number of Farms	392	78	77	396	79	79
<b>PROFITABILITY</b>						
Net farm income	41810	-13063	127125	40877	-6942	119525
Labor and management earnings	29014	-19865	102448	26473	-15564	94401
Rate of return on assets	8.7 %	-5.1 %	15.1 %	7.2 %	-2.4 %	12.5 %
Rate of return on equity	10.4 %	-24.2 %	23.6 %	8.8 %	-14.3 %	21.3 %
Operating profit margin	21.0 %	-16.6 %	30.9 %	20.5 %	-9.7 %	29.2 %
Asset turnover rate	41.6 %	30.5 %	48.7 %	35.2 %	24.9 %	42.9 %
Interest on farm net worth	12796	6802	24677	14403	8622	25124
Farm interest expense	16505	11904	31133	16477	11796	30953
Value of operator lbr and mgmt.	19838	13315	30749	19827	13273	30603
Return on farm assets	38477	-14474	127509	37526	-8419	119874
Average farm assets	440555	286493	847024	519512	347513	957007
Return on farm equity	21972	-26378	96376	21050	-20216	88922
Average farm equity	210304	109177	407562	238415	141361	418337
Value of farm production	183093	87407	412831	183090	86425	410990
	Average Of All Farms	Average Of Low 20%	Average Of High 20%			
Number of Farms	396	79	79			
<b>LIQUIDITY (Cash)</b>						
Net cash farm income	46829	8095	112912			
Net nonfarm income	15351	28010	5728			
Family living and taxes	28887	22783	42867			
Real estate principal payments	5795	4344	10431			
Cash available for interm. debt	27498	8978	65342			
Average intermediate debt	87735	58009	175268			
Years to turnover interm. debt	3.2	6.5	2.7			
Expense as a % of income	78 %	93 %	76 %			
Interest as a % of income	8 %	10 %	7 %			
<b>LIQUIDITY (Accrual)</b>						
Total accrual farm income	212917	100419	478035			
Total accrual farm expense	159345	99600	333488			
Net accrual operating income	53572	818	144547			
Net nonfarm income	15351	28010	5728			
Family living and taxes	28887	22783	42867			
Real estate principal payments	5795	4344	10431			
Available for intermediate debt	34241	1701	96977			
Average intermediate debt	87735	58009	175268			
Years to turnover interm. debt	2.6	34.1	1.8			
Expense as a % of income	75 %	99 %	70 %			
Interest as a % of income	8 %	12 %	6 %			

**FINANCIAL GUIDELINES MEASURES, 1999**  
**Northwestern Farm Business Management Averages**  
**Northland Community and Technical College**  
**(Farms sorted by Net Farm Income)**

	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Number of Farms	396		79		79	
LIQUIDITY						
Current ratio	1.55	1.69	1.69	1.24	1.41	1.74
Working capital	32430	38872	25234	10596	48735	80221
SOLVENCY (Market)						
Farm debt to asset ratio	55 %	52 %	59 %	60 %	58 %	53 %
Farm equity to asset ratio	45 %	48 %	41 %	40 %	42 %	47 %
Farm debt to equity ratio	124 %	109 %	144 %	151 %	141 %	113 %
PROFITABILITY (Cost)						
Rate of return on farm assets	8.7 %		-5.1 %		15.1 %	
Rate of return on farm equity	10.4 %		-24.2 %		23.6 %	
Operating profit margin	21.0 %		-16.6 %		30.9 %	
Net farm income	41810		-13063		127125	
REPAYMENT CAPACITY	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	146 %	167 %	103 %	70 %	169 %	224 %
Capital replacement margin	14587	21330	601	-6676	40311	71946
EFFICIENCY						
Asset turnover rate (cost)	41.6 %		30.5 %		48.7 %	
Operating expense ratio	67.1 %		87.4 %		63.3 %	
Depreciation expense ratio	5.4 %		13.6 %		3.6 %	
Interest expense ratio	7.7 %		11.7 %		6.5 %	
Net farm income ratio	19.8 %		-12.8 %		26.7 %	

**LABOR ANALYSIS**

	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Number of Farms	387		77		78	
Total unpaid labor hours	3066		2048		4284	
Total hired labor hours	985		430		2968	
Total labor hours per farm	4050		2478		7252	
Value of farm production / hour	44.84		34.11		55.72	
Net farm income / unpaid hour	13.82		-6.37		29.73	

## Financial Guideline Measures

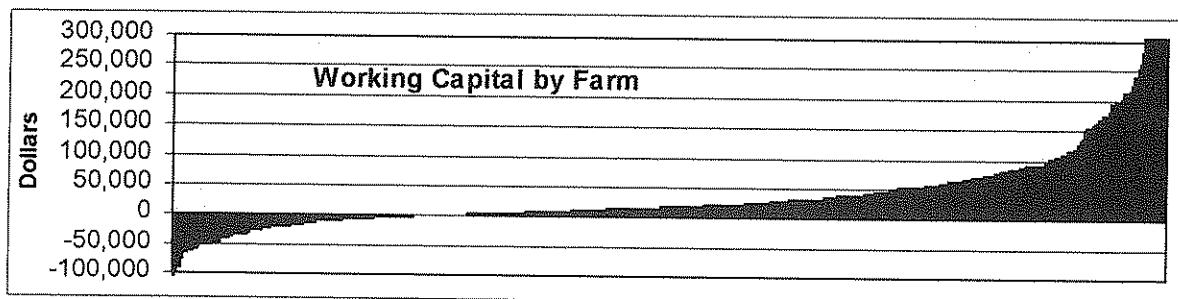
The Farm Financial Standards Task Force recommended the use of sixteen financial measures to evaluate a farms financial position and financial performance. These measures are grouped by Liquidity, Solvency, Profitability, Repayment Capacity and Efficiency.

### 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.

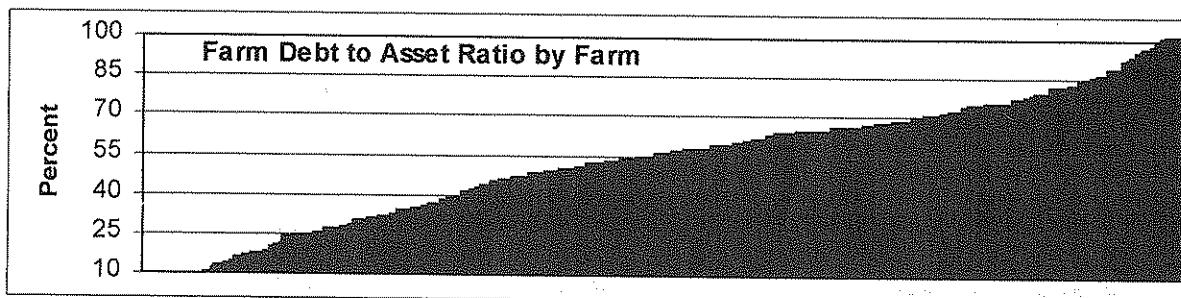
**Working Capital:** Working capital shows the dollar amount that current assets can or can not cover current liabilities. It approximates the amount of capital available to purchase crop and livestock inputs and equipment necessary to produce farm products. The amount of working capital considered adequate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



### 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 which have debt against them. A higher ratio is considered an indicator of greater financial risk.



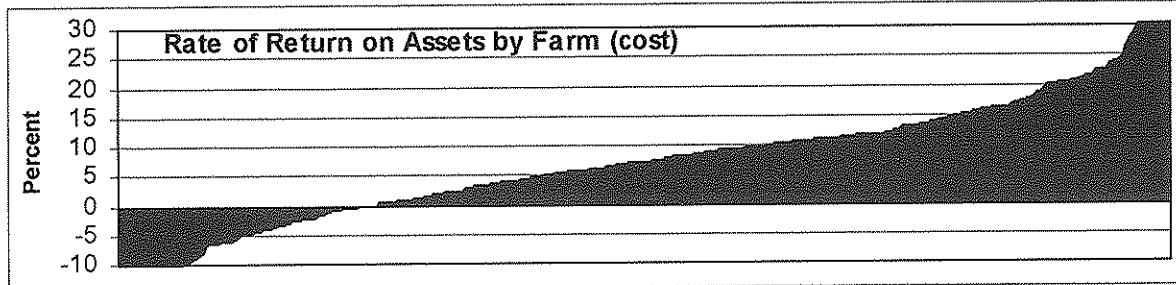
**Farm Equity To Asset Ratio:** The farm equity to asset ratio measures the farm equity relative to the value of the farm assets. It measures the proportion of the farm assets financed by the owner's equity whereas the debt to asset ratio measured the proportion of farm assets financed by debt.

**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 the farm has.

## 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.

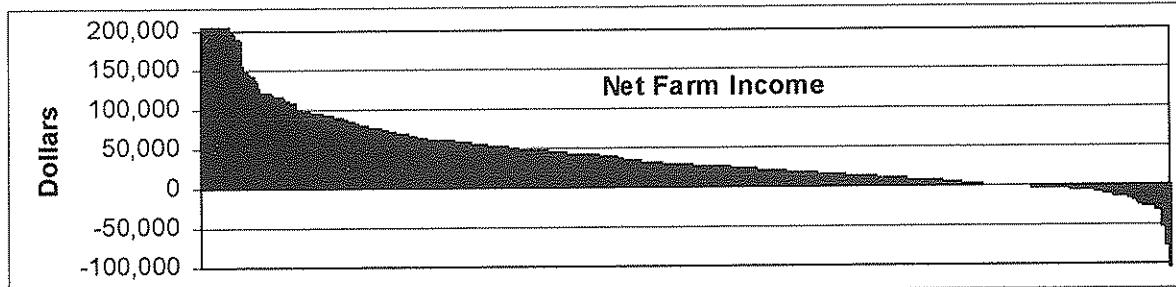
**Rate of Return on Assets:** Rate of return on assets is, in effect, the interest rate your farm earned in the past year on all money invested in the business. If assets are valued at market value, the rate of return on investment can be looked at as the "opportunity cost" of investing money in the 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. As your debt to asset ratio increases, these relationships become more pronounced. So profitability becomes a key concern when substantial debt capital is used in the business.

**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.



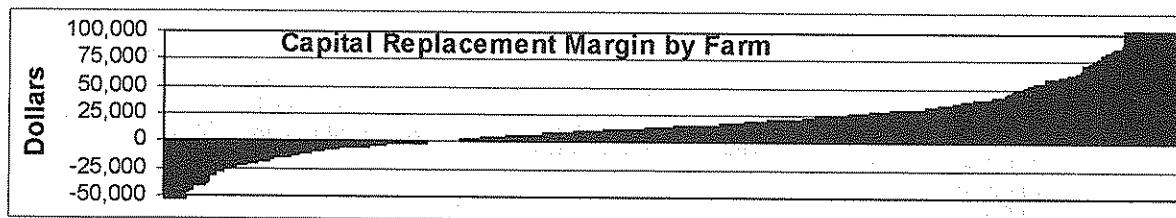
**Operating Profit Margin:** The operating profit margin is a measure of the profit margin from the employment of assets. It measures how effectively you are employing assets relative to the value of output produced. Low prices, high operating expenses, or production problems are all possible causes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

## Repayment Capacity

Repayment capacity measures the ability to repay term debt (longer than one year) and to replace capital assets.

**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 nonfarm 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.

**Capital Replacement Margin:** The capital replacement margin is the amount of money remaining from farm and nonfarm income after all operating expenses, taxes, family living and debt payments have been paid. It is the amount available for acquiring capital assets, such as machinery and land, or servicing additional debt.

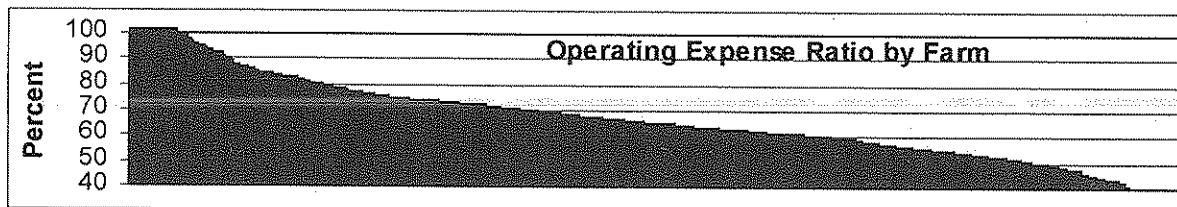


## Efficiency

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.

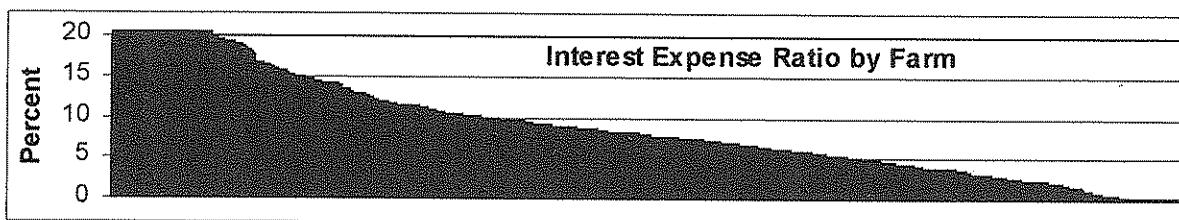
**Asset Turnover:** Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to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

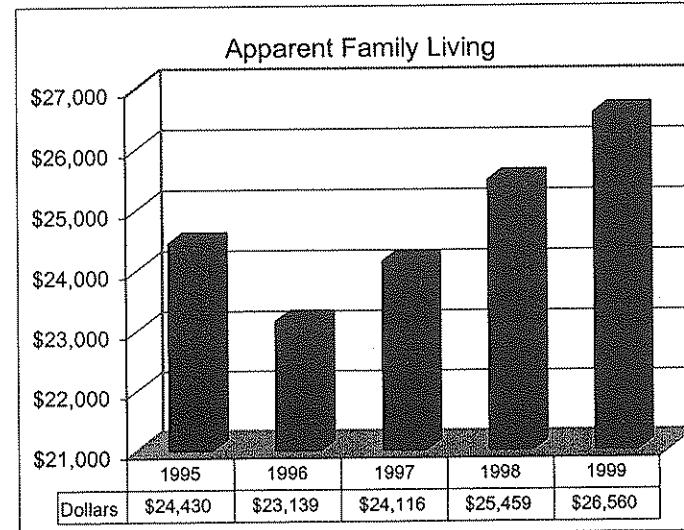
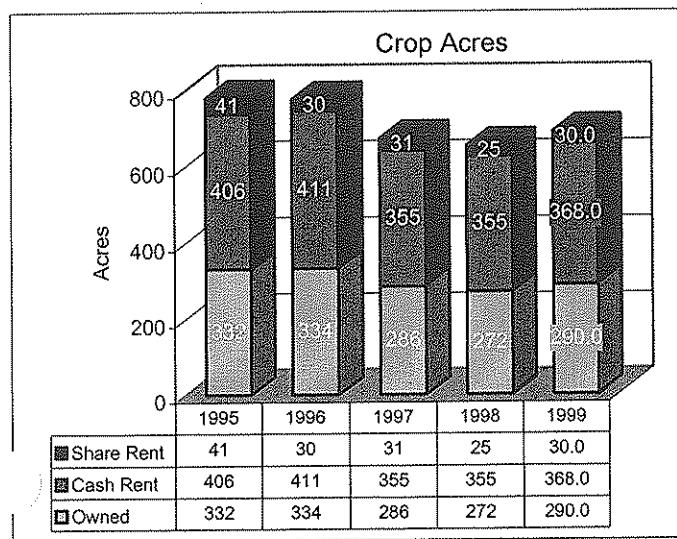
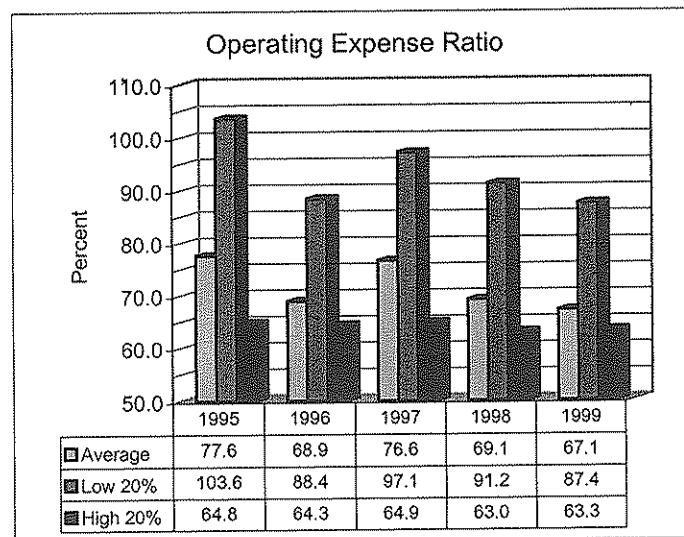
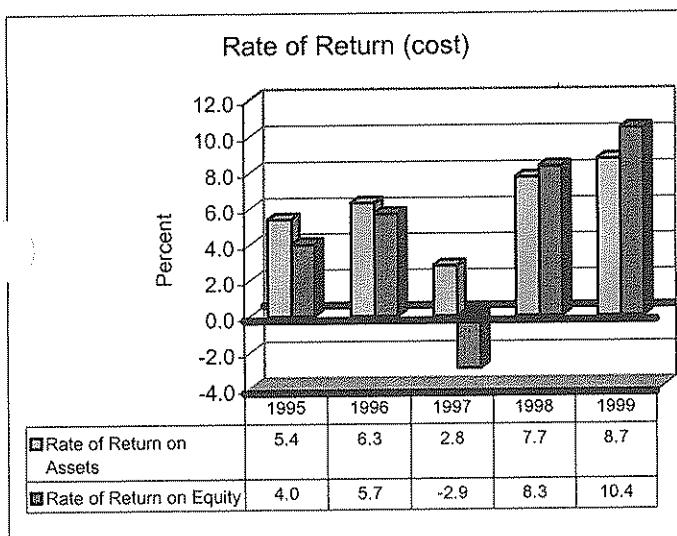
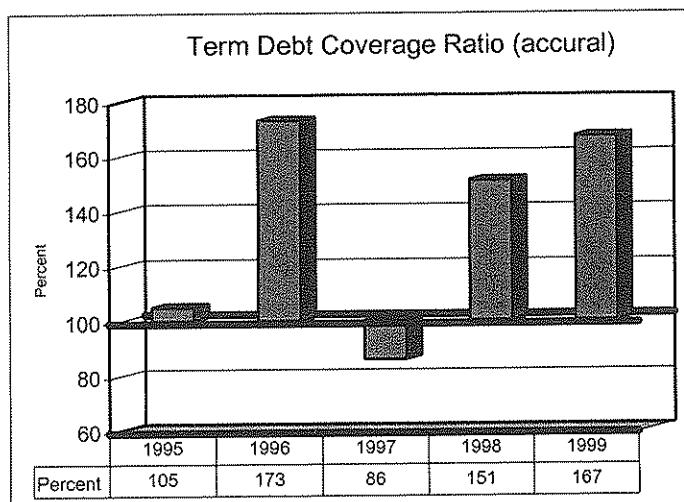
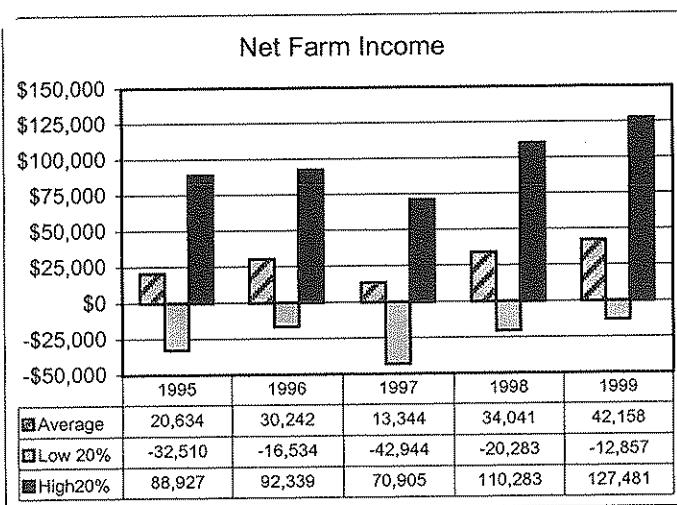
**Interest Expense Ratio:** This ratio indicates the percent of the gross farm income which is used to pay farm interest expenses.



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

## Five Year Trends

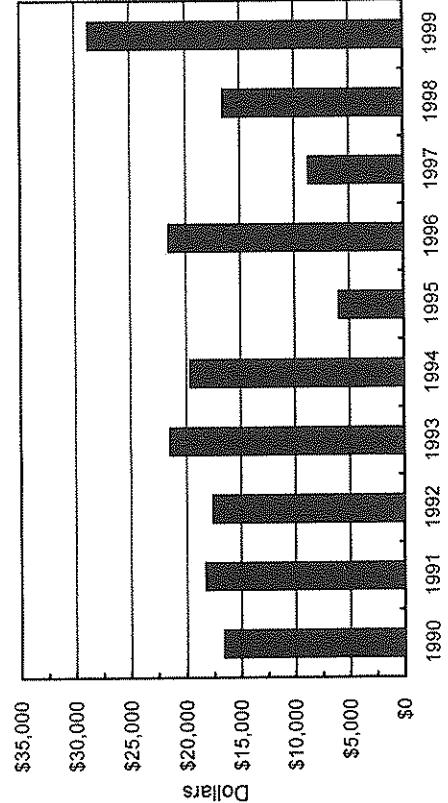
### Northwest Farm Business Management Education



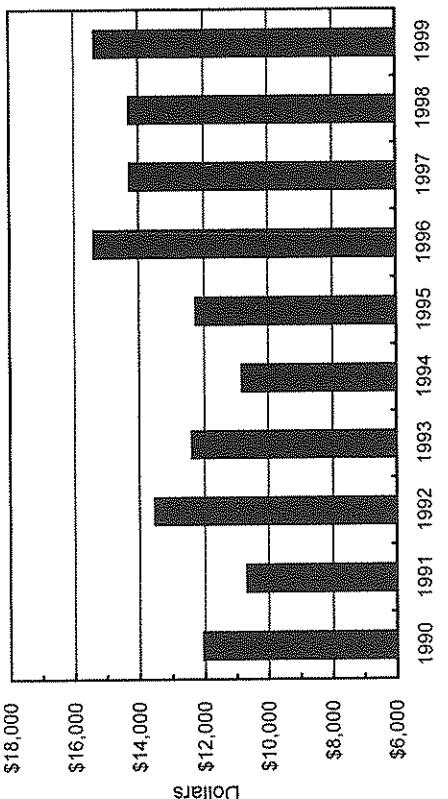
HOUSEHOLD AND PERSONAL EXPENSES, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Sole Proprietors	87	12	11
Average family size	4.2	3.1	3.8
<b>FAMILY LIVING EXPENSES</b>			
Food and meals expense	5017	4063	6564
Medical care and health insurance	3620	2268	6238
Cash donations	953	1126	1494
Household supplies	2380	1795	2239
Clothing	1114	829	1547
Personal care	2057	1665	3239
Child / Dependent care	204	523	314
Gifts	1032	1130	1449
Education	644	649	1348
Recreation	978	1451	1315
Utilities (household share)	1174	854	1197
Nonfarm vehicle operating expense	1335	1244	1113
Household real estate taxes	51	135	95
Dwelling rent	105	16	-
Household repairs	957	736	1245
Nonfarm interest	323	244	677
Life insurance payments	934	346	1573
Total cash family living expense	22875	19075	31647
Family living from the farm	410	203	519
Total family living	23285	19278	32166
<b>OTHER NONFARM EXPENDITURES</b>			
Income taxes	2316	3353	2304
Furnishing & appliance purchases	235	46	919
Nonfarm vehicle purchases	1545	460	4979
Nonfarm real estate purchases	1238	1677	2634
Other nonfarm capital purchases	1309	-	1818
Nonfarm savings & investments	1070	-464	6281
Total other nonfarm expenditures	7713	5071	18935
Total cash family living, investment & nonfarm capital purch	30588	24146	50583
<b>PARTNERSHIPS</b>			
Number of partnerships	23		
Number of operators per partnership	1.9		
Average owner withdrawals per farm	41282		
Average withdrawals per operator	22081		

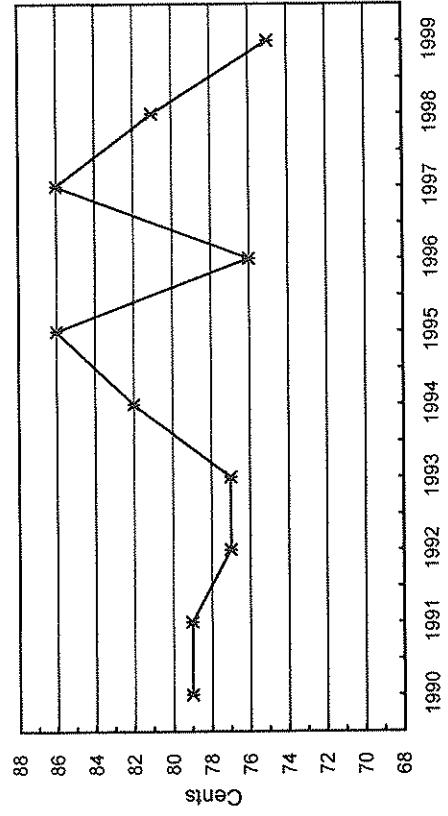
### Government Payments



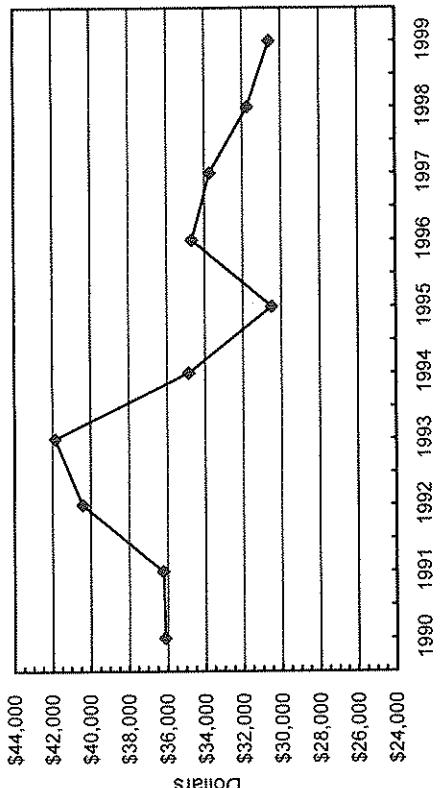
### Non-Farm Income



### Farm Expenses per \$ of Income



### FAMILY LIVING



## Individual Crop Enterprise Analysis

The individual crop analysis table shows acres, yield, value per unit, (usually the value per unit at harvest time) and the gross return per acre for each crop raised by at least five farmers in the 1999 crop year.

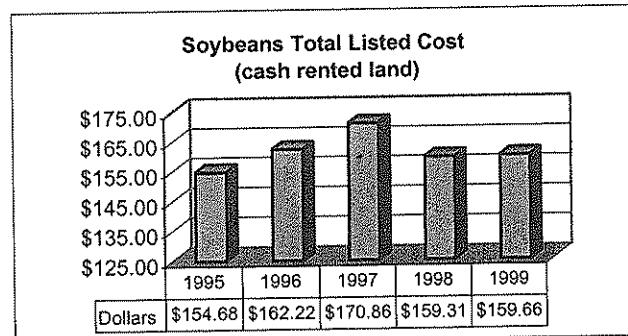
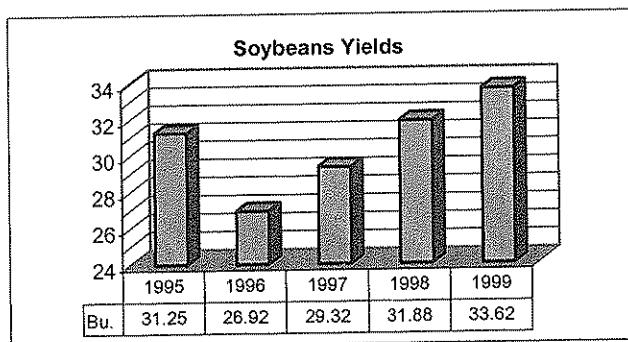
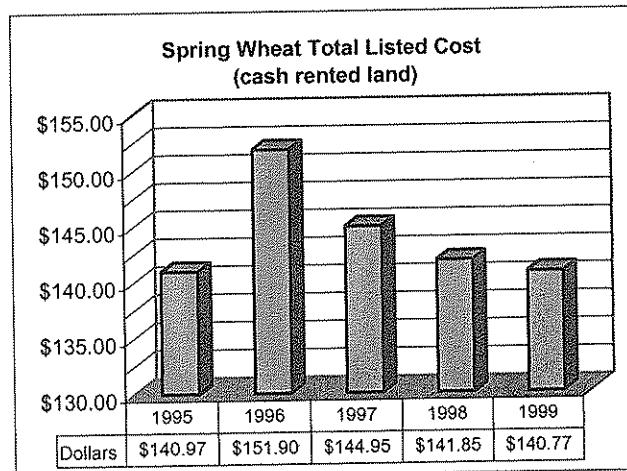
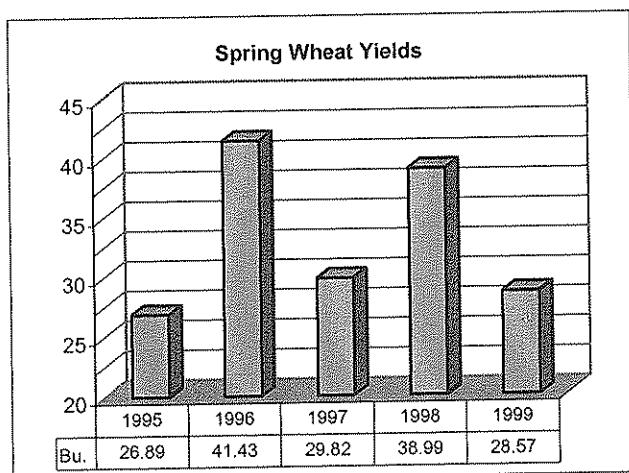
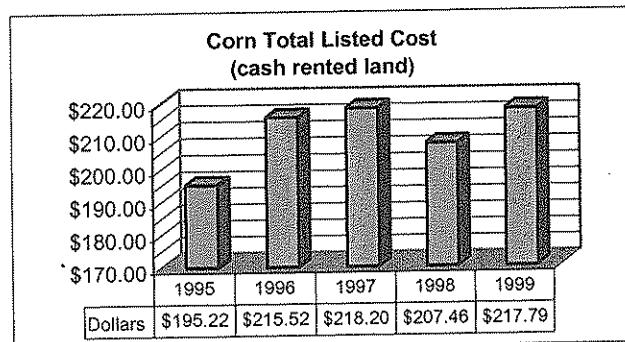
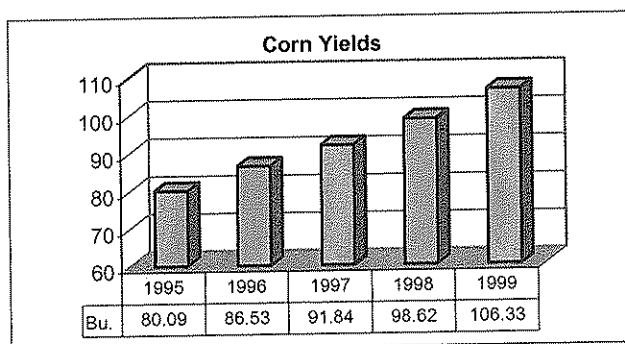
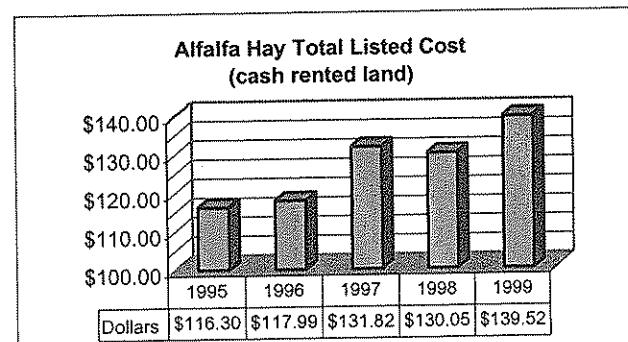
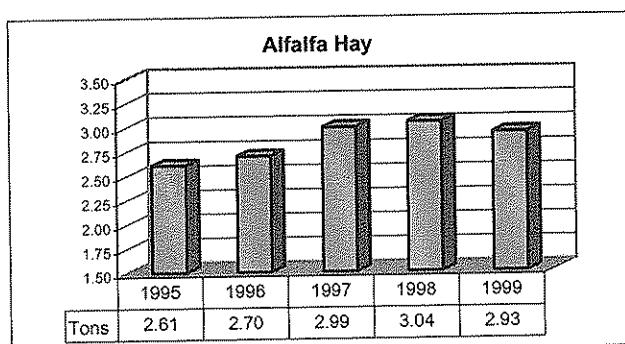
Costs such as fertilizer, chemicals, seed, crop drying expenses, hired labor and custom hire are costs that are assigned to each individual crop in the account book or computerized record system. These costs are shown in the crop enterprise analysis as *Direct Costs*.

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, the land cost is divided into two different lines in the overhead cost section. These are the real-estate taxes and interest on long-term debt lines.

Any crop insurance, Loan Deficiency Payment (LDP), or second product income is included in the miscellaneous income. The Market Loss payment and the regular Agriculture Market Transitional Act (AMTA) payments are included in the Net Return including Government Payments near the bottom of the page. Government payments are spread across all tillable acres except edible beans, potatoes and other vegetable crops.

**Five Year Crop History of  
Yields and Cost of Production**  
**Northwestern Minnesota Farm Business Management Education**



Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

SPRING WHEAT ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	113	16	22
Number of farms	80	16	16
Acres	114.74	115.83	72.11
Yield per acre (bushel)	28.16	21.47	42.95
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.94	2.72	3.00
Total product return per acre	82.83	58.49	128.64
Miscellaneous income per acre	37.82	14.62	39.95
Gross return per acre	120.65	73.11	168.59
Direct expenses per acre			
Seed	10.09	9.50	9.66
Fertilizer	23.46	24.92	21.39
Crop chemicals	13.77	10.01	9.50
Crop insurance	4.43	3.65	4.47
Drying fuel	0.46	1.07	0.34
Fuel & oil	6.35	7.09	5.50
Repairs	11.66	12.93	11.69
Custom hire	1.47	2.96	0.88
Hired labor	0.47	0.13	0.88
Machinery & bldg leases	0.04	0.00	0.00
Marketing	0.31	1.04	0.24
Operating interest	3.97	2.33	3.00
Miscellaneous	0.16	0.13	0.18
Total direct expenses per acre	76.64	75.76	67.71
Return over direct expenses per acre	44.02	-2.66	100.88
Overhead expenses per acre			
Custom hire	0.92	0.26	0.46
Hired labor	3.94	4.76	2.30
Machinery & bldg leases	1.93	1.25	2.76
RE & pers. property taxes	6.25	5.37	6.92
Farm insurance	2.03	3.23	2.02
Utilities	1.93	2.38	1.33
Dues & professional fees	1.23	1.08	1.30
Interest	18.04	13.33	27.23
Mach & bldg depreciation	10.54	8.05	8.58
Miscellaneous	1.89	1.29	2.03
Total overhead expenses per acre	48.69	40.99	54.92
Total listed expenses per acre	125.33	116.75	122.64
Net return per acre	-4.67	-43.65	45.96
Total direct expense per bushel	2.72	3.53	1.58
Total listed expense per bushel	4.45	5.44	2.86
Net return per bushel	-0.17	-2.03	1.07
Breakeven yield per acre	29.75	37.49	27.60
Est. labor hours per acre	2.10	2.58	1.67
Net return including govt. payments	23.28	-19.05	73.65
Lbr & mgt charge per acre	15.19	15.10	14.47
Net return over lbr & mgt	8.09	-34.15	59.18

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

SPRING WHEAT ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	157	32	26
Number of farms	93	19	19
Acres	253.17	188.83	245.01
Yield per acre (bushel)	28.57	22.96	31.26
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.94	2.87	2.98
Total product return per acre	83.96	65.79	93.04
Miscellaneous income per acre	43.01	14.54	74.89
Gross return per acre	126.98	80.33	167.92
Direct expenses per acre			
Seed	9.89	9.62	8.45
Fertilizer	23.23	21.70	21.54
Crop chemicals	16.26	16.96	12.52
Crop insurance	6.12	4.25	5.60
Drying fuel	0.87	1.66	0.45
Fuel & oil	5.98	6.49	7.10
Repairs	11.42	12.29	11.97
Custom hire	3.32	1.57	2.04
Hired labor	0.17	0.19	0.61
Land rent	35.70	36.86	36.32
Machinery & bldg leases	0.16	0.72	0.10
Marketing	0.34	0.94	0.61
Operating interest	3.26	3.82	3.05
Miscellaneous	0.17	0.03	0.33
Total direct expenses per acre	116.88	117.10	110.70
Return over direct expenses per acre	10.09	-36.78	57.22
Overhead expenses per acre			
Custom hire	0.54	0.42	1.44
Hired labor	4.30	3.61	5.43
Machinery & bldg leases	3.17	0.80	2.67
Farm insurance	1.85	2.25	2.16
Utilities	1.52	1.84	1.48
Dues & professional fees	0.93	1.99	4.50
Interest	3.03	2.26	4.05
Mach & bldg depreciation	6.94	6.12	8.05
Miscellaneous	1.60	1.16	1.50
Total overhead expenses per acre	23.88	20.44	28.41
Total listed expenses per acre	140.77	137.55	139.11
Net return per acre	-13.79	-57.22	28.82
Total direct expense per bushel	4.09	5.10	3.54
Total listed expense per bushel	4.93	5.99	4.45
Net return per bushel	-0.48	-2.49	0.92
Breakeven yield per acre	33.26	42.93	21.58
Est. labor hours per acre	1.60	1.84	1.89
Net return including govt. payments	16.47	-25.77	59.16
Lbr & mgt charge per acre	11.86	11.49	13.14
Net return over lbr & mgt	4.61	-37.26	46.02

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Average of All Farms)

WINTER WHEAT ON OWNED AND CASH RENTED LAND

	Owned Land Average For All Farms	Cash Rented Land Average For All Farms
Number of fields	9	16
Number of farms	9	15
Acres		
Yield per acre (bushel)	34.89	105.61
Operators share of yield %	22.34	33.79
Value per bushel	100.00	100.00
Total product return per acre	2.47	2.49
Miscellaneous income per acre	55.11	84.27
Gross return per acre	17.82	38.52
	72.92	122.79
Direct expenses per acre		
Seed	8.00	7.40
Fertilizer	9.80	12.31
Crop chemicals	2.67	8.10
Crop insurance	4.47	6.79
Drying fuel	0.00	0.66
Fuel & oil	6.92	6.27
Repairs	12.16	15.54
Custom hire	0.92	2.41
Land rent	0.00	35.09
Operating interest	0.97	3.25
Miscellaneous	0.36	0.07
Total direct expenses per acre	46.27	97.89
Return over direct expenses per acre	26.65	24.90
Overhead expenses per acre		
Custom hire	0.40	0.11
Hired labor	0.83	4.34
Machinery & bldg leases	0.17	5.63
RE & pers. property taxes	5.10	0.00
Farm insurance	1.49	1.29
Utilities	1.33	1.23
Dues & professional fees	1.21	0.62
Interest	9.46	3.83
Mach & bldg depreciation	9.22	5.43
Miscellaneous	1.85	1.65
Total overhead expenses per acre	31.06	24.15
Total listed expenses per acre	77.33	122.04
Net return per acre	-4.41	0.75
Total direct expense per bushel	2.07	2.90
Total listed expense per bushel	3.46	3.61
Net return per bushel	-0.20	0.02
Breakeven yield per acre	24.12	33.49
Est. labor hours per acre	2.62	1.56
Net return including govt. payments	21.79	33.42
Lbr & mgt charge per acre	20.81	12.22
Net return over lbr & mgt	0.97	21.20

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Average of All Farms)

BARLEY ON OWNED AND CASH RENTED LAND

	Owned Land Average For All Farms	Cash Rented Land Average For All Farms
Number of fields	20	20
Number of farms	18	18
Acres	42.95	56.05
Yield per acre (bushel)	33.64	42.13
Operators share of yield %	100.00	100.00
Value per bushel	1.45	1.91
Total product return per acre	48.94	80.29
Miscellaneous income per acre	19.05	10.90
Gross return per acre	67.99	91.19
Direct expenses per acre		
Seed	6.27	7.17
Fertilizer	14.46	16.73
Crop chemicals	7.78	11.74
Crop insurance	5.57	5.27
Drying fuel	0.12	.22
Fuel & oil	6.87	6.66
Repairs	17.02	12.16
Custom hire	0.82	.87
Hired labor	0.00	.39
Land rent	0.00	32.97
Operating interest	4.08	2.40
Miscellaneous	0.23	.03
Total direct expenses per acre	63.22	96.60
Return over direct expenses per acre	4.78	-5.41
Overhead expenses per acre		
Custom hire	0.49	1.37
Hired labor	4.26	3.13
Machinery & bldg leases	3.18	2.80
RE & pers. property taxes	6.47	0.00
Farm insurance	3.02	2.60
Utilities	1.51	1.30
Dues & professional fees	0.91	.77
Interest	23.48	3.21
Mach & bldg depreciation	10.91	8.96
Miscellaneous	1.71	2.49
Total overhead expenses per acre	55.95	26.63
Total listed expenses per acre	119.17	123.23
Net return per acre	-51.17	-32.04
Total direct expense per bushel	1.88	2.29
Total listed expense per bushel	3.54	2.92
Net return per bushel	-1.52	-0.76
Breakeven yield per acre	68.82	58.94
Est. labor hours per acre	2.51	1.87
Net return including govt. payments	-28.39	-5.82
Lbr & mgt charge per acre	14.94	12.75
Net return over lbr & mgt	-43.33	-18.58

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

CANOLA ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	38	7	9
Number of farms	24	5	5
Acres	117.44	81.51	98.33
Yield per acre (cwt)	9.38	6.98	13.87
Operators share of yield %	100.00	100.00	100.00
Value per cwt	7.36	6.89	7.49
Total product return per acre	69.08	48.13	103.92
Miscellaneous income per acre	42.69	26.71	42.73
Gross return per acre	111.77	74.84	146.64
Direct expenses per acre			
Seed	20.27	22.41	18.37
Fertilizer	30.45	25.29	25.04
Crop chemicals	9.85	11.43	9.41
Crop insurance	5.68	5.47	2.70
Drying fuel	0.24	0.38	0.98
Fuel & oil	6.10	7.28	6.12
Repairs	10.87	10.58	9.79
Custom hire	2.94	2.45	3.88
Hired labor	0.14	0.00	0.00
Machinery & bldg leases	0.01	0.00	0.00
Marketing	0.05	0.00	0.20
Operating interest	2.90	2.03	0.08
Miscellaneous	0.40	0.94	0.07
Total direct expenses per acre	89.92	88.26	76.65
Return over direct expenses per acre	21.85	-13.42	70.00
Overhead expenses per acre			
Custom hire	1.08	0.37	0.68
Hired labor	2.72	4.32	1.99
Machinery & bldg leases	0.89	0.00	0.02
RE & pers. property taxes	5.12	5.96	6.19
Farm insurance	1.75	2.96	1.38
Utilities	2.11	2.83	1.74
Dues & professional fees	0.98	0.84	0.83
Interest	10.54	7.33	8.08
Mach & bldg depreciation	14.38	12.47	17.70
Miscellaneous	1.77	2.15	1.30
Total overhead expenses per acre	41.34	39.23	39.91
Total listed expenses per acre	131.26	127.49	116.56
Net return per acre	-19.49	-52.64	30.09
Total direct expense per cwt	9.58	12.64	5.53
Total listed expense per cwt	13.99	18.26	8.41
Net return per cwt	-2.08	-7.54	2.17
Breakeven yield per acre	12.03	14.62	9.85
Est. labor hours per acre	2.03	2.23	2.02
Net return including govt. payments	2.74	-38.22	60.40
Lbr & mgt charge per acre	16.62	11.71	18.84
Net return over lbr & mgt	-13.88	-49.94	41.56

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

CANOLA ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	33	6	7
Number of farms	27	5	5
Acres	191.48	104.93	98.10
Yield per acre (cwt)	9.28	8.01	11.57
Operators share of yield %	100.00	100.00	100.00
Value per cwt	8.13	4.10	8.31
Total product return per acre	75.45	32.84	96.16
Miscellaneous income per acre	45.71	56.99	53.70
Gross return per acre	121.16	89.83	149.86
Direct expenses per acre			
Seed	18.34	20.78	17.93
Fertilizer	32.93	29.81	30.79
Crop chemicals	16.45	15.12	11.23
Crop insurance	6.40	9.29	4.93
Fuel & oil	4.99	6.50	5.38
Repairs	11.05	12.72	6.47
Custom hire	10.07	3.25	8.52
Hired labor	0.05	0.00	0.00
Land rent	29.32	36.31	28.94
Machinery & bldg leases	0.55	0.00	0.00
Marketing	0.02	0.00	0.00
Operating interest	2.89	1.64	0.92
Miscellaneous	0.23	0.29	0.00
Total direct expenses per acre	133.28	135.72	115.11
Return over direct expenses per acre	-12.12	-45.89	34.75
Overhead expenses per acre			
Custom hire	1.03	1.84	0.99
Hired labor	5.47	5.19	3.63
Machinery & bldg leases	1.32	2.73	1.32
Farm insurance	1.29	1.27	1.06
Utilities	1.50	1.40	1.94
Dues & professional fees	0.39	0.63	0.09
Interest	2.80	3.60	2.15
Mach & bldg depreciation	10.77	8.79	25.32
Miscellaneous	1.75	0.96	1.17
Total overhead expenses per acre	26.33	26.42	37.66
Total listed expenses per acre	159.61	162.14	152.78
Net return per acre	-38.45	-72.31	-2.91
Total direct expense per cwt	14.36	16.95	9.95
Total listed expense per cwt	17.20	20.25	13.20
Net return per cwt	-4.14	-9.03	-0.25
Breakeven yield per acre	14.01	25.64	11.93
Est. labor hours per acre	1.53	1.62	1.62
Net return including govt. payments	-10.35	-45.23	25.98
Lbr & mgt charge per acre	12.00	14.65	14.76
Net return over lbr & mgt	-22.35	-59.89	11.22

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

CORN ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	132	25	26
Number of farms	126	25	25
Acres	59.19	57.19	75.16
Yield per acre (bushel)	104.14	68.38	133.35
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.69	1.68	1.70
Total product return per acre	176.02	115.16	227.29
Miscellaneous income per acre	16.02	6.21	19.71
Gross return per acre	192.05	121.37	247.00
Direct expenses per acre			
Seed	23.64	22.93	22.31
Fertilizer	26.84	29.00	27.00
Crop chemicals	26.81	27.27	26.72
Crop insurance	3.72	5.17	2.98
Drying fuel	3.87	3.11	3.97
Fuel & oil	11.47	12.68	9.71
Repairs	29.43	32.77	21.26
Custom hire	3.87	2.63	3.53
Hired labor	0.09	0.07	0.00
Machinery & bldg leases	0.47	0.27	0.62
Marketing	0.22	1.07	0.00
Operating interest	6.66	6.94	4.59
Miscellaneous	0.78	0.24	0.52
Total direct expenses per acre	137.88	144.15	123.20
Return over direct expenses per acre	54.16	-22.78	123.80
Overhead expenses per acre			
Custom hire	0.46	0.18	0.74
Hired labor	9.35	8.86	9.26
Machinery & bldg leases	3.45	1.82	2.54
RE & pers. property taxes	5.29	6.27	5.67
Farm insurance	2.76	2.76	2.09
Utilities	2.40	3.06	2.05
Dues & professional fees	1.36	0.43	1.56
Interest	27.55	29.21	27.67
Mach & bldg depreciation	16.68	21.87	16.47
Miscellaneous	3.03	4.41	4.00
Total overhead expenses per acre	72.33	78.86	72.04
Total listed expenses per acre	210.21	223.01	195.24
Net return per acre	-18.17	-101.64	51.76
Total direct expense per bushel	1.32	2.11	0.92
Total listed expense per bushel	2.02	3.26	1.46
Net return per bushel	-0.17	-1.49	0.39
Breakeven yield per acre	114.89	128.73	102.98
Est. labor hours per acre	5.57	4.82	5.25
Net return including govt. payments	6.14	-85.95	74.63
Lbr & mgt charge per acre	28.17	33.32	28.08
Net return over lbr & mgt	-22.04	-119.27	46.55

Crop Enterprise Analysis, 1999  
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CORN ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	124	24	29
Number of farms	107	21	21
Acres	85.87	67.05	80.45
Yield per acre (bushel)	106.33	84.45	137.06
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.68	1.66	1.73
Total product return per acre	178.75	139.86	236.74
Miscellaneous income per acre	24.51	8.87	39.03
Gross return per acre	203.25	148.72	275.76
Direct expenses per acre			
Seed	26.28	26.24	28.35
Fertilizer	26.91	25.44	26.26
Crop chemicals	25.83	28.82	23.23
Crop insurance	3.93	5.49	2.85
Drying fuel	5.45	5.71	6.78
Fuel & oil	10.84	11.92	10.85
Repairs	25.28	31.74	23.17
Custom hire	3.69	10.19	0.99
Hired labor	0.36	0.36	0.00
Land rent	37.23	35.91	40.49
Machinery & bldg leases	0.12	0.72	0.05
Marketing	0.15	0.23	0.42
Operating interest	6.21	6.22	7.16
Miscellaneous	0.68	0.47	0.89
Total direct expenses per acre	172.96	189.45	171.50
Return over direct expenses per acre	30.30	-40.72	104.27
Overhead expenses per acre			
Custom hire	0.88	0.19	1.21
Hired labor	10.84	9.21	21.18
Machinery & bldg leases	4.35	2.36	3.75
Farm insurance	2.07	2.15	2.94
Utilities	1.93	1.51	2.69
Dues & professional fees	1.44	0.88	1.75
Interest	6.88	12.22	6.22
Mach & bldg depreciation	13.58	12.91	17.49
Miscellaneous	2.86	2.34	4.42
Total overhead expenses per acre	44.83	43.77	61.66
Total listed expenses per acre	217.79	233.22	233.16
Net return per acre	-14.54	-84.50	42.61
Total direct expense per bushel	1.63	2.24	1.25
Total listed expense per bushel	2.05	2.76	1.70
Net return per bushel	-0.14	-1.00	0.31
Breakeven yield per acre	114.98	135.48	112.39
Est. labor hours per acre	4.21	5.04	3.28
Net return including govt. payments	9.18	-60.26	70.59
Lbr & mgt charge per acre	19.77	23.86	16.21
Net return over lbr & mgt	-10.59	-84.13	54.38

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CORN SILAGE ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	157	33	31
Number of farms	155	31	31
Acres	47.02	54.54	48.80
Yield per acre (ton)	14.34	9.70	20.74
Operators share of yield %	100.00	100.00	100.00
Value per ton	19.12	17.22	19.69
Total product return per acre	274.24	166.98	408.34
Miscellaneous income per acre	23.78	24.85	21.85
Gross return per acre	298.02	191.83	430.18
Direct expenses per acre			
Seed	22.35	22.15	21.82
Fertilizer	23.24	26.10	24.83
Crop chemicals	23.38	19.81	22.59
Crop insurance	3.45	4.50	2.70
Fuel & oil	13.16	12.86	12.10
Repairs	33.49	32.98	29.49
Custom hire	13.71	30.71	4.62
Hired labor	0.15	0.21	0.32
Machinery & bldg leases	0.14	0.22	0.00
Operating interest	5.29	2.91	1.84
Miscellaneous	3.89	9.15	1.52
Total direct expenses per acre	142.27	161.60	121.83
Return over direct expenses per acre	155.75	30.23	308.36
Overhead expenses per acre			
Custom hire	1.77	0.65	1.21
Hired labor	10.81	10.33	9.11
Machinery & bldg leases	3.40	0.45	2.47
RE & pers. property taxes	4.46	4.23	4.28
Farm insurance	2.91	2.44	2.92
Utilities	2.21	2.88	1.67
Dues & professional fees	1.01	0.82	1.91
Interest	27.34	18.63	31.74
Mach & bldg depreciation	22.76	27.16	20.60
Miscellaneous	3.40	2.78	3.88
Total overhead expenses per acre	80.07	70.37	79.80
Total listed expenses per acre	222.34	231.97	201.63
Net return per acre	75.68	-40.14	228.56
Total direct expense per ton	9.92	16.66	5.87
Total listed expense per ton	15.50	23.92	9.72
Net return per ton	5.28	-4.14	11.02
Breakeven yield per acre	10.39	12.03	9.13
Est. labor hours per acre	6.62	5.59	6.09
Net return including govt. payments	97.16	-18.95	253.43
Lbr & mgt charge per acre	28.85	26.85	30.47
Net return over lbr & mgt	68.31	-45.80	222.96

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CORN SILAGE ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	93	19	18
Number of farms	90	18	18
Acres	44.22	63.63	34.63
Yield per acre (ton)	14.08	10.62	19.68
Operators share of yield %	100.00	100.00	100.00
Value per ton	18.91	15.34	19.94
Total product return per acre	266.30	163.03	392.31
Miscellaneous income per acre	22.54	26.95	20.59
Gross return per acre	288.84	189.97	412.90
Direct expenses per acre			
Seed	23.18	24.83	20.66
Fertilizer	21.21	21.29	15.53
Crop chemicals	24.52	21.20	24.67
Crop insurance	3.23	3.10	1.45
Fuel & oil	11.96	11.65	11.60
Repairs	30.78	26.63	29.98
Custom hire	8.02	8.83	7.50
Hired labor	0.02	0.00	0.14
Land rent	27.65	33.20	22.90
Machinery & bldg leases	0.35	0.69	0.95
Operating interest	4.16	5.85	1.10
Miscellaneous	2.33	1.33	1.53
Total direct expenses per acre	157.40	158.60	138.03
Return over direct expenses per acre	131.44	31.37	274.87
Overhead expenses per acre			
Custom hire	1.05	0.62	3.16
Hired labor	9.09	6.11	12.57
Machinery & bldg leases	2.38	1.86	2.28
Farm insurance	2.88	1.51	2.79
Utilities	1.84	1.60	2.40
Dues & professional fees	1.10	1.19	3.22
Interest	9.89	5.95	10.34
Mach & bldg depreciation	17.34	15.31	20.17
Miscellaneous	2.11	2.09	3.82
Total overhead expenses per acre	47.69	36.24	60.76
Total listed expenses per acre	205.09	194.84	198.79
Net return per acre	83.75	-4.86	214.11
Total direct expense per ton	11.18	14.93	7.01
Total listed expense per ton	14.56	18.34	10.10
Net return per ton	5.95	-0.46	10.88
Breakeven yield per acre	9.66	10.94	8.94
Est. labor hours per acre	5.44	3.58	6.61
Net return including govt. payments	98.61	8.18	231.78
Lbr & mgt charge per acre	22.50	17.55	29.88
Net return over lbr & mgt	76.11	-9.37	201.90

Crop Enterprise Analysis, 1999  
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SOYBEANS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	76	11	16
Number of farms	54	11	11
Acres	104.62	150.38	115.05
Yield per acre (bushel)	41.30	24.96	43.10
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.31	4.17	4.34
Total product return per acre	136.74	103.99	187.19
Miscellaneous income per acre	25.82	16.33	37.48
Gross return per acre	162.56	120.32	224.67
Direct expenses per acre			
Seed	13.53	11.16	13.20
Fertilizer	7.63	10.74	2.41
Crop chemicals	21.80	21.33	21.28
Crop insurance	4.71	6.79	2.95
Drying fuel	0.06	0.00	0.00
Fuel & oil	8.10	8.41	7.78
Repairs	16.43	20.00	15.60
Custom hire	1.26	0.44	0.63
Hired labor	0.59	0.45	1.54
Machinery & bldg leases	0.21	0.55	0.00
Marketing	0.26	0.00	1.08
Operating interest	7.44	12.49	7.82
Miscellaneous	0.19	0.23	0.00
Total direct expenses per acre	82.22	92.60	74.28
Return over direct expenses per acre	80.34	27.72	150.39
Overhead expenses per acre			
Custom hire	0.77	1.80	0.51
Hired labor	6.24	1.03	3.69
Machinery & bldg leases	2.65	2.01	4.00
RE & pers. property taxes	7.31	8.55	9.07
Farm insurance	2.34	1.72	4.09
Utilities	2.55	3.54	2.96
Dues & professional fees	1.70	1.70	2.49
Interest	22.89	18.88	29.07
Mach & bldg depreciation	11.03	10.29	10.83
Miscellaneous	2.89	2.66	3.40
Total overhead expenses per acre	60.37	52.18	70.11
Total listed expenses per acre	142.59	144.78	144.38
Net return per acre	19.97	-24.46	80.28
Total direct expense per bushel	1.99	3.71	1.72
Total listed expense per bushel	3.45	5.80	3.35
Net return per bushel	0.48	-0.98	1.86
Breakeven yield per acre	35.27	30.83	24.61
Est. labor hours per acre	2.57	2.67	1.97
Net return including govt. payments	52.65	6.92	112.50
Lbr & mgt charge per acre	19.00	23.66	19.10
Net return over lbr & mgt	33.65	-16.75	93.40

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SOYBEANS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	134	30	23
Number of farms	77	15	15
Acres	171.90	154.08	112.80
Yield per acre (bushel)	33.62	20.77	38.68
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.69	4.07	4.21
Total product return per acre	123.91	84.42	162.63
Miscellaneous income per acre	39.78	31.38	48.79
Gross return per acre	163.69	115.80	211.42
Direct expenses per acre			
Seed	14.30	13.75	12.82
Fertilizer	9.49	10.54	4.72
Crop chemicals	23.03	21.63	18.95
Crop insurance	6.99	7.85	6.66
Drying fuel	0.19	0.03	0.25
Fuel & oil	8.22	7.25	7.15
Repairs	16.34	17.90	12.25
Custom hire	1.84	2.52	2.03
Hired labor	0.37	0.50	1.02
Land rent	41.35	37.03	48.84
Machinery & bldg leases	0.17	0.00	0.00
Marketing	0.04	0.00	0.04
Operating interest	5.59	6.38	3.86
Miscellaneous	0.08	0.12	0.04
Total direct expenses per acre	127.99	125.50	118.64
Return over direct expenses per acre	35.71	-9.70	92.78
Overhead expenses per acre			
Custom hire	0.45	0.19	0.79
Hired labor	5.76	3.36	5.12
Machinery & bldg leases	4.65	2.07	3.15
Farm insurance	2.00	2.17	2.10
Utilities	1.90	1.25	2.04
Dues & professional fees	1.73	1.23	1.31
Interest	4.29	5.60	2.91
Mach & bldg depreciation	8.48	7.35	10.17
Miscellaneous	2.42	0.89	2.41
Total overhead expenses per acre	31.68	24.11	29.99
Total listed expenses per acre	159.66	149.61	148.63
Net return per acre	4.03	-33.81	62.79
Total direct expense per bushel	3.81	6.04	3.07
Total listed expense per bushel	4.75	7.20	3.84
Net return per bushel	0.12	-1.63	1.62
Breakeven yield per acre	32.53	29.08	23.74
Est. labor hours per acre	2.02	2.17	1.93
Net return including govt. payments	35.64	-1.14	92.38
Lbr & mgt charge per acre	15.27	16.44	15.20
Net return over lbr & mgt	20.37	-17.58	77.18

Crop Enterprise Analysis, 1999  
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 (Average of All Farms)

RED CLOVER SEED ON OWNED AND CASH RENTED LAND

	Owned Land Average For All Farms	Cash Rented Land Average For All Farms
Number of fields	5	6
Number of farms	5	6
Acres		
Yield per acre (lb)	72.24	42.38
Operators share of yield %	105.27	56.19
Value per lb	100.00	100.00
Total product return per acre	0.35	0.37
Miscellaneous income per acre	37.10	20.79
Gross return per acre	2.62	21.32
	39.72	42.11
Direct expenses per acre		
Seed	2.32	3.75
Fertilizer	6.30	5.12
Crop chemicals	7.93	1.08
Crop insurance	0.21	0.00
Fuel & oil	4.87	6.77
Repairs	9.73	14.59
Custom hire	2.33	1.30
Land rent	0.00	9.30
Operating interest	1.12	0.42
Total direct expenses per acre	34.80	42.32
Return over direct expenses per acre	4.91	-0.21
Overhead expenses per acre		
Custom hire	0.16	0.02
Hired labor	1.00	0.58
Machinery & bldg leases	0.60	0.17
RE & pers. property taxes	3.42	0.00
Farm insurance	1.77	0.53
Utilities	2.11	6.84
Dues & professional fees	0.55	0.28
Interest	6.61	2.10
Mach & bldg depreciation	8.18	3.24
Miscellaneous	1.18	2.31
Total overhead expenses per acre	25.59	16.06
Total listed expenses per acre	60.40	58.38
Net return per acre	-20.68	-16.27
Total direct expense per lb	0.33	0.75
Total listed expense per lb	0.57	1.04
Net return per lb	-0.20	-0.29
Breakeven yield per acre	163.94	100.17
Est. labor hours per acre	2.71	1.23
Net return including govt. payments	-2.66	9.94
Lbr & mgt charge per acre	19.77	46.36
Net return over lbr & mgt	-22.43	-36.42

Crop Enterprise Analysis, 1999  
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 (Average of All Farms)

KENTUCKY BLUE GRASS SEED ON OWNED AND CASH RENTED LAND

	Owned Land Average For All Farms	Cash Rented Land Average For All Farms
Number of fields	6	11
Number of farms	6	6
Acres	112.67	67.82
Yield per acre (lb)	387.09	332.55
Operators share of yield %	100.00	100.00
Value per lb	0.74	0.76
Total product return per acre	287.99	251.26
Miscellaneous income per acre	0.00	0.00
Gross return per acre	287.99	251.26
Direct expenses per acre		
Seed	0.37	0.23
Fertilizer	31.59	30.10
Crop chemicals	11.46	10.33
Crop insurance	0.70	0.33
Fuel & oil	4.33	4.81
Repairs	7.69	5.56
Custom hire	12.20	4.42
Land rent	0.00	26.81
Machinery & bldg leases	0.13	0.83
Operating interest	1.55	1.21
Miscellaneous	1.06	0.68
Total direct expenses per acre	71.09	85.30
Return over direct expenses per acre	216.91	165.96
Overhead expenses per acre		
Custom hire	0.61	0.30
Hired labor	1.98	2.23
Machinery & bldg leases	0.25	0.20
RE & pers. property taxes	4.70	0.00
Farm insurance	1.41	1.36
Utilities	1.57	1.08
Dues & professional fees	0.33	0.46
Interest	9.12	1.25
Mach & bldg depreciation	6.54	6.17
Miscellaneous	0.59	0.68
Total overhead expenses per acre	27.10	13.72
Total listed expenses per acre	98.18	99.02
Net return per acre	189.81	152.24
Total direct expense per lb	0.18	0.26
Total listed expense per lb	0.25	0.30
Net return per lb	0.49	0.46
Breakeven yield per acre	131.97	131.05
Est. labor hours per acre	1.87	1.42
Net return including govt. payments	210.97	173.53
Lbr & mgt charge per acre	14.77	5.91
Net return over lbr & mgt	196.19	167.62

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 (Farms sorted by Return to Overhead)

ALFALFA HAY ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	159	33	30
Number of farms	149	30	30
Acres	62.03	62.97	55.15
Yield per acre (ton)	3.45	2.24	4.97
Operators share of yield %	100.00	100.00	100.00
Value per ton	59.19	38.95	70.95
Other product return per acre	0.39	0.00	0.00
Total product return per acre	204.70	87.23	352.77
Miscellaneous income per acre	3.64	0.26	0.00
Gross return per acre	208.34	87.49	352.77
Direct expenses per acre			
Seed	1.51	0.98	0.52
Fertilizer	12.80	12.27	9.85
Crop chemicals	1.48	0.46	2.21
Crop insurance	0.87	0.16	1.48
Fuel & oil	13.05	14.09	11.29
Repairs	31.99	31.32	27.05
Custom hire	5.81	1.41	3.98
Hired labor	0.20	0.00	0.99
Machinery & bldg leases	0.41	0.00	0.00
Marketing	0.01	0.00	0.00
Operating interest	4.51	5.34	3.24
Miscellaneous	2.01	1.58	1.87
Total direct expenses per acre	74.66	67.62	62.48
Return over direct expenses per acre	133.68	19.87	290.29
Overhead expenses per acre			
Custom hire	1.49	1.97	2.97
Hired labor	7.70	6.22	10.54
Machinery & bldg leases	3.20	0.69	4.68
RE & pers. property taxes	4.49	4.51	4.65
Farm insurance	2.83	1.74	3.21
Utilities	2.80	3.93	2.11
Dues & professional fees	1.07	1.30	0.76
Interest	25.93	15.87	30.38
Mach & bldg depreciation	18.93	16.40	18.28
Miscellaneous	2.94	2.21	3.82
Total overhead expenses per acre	71.38	54.84	81.40
Total listed expenses per acre	146.03	122.46	143.88
Net return per acre	62.31	-34.97	208.88
Total direct expense per ton	21.63	30.19	12.57
Total listed expense per ton	42.31	54.68	28.94
Net return per ton	18.05	-15.62	42.01
Breakeven yield per acre	2.40	3.14	2.03
Est. labor hours per acre	5.54	4.92	7.13
Net return including govt. payments	75.33	-25.84	219.09
Lbr & mgt charge per acre	29.17	28.21	30.04
Net return over lbr & mgt	46.15	-54.05	189.05

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 (Farms sorted by Return to Overhead)

ALFALFA HAY ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	116	30	22
Number of farms	100	20	20
Acres	63.01	79.46	57.37
Yield per acre (ton)	2.93	1.88	4.60
Operators share of yield %	100.00	100.00	100.00
Value per ton	58.15	34.81	70.35
Total product return per acre	170.29	65.38	323.70
Miscellaneous income per acre	8.93	3.06	0.00
Gross return per acre	179.22	68.44	323.70
Direct expenses per acre			
Seed	1.05	1.35	0.05
Fertilizer	8.12	8.98	6.17
Crop chemicals	1.72	4.12	0.86
Crop insurance	0.68	0.66	0.16
Fuel & oil	10.33	9.22	10.82
Repairs	26.80	20.80	29.67
Custom hire	4.88	6.60	2.43
Hired labor	0.00	0.00	0.00
Land rent	32.23	29.59	36.13
Machinery & bldg leases	0.24	0.72	0.00
Operating interest	4.63	5.15	2.08
Miscellaneous	1.55	0.32	1.60
Total direct expenses per acre	92.24	87.52	89.96
Return over direct expenses per acre	86.98	-19.07	233.74
Overhead expenses per acre			
Custom hire	1.79	2.69	3.10
Hired labor	7.83	2.98	15.02
Machinery & bldg leases	2.65	3.09	1.17
Farm insurance	2.12	1.67	2.47
Utilities	2.05	1.84	1.63
Dues & professional fees	1.70	1.47	3.96
Interest	9.41	8.29	9.61
Mach & bldg depreciation	16.72	13.49	19.41
Miscellaneous	3.01	4.47	2.44
Total overhead expenses per acre	47.28	39.98	58.81
Total listed expenses per acre	139.52	127.50	148.77
Net return per acre	39.70	-59.06	174.93
Total direct expense per ton	31.50	46.60	19.55
Total listed expense per ton	47.64	67.89	32.33
Net return per ton	13.56	-31.44	38.02
Breakeven yield per acre	2.25	3.57	2.11
Est. labor hours per acre	4.41	2.71	5.53
Net return including govt. payments	55.85	-36.69	185.03
Lbr & mgt charge per acre	23.78	23.22	20.18
Net return over lbr & mgt	32.07	-59.90	164.86

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

MIXED HAY ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	69	14	13
Number of farms	67	13	13
Acres	108.69	84.90	67.40
Yield per acre (ton)	2.11	1.58	2.90
Operators share of yield %	100.00	100.00	100.00
Value per ton	38.14	34.39	41.49
Total product return per acre	80.44	54.39	120.13
Miscellaneous income per acre	0.36	0.06	0.00
Gross return per acre	80.80	54.45	120.13
Direct expenses per acre			
Seed	0.60	3.36	0.00
Fertilizer	8.12	12.09	7.00
Crop chemicals	0.02	0.11	0.06
Crop insurance	0.06	0.00	0.11
Fuel & oil	7.43	10.57	5.89
Repairs	18.53	28.10	12.88
Custom hire	0.55	0.42	0.00
Machinery & bldg leases	0.06	0.00	0.00
Operating interest	1.68	0.12	0.37
Miscellaneous	2.09	1.10	1.29
Total direct expenses per acre	39.13	55.88	27.60
Return over direct expenses per acre	41.68	-1.42	92.53
Overhead expenses per acre			
Custom hire	0.49	0.87	1.37
Hired labor	2.95	0.63	5.32
Machinery & bldg leases	0.37	0.00	0.20
RE & pers. property taxes	4.68	4.65	4.06
Farm insurance	1.64	1.36	0.62
Utilities	1.54	2.33	0.54
Dues & professional fees	0.49	1.45	0.17
Interest	10.99	4.70	17.14
Mach & bldg depreciation	13.42	12.29	13.68
Miscellaneous	1.93	1.71	2.36
Total overhead expenses per acre	38.50	29.99	45.47
Total listed expenses per acre	77.62	85.87	73.07
Net return per acre	3.18	-31.42	47.05
Total direct expense per ton	18.55	35.32	9.53
Total listed expense per ton	36.80	54.28	25.24
Net return per ton	1.51	-19.86	16.25
Breakeven yield per acre	2.03	2.50	1.76
Est. labor hours per acre	3.55	5.46	3.64
Net return including govt. payments	12.27	-28.96	59.80
Lbr & mgt charge per acre	17.58	26.34	17.71
Net return over lbr & mgt	-5.31	-55.30	42.09

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
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 (Farms sorted by Return to Overhead)

MIXED HAY ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	54	13	10
Number of farms	50	10	10
Acres	91.12	65.02	119.56
Yield per acre (ton)	2.06	0.95	3.03
Operators share of yield %	100.00	100.00	100.00
Value per ton	38.03	30.59	42.61
Total product return per acre	78.52	29.09	129.16
Miscellaneous income per acre	1.04	-0.00	0.00
Gross return per acre	79.56	29.09	129.16
Direct expenses per acre			
Seed	0.44	0.00	0.97
Fertilizer	5.51	8.95	3.46
Crop chemicals	0.08	0.45	0.00
Crop insurance	0.18	0.00	0.00
Fuel & oil	8.22	8.36	8.09
Repairs	16.13	15.10	14.87
Custom hire	0.69	1.27	0.00
Land rent	14.70	5.51	20.47
Operating interest	1.91	0.72	1.36
Miscellaneous	0.78	0.97	0.48
Total direct expenses per acre	48.65	41.33	49.71
Return over direct expenses per acre	30.91	-12.24	79.46
Overhead expenses per acre			
Custom hire	0.82	0.29	1.99
Hired labor	4.22	0.32	11.54
Machinery & bldg leases	0.57	0.12	0.72
Farm insurance	1.00	0.30	0.51
Utilities	1.60	1.31	1.87
Dues & professional fees	0.30	0.67	0.34
Interest	5.51	3.02	9.90
Mach & bldg depreciation	12.51	10.05	14.64
Miscellaneous	2.07	0.98	4.33
Total overhead expenses per acre	28.58	17.05	45.85
Total listed expenses per acre	77.23	58.38	95.55
Net return per acre	2.33	-29.29	33.61
Total direct expense per ton	23.56	43.46	16.40
Total listed expense per ton	37.41	61.40	31.52
Net return per ton	1.13	-30.81	11.09
Break-even yield per acre	2.00	1.91	2.24
Est. labor hours per acre	3.21	3.56	3.15
Net return including govt. payments	12.91	-27.51	53.36
Lbr & mgt charge per acre	15.60	18.39	18.22
Net return over lbr & mgt	-2.69	-45.89	35.14

Crop Enterprise Analysis, 1999  
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 (Farms sorted by Return to Overhead)

GRASS HAY ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	45	9	9
Number of farms	44	9	9
Acres	56.91	43.33	13.41
Yield per acre (ton)	2.05	0.98	3.50
Operators share of yield %	100.00	100.00	100.00
Value per ton	31.59	23.67	44.18
Total product return per acre	64.79	23.14	154.83
Miscellaneous income per acre	0.00	0.00	0.00
Gross return per acre	64.79	23.14	154.83
Direct expenses per acre			
Fertilizer	0.56	0.00	0.00
Crop insurance	0.01	0.00	0.00
Fuel & oil	5.67	9.98	8.41
Repairs	14.53	24.15	22.69
Custom hire	0.75	1.47	0.51
Hired labor	0.02	0.00	0.00
Operating interest	0.97	0.90	0.74
Miscellaneous	0.77	0.87	1.00
Total direct expenses per acre	23.27	37.37	33.35
Return over direct expenses per acre	41.51	-14.24	121.48
Overhead expenses per acre			
Custom hire	0.06	0.08	0.00
Hired labor	1.86	2.95	10.42
Machinery & bldg leases	1.41	0.03	1.95
RE & pers. property taxes	3.22	5.00	3.25
Farm insurance	0.82	0.54	3.80
Utilities	1.27	1.89	1.54
Dues & professional fees	0.31	0.31	0.37
Interest	14.51	17.51	21.11
Mach & bldg depreciation	5.10	9.47	8.60
Miscellaneous	0.62	1.01	0.29
Total overhead expenses per acre	29.17	38.79	51.34
Total listed expenses per acre	52.44	76.16	84.69
Net return per acre	12.34	-53.03	70.13
Total direct expense per ton	11.35	38.23	9.52
Total listed expense per ton	25.57	77.90	24.17
Net return per ton	6.02	-54.24	20.01
Breakeven yield per acre	1.66	3.22	1.92
Est. labor hours per acre	2.34	5.29	4.77
Net return including govt. payments	17.44	-47.88	70.13
Lbr & mgt charge per acre	11.58	22.04	21.74
Net return over lbr & mgt	5.86	-69.92	48.39

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
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 (Farms sorted by Return to Overhead)

GRASS HAY ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	32	7	6
Number of farms	31	6	6
Acres	61.38	31.79	29.63
Yield per acre (ton)	1.87	0.91	2.72
Operators share of yield %	100.00	100.00	100.00
Value per ton	34.43	26.59	43.02
Total product return per acre	64.24	24.09	116.85
Miscellaneous income per acre	0.07	0.62	0.00
Gross return per acre	64.31	24.71	116.85
Direct expenses per acre			
Seed	0.10	0.88	0.00
Fertilizer	0.99	3.49	4.37
Crop chemicals	0.20	1.80	0.00
Fuel & oil	5.88	5.44	5.02
Repairs	12.94	10.47	19.67
Custom hire	1.22	6.54	0.00
Land rent	9.73	16.36	13.26
Operating interest	1.40	1.05	2.39
Miscellaneous	0.76	0.33	0.18
Total direct expenses per acre	33.24	46.35	44.89
Return over direct expenses per acre	31.07	-21.64	71.96
Overhead expenses per acre			
Custom hire	0.05	0.47	0.00
Hired labor	2.18	1.48	3.82
Machinery & bldg leases	1.27	0.23	1.14
Farm insurance	1.01	1.04	1.19
Utilities	1.24	1.09	0.70
Dues & professional fees	0.26	0.50	0.02
Interest	6.22	3.31	6.96
Mach & bldg depreciation	7.54	3.88	11.32
Miscellaneous	0.87	0.49	0.52
Total overhead expenses per acre	20.66	12.51	25.66
Total listed expenses per acre	53.90	58.86	70.55
Net return per acre	10.41	-34.15	46.30
Total direct expense per ton	17.81	51.17	16.53
Total listed expense per ton	28.88	64.99	25.97
Net return per ton	5.58	-37.70	17.04
Break-even yield per acre	1.56	2.19	1.64
Est. labor hours per acre	1.68	1.47	2.88
Net return including govt. payments	15.58	-20.44	46.30
Lbr & mgt charge per acre	9.18	9.92	11.89
Net return over lbr & mgt	6.40	-30.36	34.41

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Average of All Farms)

CLOVER HAY ON OWNED AND CASH RENTED LAND

	Owned Land Average For All Farms	Cash Rented Land Average For All Farms
Number of fields	10	7
Number of farms	10	6
Acres		
Yield per acre (ton)	24.60	25.59
Operators share of yield %	2.89	3.21
Value per ton	100.00	100.00
Total product return per acre	51.09	54.75
Miscellaneous income per acre	147.87	176.00
Gross return per acre	13.12	23.76
	160.99	199.77
Direct expenses per acre		
Crop chemicals	0.65	0.00
Seed	0.00	2.71
Fertilizer	0.00	11.16
Fuel & oil	8.98	14.21
Repairs	23.50	32.08
Custom hire	1.88	0.87
Land rent	0.00	17.98
Operating interest	0.41	1.62
Miscellaneous	1.19	0.32
Total direct expenses per acre	36.62	80.96
Return over direct expenses per acre	124.37	118.81
Overhead expenses per acre		
Custom hire	0.12	0.00
Hired labor	1.37	1.53
Machinery & bldg leases	0.13	0.00
RE & pers. property taxes	4.91	0.00
Farm insurance	1.61	3.13
Utilities	0.66	4.17
Dues & professional fees	0.11	0.15
Interest	29.13	6.58
Mach & bldg depreciation	6.82	16.16
Miscellaneous	0.59	3.75
Total overhead expenses per acre	45.44	35.47
Total listed expenses per acre	82.06	116.43
Net return per acre	78.94	83.33
Total direct expense per ton	12.65	25.19
Total listed expense per ton	28.35	36.22
Net return per ton	27.27	25.92
Breakeven yield per acre	1.35	1.69
Est. labor hours per acre	5.06	4.52
Net return including govt. payments	80.43	92.80
Lbr & mgt charge per acre	22.45	23.61
Net return over lbr & mgt	57.98	69.19

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Average of All Farms)

OATLAGE ON OWNED AND CASH RENTED LAND

	Owned Land Average For All Farms	Cash Rented Land Average For All Farms
Number of fields	9	6
Number of farms	9	6
Acres	21.97	33.42
Yield per acre (ton)	4.19	5.85
Operators share of yield %	100.00	100.00
Value per ton	22.16	24.77
Total product return per acre	92.96	144.91
Miscellaneous income per acre	23.44	3.56
Gross return per acre	116.40	148.46
Direct expenses per acre		
Seed	18.01	19.75
Fertilizer	16.62	15.09
Crop chemicals	1.62	2.24
Crop insurance	0.79	0.00
Fuel & oil	8.03	8.71
Repairs	29.06	32.48
Custom hire	1.01	0.00
Land rent	0.00	28.58
Operating interest	0.94	2.28
Miscellaneous	1.04	1.01
Total direct expenses per acre	77.13	110.15
Return over direct expenses per acre	39.27	38.32
Overhead expenses per acre		
Custom hire	0.72	0.23
Hired labor	6.33	7.12
Machinery & bldg leases	1.04	0.71
RE & pers. property taxes	5.11	0.00
Farm insurance	2.86	2.77
Utilities	2.27	1.31
Dues & professional fees	0.25	0.06
Interest	33.23	7.93
Mach & bldg depreciation	13.54	15.24
Miscellaneous	2.94	1.50
Total overhead expenses per acre	68.28	36.87
Total listed expenses per acre	145.40	147.02
Net return per acre	-29.00	1.44
Total direct expense per ton	18.39	18.83
Total listed expense per ton	34.66	25.13
Net return per ton	-6.91	0.25
Breakeven yield per acre	5.50	5.79
Est. labor hours per acre	3.44	2.64
Net return including govt. payments	-18.95	12.92
Lbr & mgt charge per acre	21.50	16.25
Net return over lbr & mgt	-40.45	-3.33

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

OATS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	55	12	10
Number of farms	51	10	10
Acres	40.70	44.92	24.25
Yield per acre (bushel)	33.20	24.75	53.11
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.05	1.16	1.07
Total product return per acre	34.84	28.71	56.80
Miscellaneous income per acre	24.47	5.48	54.64
Gross return per acre	59.31	34.19	111.45
Direct expenses per acre			
Seed	6.97	9.22	4.12
Fertilizer	13.36	17.47	1.09
Crop chemicals	3.30	4.84	1.62
Crop insurance	2.11	1.19	2.75
Fuel & oil	7.76	7.86	8.55
Repairs	17.20	18.79	18.80
Custom hire	1.53	0.98	3.02
Hired labor	0.05	0.00	0.05
Operating interest	3.15	4.98	1.50
Miscellaneous	0.47	0.81	0.63
Total direct expenses per acre	55.90	66.15	42.14
Return over direct expenses per acre	3.41	-31.95	69.31
Overhead expenses per acre			
Custom hire	0.57	0.47	0.00
Hired labor	4.74	10.27	3.92
Machinery & bldg leases	1.42	3.87	0.92
RE & pers. property taxes	5.39	4.82	3.23
Farm insurance	2.00	2.54	1.90
Utilities	1.25	1.23	1.43
Dues & professional fees	0.62	0.88	0.44
Interest	15.08	19.04	18.82
Mach & bldg depreciation	12.11	14.11	13.50
Miscellaneous	1.71	2.11	1.17
Total overhead expenses per acre	44.89	59.35	45.31
Total listed expenses per acre	100.79	125.50	87.45
Net return per acre	-41.48	-91.30	23.99
Total direct expense per bushel	1.68	2.67	0.79
Total listed expense per bushel	3.04	5.07	1.65
Net return per bushel	-1.25	-3.69	0.45
Breakeven yield per acre	72.74	103.45	30.68
Est. labor hours per acre	3.27	3.16	5.27
Net return including govt. payments	-27.74	-80.35	40.16
Lbr & mgt charge per acre	16.78	18.77	21.30
Net return over lbr & mgt	-44.52	-99.12	18.86

Crop Enterprise Analysis, 1999  
 Western Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

	OATS ON CASH RENTED LAND	Average Of All Farms	Average Of Low 20%	Average High
Number of fields		41	8	
Number of farms		40	8	
Acres				
Yield per acre	bushel)	36.02	48.53	
Operators share	of yield %	39.30	34.45	
Value per bushel		100.00	100.00	
Total product	return per acre	0.97	0.91	
Miscellaneous	income per acre	38.04	31.39	
Gross return	per acre	21.79	9.22	40.61
Direct expenses per acre		59.83		
Seed		7.61	11.50	
Fertilizer	cals	10.42	16.93	
Crop chem	ance	2.64	3.53	
Crop insur		1.57	1.19	
Fuel & oil		6.80	8.13	
Repairs		17.56	14.04	
Custom hire		3.52	7.75	
Hired labor		0.11	0.35	
Land rent	interest	19.84	23.97	
Operat	ng interest	1.89	3.13	
Miscel	laneous	0.55	0.00	
Total direct expenses per acre		72.52	90.51	
Overhead expenses per acre		-12.70	-49.91	
Return per acre		0.19	0.	
Overhead expenses per acre		2.74	3.	
Cust om hire		0.68	0	
Hired labor		1.72	2	
Ma chinery & bldg leases		1.61		
Farm insurance		0.26		
Utilities		4.24		
Prof fees		8.40		
Interest		1.83		
Bach & bldg depreciation		21.67		
Miscellaneous		94.19		
Total overhead expenses per acre		-34.37		
Total listed expenses per acre		1.85		
Net return per acre		2.40		
Breakeven yield per acre		-0.87		
Est. labor hours per acre		74.82		
Total direct expense per bushel		2.55		
Total listed expense per bushel		-17.61		
Net return per bushel		13.70		
Breakeven yield per acre		-31.31		
Est. labor hours per acre				
Net return including govt. payments				
Lbr & mgt charge per acre				
Net return over lbr & mgt				

North ~~W~~~~E~~~~S~~~~N~~ Crop Enterprise Analysis, 1999  
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 land Community and Technical College  
 (Average of All Farms)  
SUNFLOWERS ON CASH RENTED LAND

	Average For All Farms
cre (cwt)	14
hare of Yield %	14
wt	14
ct return per acre	164.98
us income per acre	35.56
n per acre	100.00
nses per acre	2.11
r	75.03
icals	63.83
rance	138.86
el	15.42
l	19.30
re	10.82
interest	7.01
sous	1.55
t expenses per acre	7.45
direct expenses per acre	13.91
penses per acre	1.93
re	36.41
or	4.35
& bldg leases	0.04
rance	118.19
professional fees	20.67
ig depreciation	0.31
sous	2.48
ead expenses per acre	6.26
l expenses per acre	1.31
per acre	2.17
expense per cwt	0.75
l expense per cwt	4.25
per cwt	8.49
ield per acre	1.17
hours per acre	27.20
including govt. payments	145.38
large per acre	-6.52
over lbr & mgt	3.32
	4.09
	-0.18
	38.65
	1.99
	21.47
	17.10
	4.37

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Average of All Farms)

CONFECTIONARY SUNFLOWERS ON CASH RENTED LAND

	Average For All Farms
Number of fields	6
Number of farms	5
Acres	7.14
Yield per acre (cwt)	208.67
Operators share of yield %	100.00
Value per cwt	10.69
Total product return per acre	76.30
Miscellaneous income per acre	118.77
Gross return per acre	195.07
Direct expenses per acre	22.34
Seed	21.12
Fertilizer	13.92
Crop chemicals	6.83
Crop insurance	1.80
Drying fuel	9.71
Fuel & oil	18.91
Repairs	1.97
Custom hire	28.79
Land rent	2.60
Operating interest	127.98
Total direct expenses per acre	67.09
Return over direct expenses per acre	
Overhead expenses per acre	1.19
Custom hire	11.85
Hired labor	2.16
Machinery & bldg leases	3.43
Farm insurance	2.26
Utilities	1.33
Dues & professional fees	4.46
Interest	11.17
Mach & bldg depreciation	2.26
Miscellaneous	40.12
Total overhead expenses per acre	168.10
Total overhead expenses per acre	
Total listed expenses per acre	26.97
Net return per acre	
Total direct expense per cwt	17.93
Total listed expense per cwt	23.55
Net return per cwt	3.78
Breakeven yield per acre	4.61
Est. labor hours per acre	2.50
Net return including govt. payments	54.99
Lbr & mgt charge per acre	14.97
Net return over lbr & mgt	40.02

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

CRP ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	30	6	6
Number of farms	29	6	6
Acres			
Yield per acre	224.07	64.45	229.12
Operators share of yield %	40.42	25.55	58.38
Value per unit	100.00	100.00	100.00
Total product return per acre	1.03	1.01	1.00
Miscellaneous income per acre	41.44	25.71	58.38
Gross return per acre	4.48	0.00	0.00
	45.92	25.71	58.38
Direct expenses per acre			
Seed			
Fertilizer	3.37	14.06	4.27
Crop chemicals	0.58	1.54	0.00
Fuel & oil	0.71	2.82	0.00
Repairs	1.65	0.45	0.00
Operating interest	3.81	1.77	1.33
Miscellaneous	0.49	0.34	1.87
Total direct expenses per acre	0.01	0.16	0.89
Return over direct expenses per acre	10.61	21.13	8.35
	35.31	4.59	50.02
Overhead expenses per acre			
Custom hire			
Hired labor	0.21	0.08	0.15
Machinery & bldg leases	0.36	0.16	0.36
RE & pers. property taxes	0.37	0.36	0.05
Farm insurance	5.81	6.38	7.69
Utilities	2.00	3.33	1.49
Dues & professional fees	0.66	0.30	0.39
Interest	0.29	0.10	0.31
Mach & bldg depreciation	12.20	20.73	17.27
Miscellaneous	4.76	0.94	1.16
Total overhead expenses per acre	0.82	0.11	0.28
Total listed expenses per acre	27.48	32.52	29.14
Net return per acre	38.09	53.64	37.49
	7.83	-27.93	20.89
Total direct expense per unit			
Total listed expense per unit	0.26	0.83	0.14
Net return per unit	0.94	2.10	0.64
Breakeven yield per acre	0.19	-1.09	0.36
Est. labor hours per acre	32.79	53.31	37.49
	0.48	0.16	0.31
Net return including govt. payments			
Lbr & mgt charge per acre	7.85	-27.56	20.89
Net return over lbr & mgt	3.22	1.47	2.39
	4.63	-29.03	18.50

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Average of All Farms)

FALLOW ON OWNED LAND

	Average For All Farms
Number of fields	19
Number of farms	17
Acres	55.71
Yield per acre	0.00
Operators share of yield %	100.00
Value per unit	0.00
Total product return per acre	0.00
Miscellaneous income per acre	0.00
Gross return per acre	0.00
Direct expenses per acre	0.31
Seed	0.16
Fertilizer	0.12
Crop chemicals	5.96
Fuel & oil	7.91
Repairs	0.05
Custom hire	1.24
Operating interest	15.74
Total direct expenses per acre	15.74
Return over direct expenses per acre	-15.74
Overhead expenses per acre	1.18
Custom hire	1.69
Hired labor	0.03
Machinery & bldg leases	4.13
RE & pers. property taxes	2.58
Farm insurance	1.44
Utilities	0.78
Dues & professional fees	17.46
Interest	11.49
Mach & bldg depreciation	1.64
Miscellaneous	42.42
Total overhead expenses per acre	58.16
Total listed expenses per acre	58.16
Net return per acre	-58.16
Total direct expense per unit	0.00
Total listed expense per unit	0.00
Net return per unit	0.00
Breakeven yield per acre	0.00
Est. labor hours per acre	2.26
Net return including govt. payments	-43.90
Lbr & mgt charge per acre	16.53
Net return over lbr & mgt	-60.43

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

PREVENTED PLANTING ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	119	22	33
Number of farms	74	15	15
Acres	219.45	115.68	206.62
Yield per acre	0.00	0.00	0.00
Operators share of yield %	100.00	100.00	100.00
Value per unit	0.00	0.00	0.00
Total product return per acre	0.00	0.00	0.00
Miscellaneous income per acre	72.56	28.84	0.00
Gross return per acre	72.56	28.84	106.94
Direct expenses per acre			
Seed	0.46	0.27	1.04
Fertilizer	2.34	3.46	2.16
Crop chemicals	2.60	1.66	1.17
Crop insurance	4.64	2.67	6.57
Fuel & oil	4.87	6.82	5.11
Repairs	9.61	12.54	10.97
Custom hire	0.82	0.43	0.14
Operating interest	2.63	1.61	2.00
Miscellaneous	0.03	0.00	0.03
Total direct expenses per acre	27.98	29.45	29.19
Return over direct expenses per acre	44.58	-0.61	77.76
Overhead expenses per acre			
Custom hire	0.64	0.43	0.69
Hired labor	2.04	0.81	2.43
Machinery & bldg leases	1.07	0.81	1.76
RE & pers. property taxes	4.57	4.43	4.90
Farm insurance	2.01	1.83	2.25
Utilities	1.49	2.42	1.49
Dues & professional fees	0.75	0.97	0.91
Interest	12.37	15.74	9.94
Mach & bldg depreciation	9.99	7.93	15.26
Miscellaneous	1.31	2.91	1.32
Total overhead expenses per acre	36.23	38.28	40.94
Total listed expenses per acre	64.22	67.73	70.12
Net return per acre	8.34	-38.88	36.82
Total direct expense per unit	0.00	0.00	0.00
Total listed expense per unit	0.00	0.00	0.00
Net return per unit	0.00	0.00	0.00
Breakeven yield per acre	0.00	0.00	0.00
Est. labor hours per acre	1.61	2.47	1.29
Net return including govt. payments	30.17	-25.40	62.51
Lbr & mgt charge per acre	12.42	18.51	13.90
Net return over lbr & mgt	17.75	-43.91	48.61

Crop Enterprise Analysis, 1999  
 Northwestern Farm Business Management Averages  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

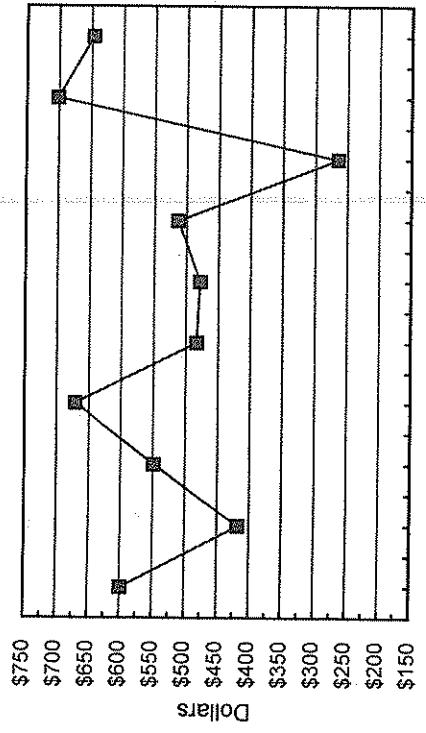
PREVENTED PLANTING ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	130	31	20
Number of farms	63	13	13
Acres	202.59	119.60	355.87
Yield per acre	0.00	0.00	0.00
Operators share of yield %	100.00	100.00	100.00
Value per unit	0.00	0.00	0.00
Total product return per acre	0.00	0.00	0.00
Miscellaneous income per acre	76.32	40.36	114.03
Gross return per acre	76.32	40.36	114.03
Direct expenses per acre			
Seed	0.30	0.01	0.61
Fertilizer	1.82	1.25	2.03
Crop chemicals	2.31	1.16	1.12
Crop insurance	4.21	2.06	5.52
Fuel & oil	4.71	6.60	3.57
Repairs	8.27	12.56	8.29
Custom hire	0.42	0.09	0.34
Land rent	23.30	23.59	22.40
Operating interest	2.45	2.76	2.85
Miscellaneous	0.09	0.00	0.16
Total direct expenses per acre	47.89	50.08	46.91
Return over direct expenses per acre	28.43	-9.72	67.13
Overhead expenses per acre			
Custom hire	0.98	0.77	0.51
Hired labor	2.11	1.07	2.59
Machinery & bldg leases	1.35	0.47	0.94
Farm insurance	1.52	1.51	1.85
Utilities	1.29	1.29	1.58
Dues & professional fees	0.75	0.78	0.98
Interest	2.93	3.31	4.12
Mach & bldg depreciation	7.77	5.86	8.71
Miscellaneous	1.14	1.19	1.03
Total overhead expenses per acre	19.86	16.26	22.31
Total listed expenses per acre	67.75	66.34	69.22
Net return per acre	8.57	-25.98	44.81
Total direct expense per unit	0.00	0.00	0.00
Total listed expense per unit	0.00	0.00	0.00
Net return per unit	0.00	0.00	0.00
Breakeven yield per acre	0.00	0.00	0.00
Est. labor hours per acre	1.32	1.71	1.32
Net return including govt. payments	33.99	-1.39	71.47
Lbr & mgt charge per acre	10.86	14.58	10.78
Net return over lbr & mgt	23.12	-15.97	60.69

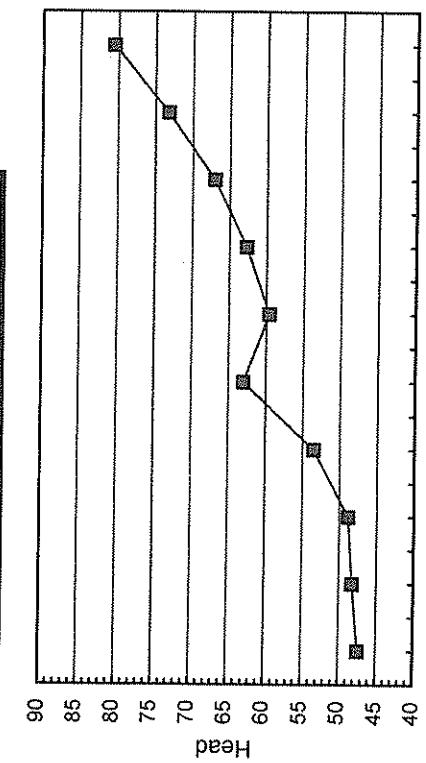
Soybeans Special Sort-1999	All MN Soy Own Avg 1099	22" Rows Own Avg 14	Drill Row Own Avg 115	Sat. Grid Own Avg 9	Min. Till Own Avg 114	Ridge Till Own Avg 11	No Till Own Avg. 9
Acres	108.2	127.5	130.5	116.9	95.8	105.3	193.6
Yield per Acre	43.1	47.0	42.1	47.8	44.6	44.4	47.9
Operators Share of Yield %	100	100	100	100	100	100	100
Value per Unit	4.93	5.01	4.93	5.11	5.13	5.13	5.09
Crop Product Return Per Acre	212.38	235.67	207.60	244.31	228.90	227.72	243.81
Miscellaneous Income per Acre	10.66	11.77	13.61	3.47	6.30	3.83	1.77
Gross Return per Acre	223.04	247.44	221.21	247.78	235.20	231.55	245.58
<b>Direct Expense Per Acre</b>							
Seed	17.87	17.83	19.39	29.35	19.11	17.52	26.90
Fertilizer	3.86	3.37	3.00	21.11	1.96	0.53	0.68
Chemicals	21.63	21.25	22.76	15.68	21.75	18.98	28.04
Crop Insurance	8.70	11.66	8.33	9.18	9.92	10.92	6.38
Drying Fuel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel and Oil	7.55	6.69	7.07	5.48	8.19	5.56	6.63
Repairs	18.31	16.77	16.02	21.52	18.48	15.96	20.41
Custom Hire	3.04	5.48	3.87	1.77	2.36	1.80	3.88
Special Hired Labor	0.40	0.77	0.39	0.00	0.10	0.22	0.77
Machinery and Bldg Leases	0.51	0.25	0.45	0.00	0.83	0.13	0.00
Land Rent	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utilities	0.06	0.00	0.02	0.00	0.11	0.00	0.06
Marketing	0.49	4.40	0.10	1.03	0.55	0.24	0.23
Operating Interest	7.03	7.99	8.01	6.29	9.02	5.88	5.40
Miscellaneous	0.86	0.34	1.00	0.82	2.05	0.69	0.17
Total Direct Expenses	\$90.31	\$96.80	\$90.41	\$112.23	\$94.43	\$78.43	\$99.55
Return over Direct Expense	132.73	150.64	130.80	135.55	140.77	153.12	146.03
<b>Overhead Costs per Acre</b>							
Hired Labor	4.55	7.93	5.11	5.17	4.28	4.91	6.22
Machinery & Building Leases	2.83	1.26	3.35	14.60	3.21	4.29	1.49
Real Estate Taxes	14.01	16.48	13.94	12.71	14.66	18.91	14.67
Farm Insurance	3.27	1.81	2.72	3.37	3.26	2.71	2.80
Utilities	2.48	2.29	2.21	2.18	2.59	2.13	1.49
Dues & Professional Fees	0.82	0.12	0.62	0.07	0.58	0.05	0.18
Interest: Interm/Lg Term Debt	46.21	45.94	47.21	45.42	52.50	57.02	57.17
Mach & Bldg Depreciation	19.61	18.81	18.15	27.92	23.01	16.26	23.87
Miscellaneous	3.87	3.24	3.81	2.71	3.31	4.42	5.13
Total Overhead Expenses	\$97.65	\$97.88	\$97.12	\$114.15	\$107.40	\$110.70	\$113.02
Total Expenses	187.96	194.68	187.53	226.38	201.83	189.13	212.57
<b>Net Return per Acre</b>	<b>35.08</b>	<b>52.76</b>	<b>33.68</b>	<b>21.40</b>	<b>33.37</b>	<b>42.42</b>	<b>33.01</b>
Direct Expense per unit	\$2.10	\$2.06	\$2.15	\$2.35	\$2.12	\$1.77	\$2.08
Total Expense per unit	\$4.36	\$4.14	\$4.45	\$4.73	\$4.52	\$4.26	\$4.44
Net Return per Unit	\$0.81	\$1.12	\$0.80	\$0.45	\$0.75	\$0.96	\$0.69
Break Even Yield per Acre	38.13	38.86	38.04	44.30	39.34	36.87	41.76
Estimated Labor Hours per Acre	1.98	1.91	2.02	2.79	2.23	1.04	1.38
Labor & Mgmt Charge per Acre	\$23.55	\$19.38	\$20.04	\$24.65	\$26.17	\$18.72	\$16.30
Net Return over Labor & Mgmt	11.53	33.38	13.64	-3.25	7.20	23.70	16.71

<b>Corn</b> <b>Special Sort-1999</b> MN AVG	All MN Corn	22" Rows	Sat. Grid	Min. Till	Ridge Till	Roundup
	Own Avg 1203	Own Avg 13	Own Avg 6	Own Avg 95	Own Avg 13	Own Avg. 62
Acres	98.6	67.6	101.4	113.5	80.0	84.8
<u>Yield per Acre</u>	<u>151.9</u>	<u>164.1</u>	<u>160.2</u>	<u>158.9</u>	<u>154.2</u>	<u>166.4</u>
Operators Share of Yield %	100	100	100	100	100	100
Value per Unit	1.75	1.74	1.76	1.76	1.73	1.76
Crop Product Return Per Acre	265.84	285.48	281.97	279.59	266.70	292.90
Miscellaneous Income per Acre	5.17	8.94	2.13	4.26	1.59	0.81
<b>Gross Return per Acre</b>	<b>271.01</b>	<b>294.42</b>	<b>284.10</b>	<b>283.85</b>	<b>268.29</b>	<b>293.71</b>
<b>Direct Expense Per Acre</b>						
Seed	32.63	37.97	29.56	33.12	37.49	36.02
Fertilizer	41.16	49.21	39.18	40.46	53.40	38.16
Chemicals	27.81	25.67	24.47	28.19	21.29	17.74
Crop Insurance	6.39	8.02	11.62	6.52	10.17	6.80
Drying Fuel	5.57	8.65	7.06	5.54	3.95	3.56
Fuel and Oil	9.69	7.82	7.96	9.69	6.96	7.36
Repairs	25.43	14.57	23.91	23.45	18.16	17.57
Custom Hire	5.31	11.52	2.50	4.26	1.60	5.62
Special Hired Labor	0.36	0.26	0.00	0.46	1.19	0.00
Machinery and Bldg Leases	0.95	1.87	0.00	0.96	0.79	0.00
Utilities	0.19	0.00	0.00	0.48	0.00	0.00
Marketing	0.98	1.51	0.31	0.67	1.00	0.17
Operating Interest	8.74	7.24	8.43	10.63	7.26	5.52
Miscellaneous	1.12	0.35	1.74	1.12	0.27	0.05
Total Direct Expenses	\$166.33	\$174.66	\$156.74	\$165.55	\$163.53	\$138.57
Return over Direct Expense	104.68	119.76	127.36	118.30	104.76	155.14
<b>Overhead Costs per Acre</b>						
Hired Labor	5.91	3.96	9.16	5.90	6.03	2.40
Machinery & Building Leases	3.43	1.95	17.04	3.82	5.51	5.52
Real Estate Taxes	13.91	15.46	11.35	14.43	14.50	17.66
Farm Insurance	3.94	2.12	2.77	3.50	3.68	3.35
Utilities	3.17	3.88	2.41	2.79	2.97	2.43
Dues & Professional Fees	0.89	0.26	0.26	0.57	0.54	0.26
Interest: Interim/Lg Term Debt	49.25	49.34	36.35	53.19	63.57	80.51
Mach & Bldg Depreciation	26.41	22.34	33.58	28.17	19.29	19.04
Miscellaneous	4.75	5.77	3.04	4.53	6.20	2.97
Total Overhead Expenses	\$111.66	\$105.08	\$115.96	\$116.90	\$122.29	\$134.14
Total Expenses	277.99	279.74	272.70	282.45	285.82	272.71
<b>Net Return per Acre</b>	<b>-6.98</b>	<b>14.68</b>	<b>11.40</b>	<b>1.40</b>	<b>-17.53</b>	<b>21.00</b>
Direct Expense per unit	\$1.31	\$1.31	\$0.98	\$1.04	\$1.06	\$0.83
Total Expense per unit	\$2.22	\$2.22	\$1.70	\$1.78	\$1.85	\$1.64
Net Return per Unit	-\$0.05	\$0.09	\$0.07	\$0.01	-\$0.11	\$0.13
<b>Break Even Yield per Acre</b>	<b>158.85</b>	<b>160.77</b>	<b>154.94</b>	<b>160.48</b>	<b>165.21</b>	<b>154.95</b>
Estimated Labor Hours per Acre	2.72	1.19	3.58	2.66	2.28	2.49
Labor & Mgmt Charge per Acre	\$29.84	\$25.88	\$26.33	\$30.45	\$28.63	\$28.23
<b>Net Return over Labor &amp; Mgmt</b>	<b>-36.82</b>	<b>-11.20</b>	<b>-14.93</b>	<b>-29.05</b>	<b>-46.16</b>	<b>-7.23</b>

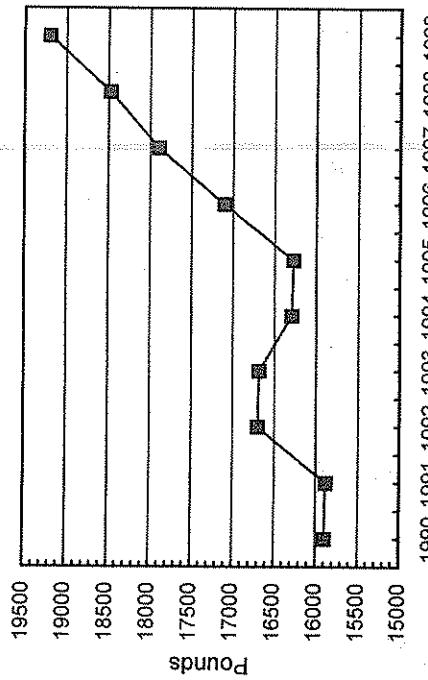
### Net Return per Dairy Cow



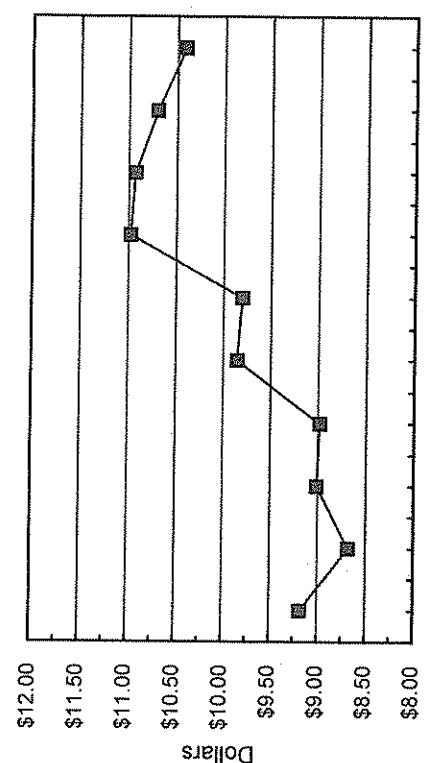
### Number of Cows per Herd



### Milk Production per Cow



### Cost per Cwt. of Milk



Livestock Enterprise Analysis, 1999  
 Minnesota Statewide Farm Business Management Database  
 Northland Community and Technical College  
 (Farms sorted by Return to Overhead)

Dairy -- Average per Cwt of Milk

Number of farms	Average For All Farms		Average For Low 20%		Average For High 20%	
		647		129		129
Milk sold (lb)	Quantity	99.25	Value	14.49	Quantity	98.98
Milk used in home (lb)		0.18		0.01		0.15
Milk fed to animals (lb)		0.57		0.06		0.87
Dairy Calves sold (hd)		0.00		0.09		0.00
Transferred out (hd)		0.00		0.28		0.00
Cull sales (hd)		0.00		0.59		0.00
Butchered (hd)		0.00		0.02		0.00
Less purchased (hd)		-0.00		-0.53		-0.00
Less transferred in (hd)		-0.00		-1.58		-1.73
Inventory change (hd)		0.00		0.26		-0.00
Total production				15.67		12.60
Other income				0.11		0.14
Gross return				13.78		12.74
Direct expenses						
Corn (bu.)	Quantity	0.42	Value	0.74	Quantity	0.53
Corn Silage (lb.)		64.95		0.58		80.84
Cotton Seed (lb.)		0.02		0.02		0.01
Hay, Alfalfa (lb.)		17.20		0.63		26.83
Hay, Grass & Other (lb.)		2.46		0.07		5.06
Protein Supplement (lb.)		0.12		0.01		0.00
Haylage, Alfalfa (lb.)		31.42		0.61		34.29
Pasture (aum)		0.00		0.01		0.00
Complete Ration (lb.)		5.25		0.47		6.55
Protein Vit Minerals (lb.)		14.04		1.67		12.73
Other feed stuffs				0.17		0.19
Breeding fees				0.14		0.12
Veterinary				0.49		0.49
BST				0.06		0.01
Livestock supplies				0.61		0.62
DHIA				0.06		0.06
Fuel & oil				0.11		0.16
Repairs				0.56		0.70
Custom hire				0.12		0.08
Hired labor				0.10		0.27
Machinery & bldg leases				0.04		0.04
Livestock leases				0.04		0.06
Utilities				0.02		0.03
Hauling and trucking				0.16		0.23
Marketing				0.19		0.22
Bedding				0.03		0.01
Operating interest				0.07		0.16
Total direct expenses				7.79		9.29
Return over direct expense				5.99		3.46
Overhead expenses						
Hired labor				0.70		0.39
Machinery & bldg leases				0.14		0.12
RE & pers. property taxes				0.05		0.08
Farm insurance				0.13		0.17
Utilities				0.29		0.35
Dues & professional fees				0.03		0.03
Interest				0.60		0.80
Mach & bldg depreciation				0.53		0.57
Miscellaneous				0.15		0.16
Total overhead expenses				2.62		2.66
Total listed expenses				10.41		11.95
Net return				3.37		0.79
Est. labor hours per unit				0.19		0.23
Labor & management charge				0.95		1.26
Net return over lbr & mgt				2.41		-0.47
Other Information						
Avg. number of Cows				80.5		56.3
Milk produced per Cow				19198		15407
Percent butterfat in milk				3.6		3.7
Culling percentage				27.5		28.5
Percent of barn capacity				108.5		99.6
Lbs. milk/lb grain & conc.				2.3		2.0
Feed cost per cwt of milk				4.98		6.04
Feed cost per Cow				956.18		930.37
Avg. milk price per cwt.				14.60		14.25

Livestock Enterprise Analysis, 1999  
 Minnesota Statewide Farm Business Management Database  
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 (Farms sorted by Return to Overhead)

Dairy -- Average per Cow

Number of farms	Average For All Farms		Average For Low 20%		Average For High 20%	
		647		129		129
Milk sold (lb)	Quantity	19054.53	Value	2782.38	Quantity	15249.52
Milk used in home (lb)		34.69		2.26		23.42
Milk fed to animals (lb)		108.65		10.92		15.88
Dairy Calves sold (hd)		0.06		16.66		0.06
Transferred out (hd)		0.50		53.22		52.78
Cull sales (hd)		0.28		113.59		0.28
Butchered (hd)		0.01		2.96		0.01
Less purchased (hd)		-0.09		-102.40		-0.13
Less transferred in (hd)		-0.29		-304.13		-0.25
Inventory change (hd)		0.03		49.00		-0.03
Total production				2624.46		1941.92
Other income				20.73		21.65
Gross return				2645.19		1963.57
Direct expenses						
Corn (bu.)		80.06		141.37		82.40
Corn Silage (lb.)		12468.95		110.92		12455.73
Cotton Seed (lb.)		4.79		3.13		0.84
Hay, Alfalfa (lb.)		3301.42		121.08		4133.26
Hay, Grass & Other (lb.)		471.72		12.75		780.34
Protein Supplement (lb.)		23.22		2.54		0.00
Haylage, Alfalfa (lb.)		6032.28		117.02		5282.64
Pasture (aum)		0.32		2.83		0.57
Complete Ration (lb.)		1008.69		90.98		1009.15
Protein Vit Minerals (lb.)		2695.49		321.00		1961.62
Other feed stuffs						
Breeding fees				32.55		29.24
Veterinary				27.32		18.59
BST				93.77		74.82
Livestock supplies				11.63		1.88
DHIA				116.81		95.73
Fuel & oil				11.85		9.83
Repairs				21.15		24.07
Custom hire				107.25		107.36
Hired labor				23.83		13.05
Machinery & bldg leases				19.86		41.42
Livestock leases				8.05		5.89
Utilities				7.13		9.36
Hauling and trucking				3.36		4.24
Marketing				31.31		34.81
Bedding				36.94		33.39
Operating interest				4.84		1.84
Total direct expenses				13.41		23.95
Return over direct expense				1494.68		1430.61
				1150.51		532.96
Overhead expenses						
Hired labor				134.83		59.49
Machinery & bldg leases				27.82		18.61
RE & pers. property taxes				10.19		12.10
Farm insurance				24.74		26.01
Utilities				54.90		54.24
Dues & professional fees				5.92		5.02
Interest				115.49		122.85
Mach & bldg depreciation				101.63		87.61
Miscellaneous				28.38		24.61
Total overhead expenses				503.90		410.54
Total listed expenses				1998.57		1841.14
Net return				646.62		122.42
Est. labor hours per unit				36.12		35.39
Labor & management charge				183.01		194.51
Net return over lbr & mgt				463.60		-72.09
Other Information						
Avg. number of Cows				80.5		56.3
Milk produced per Cow				19198		15407
Percent butterfat in milk				3.6		3.7
Culling percentage				27.5		28.5
Percent of barn capacity				108.5		99.6
Lbs. milk/lb grain & conc.				2.3		2.0
Feed cost per cwt of milk				4.98		6.04
Feed cost per Cow				956.18		930.37
Avg. milk price per cwt.				14.60		14.25

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Dairy and Repl Heifers -- Average per Cow

	Average For All Farms	Average For Low 20%	Average For High 20%
Number of farms	564	113	113
Milk sold (lb)	19025.63	2776.66	15383.00
Milk used in home (lb)	39.89	2.48	27.28
Milk fed to animals (lb)	116.83	11.34	153.13
Dairy Calves sold (hd)	0.39	96.96	0.41
Transferred out (hd)	0.93	413.55	0.88
Cull sales (hd)	0.31	122.05	0.33
Butchered (hd)	0.01	5.19	0.01
Less purchased (hd)	-0.13	-128.48	-0.15
Less transferred in (hd)	-0.86	-401.06	-0.79
Inventory change (hd)	0.07	97.39	-0.09
Total production		2996.08	
Other income		21.48	
Gross return		3017.55	
Direct expenses			
Corn (bu.)	98.90	174.44	97.87
Corn Silage (lb.)	17703.74	156.36	19138.33
Hay, Alfalfa (lb.)	4678.41	165.60	6226.56
Hay, Grass & Other (lb.)	1263.71	30.56	1582.84
Haylage, Alfalfa (lb.)	7190.33	139.58	6557.06
Oats (bu.)	3.97	4.19	5.52
Pasture (aum)	0.86	5.61	1.17
Complete Ration (lb.)	1093.34	96.91	1033.28
Milk (lb.)	41.70	5.46	54.88
Milk Replacer (lb.)	5.59	3.98	6.29
Protein Vit Minerals (lb.)	3093.03	360.31	3243.30
Other feed stuffs		51.55	299.33
Breeding fees		33.46	174.60
Veterinary		101.15	171.77
BST		11.78	79.71
Livestock supplies		129.15	106.38
DHIA		12.66	10.16
Fuel & oil		24.60	28.38
Repairs		127.66	129.28
Custom hire		38.65	16.71
Hired labor		17.22	42.10
Machinery & bldg leases		10.03	5.34
Livestock leases		5.75	9.73
Hauling and trucking		33.44	37.35
Marketing		36.90	38.63
Bedding		5.41	2.99
Operating interest		16.40	23.87
Total direct expenses		1798.80	1736.30
Return over direct expense		1218.75	508.37
Overhead expenses			
Hired labor		140.74	66.33
Machinery & bldg leases		30.54	23.45
RE & pers. property taxes		12.53	14.21
Farm insurance		28.85	27.44
Utilities		64.14	66.44
Dues & professional fees		6.66	6.41
Interest		127.11	141.68
Mach & bldg depreciation		118.90	106.89
Miscellaneous		31.50	30.03
Total overhead expenses		560.98	482.88
Total listed expenses		2359.78	2219.18
Net return		657.78	25.49
Est. labor hours per unit		43.77	41.52
Labor & management charge		218.22	229.22
Net return over lbr & mgt		439.56	-203.73
Other Information			
Avg. number of Cows		77.2	54.0
Milk produced per Cow		19182	15563
Percent butterfat in milk		3.7	3.7
Culling percentage		30.6	33.2
Percent of barn capacity		108.3	98.9
Lbs. milk/lb grain & conc.		1.9	1.5
Feed cost per cwt of milk		6.23	7.58
Feed cost per Cow		1194.55	1180.20
Avg. milk price per cwt.		14.59	14.24

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Dairy Replacement Heifers -- Average per Head Sold/Trans

Number of farms	Average For All Farms		Average For Low 20%		Average For High 20%	
	594		119		119	
Replacements sold (hd)	0.49	133.35	0.48	102.79	0.44	178.10
Transferred out (hd)	0.51	460.60	0.52	423.08	0.56	562.75
Cull sales (hd)	0.03	6.02	0.09	9.55	0.03	7.01
Butchered (hd)	0.01	2.66	0.01	4.17	0.01	3.10
Less purchased (hd)	-0.12	-73.20	-0.09	-74.59	-0.09	-41.95
Less transferred in (hd)	-0.70	-78.61	-0.83	-117.48	-0.54	-62.67
Inventory change (hd)	0.07	77.57	0.02	-45.40	0.13	198.72
Total production (hd)	0.00	528.38	0.00	302.11	0.00	845.06
Other income		5.70		2.10		6.21
Gross return		534.08		304.22		851.27
Direct expenses						
Barley (bu.)	0.67	0.86	0.51	0.67	0.56	0.75
Corn (bu.)	22.72	39.56	31.21	53.55	27.63	47.34
Corn Silage (lb.)	7396.01	65.02	9787.72	86.38	7768.72	72.61
Hay, Alfalfa (lb.)	1927.02	62.05	2993.12	103.31	1601.45	51.10
Hay, Grass & Other (lb.)	984.50	21.79	1650.04	38.10	792.82	17.53
Haylage, Alfalfa (lb.)	1348.96	25.55	1578.34	34.09	1670.28	27.58
Haylage, Grass & Other (lb.)	247.60	1.63	914.85	1.44	97.74	1.24
Oatlage (lb.)	420.59	2.71	155.79	1.08	193.87	2.01
Oats (bu.)	2.61	2.71	4.16	4.26	2.25	2.32
Pasture (aum)	0.61	3.11	2.44	5.45	0.27	2.33
Barley Silage (lb.)	99.96	1.07	133.03	0.80	28.61	0.26
Complete Ration (lb.)	226.42	28.86	213.96	50.56	194.99	20.97
Creep / Starter (lb.)	6.77	0.86	3.00	0.48	0.50	0.07
Milk (lb.)	54.00	6.74	102.42	12.26	27.86	3.18
Milk Replacer (lb.)	7.54	5.42	10.03	6.73	6.05	4.43
Protein Vit Minerals (lb.)	631.36	58.18	529.92	71.55	662.60	62.69
Other feed stuffs		8.23		4.26		2.40
Breeding fees		7.16		7.90		8.37
Veterinary		14.79		16.39		16.03
Livestock supplies		15.60		20.60		13.80
Fuel & oil		5.12		6.44		5.56
Repairs		27.39		33.83		34.38
Custom hire		22.28		26.28		6.46
Hired labor		0.83		1.11		0.42
Machinery & bldg leases		4.13		15.54		0.10
Livestock leases		0.88		1.80		2.96
Marketing		0.92		1.25		0.59
Bedding		0.79		0.92		2.17
Operating interest		3.58		4.46		3.08
Miscellaneous		1.39		9.32		0.25
Total direct expenses		439.21		620.81		412.99
Return over direct expense		94.87		-316.59		438.28
Overhead expenses						
Hired labor		25.29		27.37		32.82
Machinery & bldg leases		5.74		8.84		7.35
RE & pers. property taxes		2.49		3.19		2.52
Farm insurance		5.76		7.07		6.22
Utilities		12.93		17.60		13.57
Dues & professional fees		1.46		1.53		2.78
Interest		22.47		30.31		21.76
Mach & bldg depreciation		23.77		31.50		23.37
Miscellaneous		6.64		11.12		7.58
Total overhead expenses		106.53		138.53		117.96
Total listed expenses		545.74		759.35		530.95
Net return		-11.66		-455.13		320.32
Est. labor hours per unit		8.34		9.76		9.16
Labor & management charge		44.74		57.44		48.32
Net return over lbr & mgt		-56.40		-512.57		272.00
Other Information						
No. purchased or trans in		48		38		38
Number sold or trans out		58		41		60
Average number of head		75		61		87
Percentage death loss		5.7		6.4		4.8
Feed cost per average head		259.39		320.00		220.38
Feed cost/head sold+trans		334.35		474.97		318.82
Avg. purchase weight		72		119		124
Avg. sales weight		77		56		109
Avg. purch price / head		620.90		790.06		447.33
Avg. sales price / head		273.04		212.95		400.77

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Dairy Heifers (for sale) -- Average per Head Sold/Trans

	Average For All Farms	
	21	
Number of farms		
	Quantity	Value
Dairy Hfrs sold (hd)	0.85	922.11
Transferred out (hd)	0.15	19.02
Butchered (hd)	0.00	2.92
Less purchased (hd)	-1.10	-365.03
Less transferred in (hd)	-0.33	-33.06
Inventory change (hd)	0.43	237.05
Total production (hd)	0.00	783.02
Total production (hd)	0.00	87.01
Other income		
Gross return		870.02
Direct expenses		
Barley (bu.)	0.65	1.10
Corn (bu.)	29.62	52.05
Corn Silage (lb.)	12923.17	108.58
Corn, Ear (lb.)	54.10	0.95
Hay, Alfalfa (lb.)	3199.73	69.73
Hay, Grass & Other (lb.)	892.70	19.67
Haylage, Alfalfa (lb.)	4782.69	92.22
Oats (bu.)	4.56	5.47
Pasture (aum)	0.56	4.97
Complete Ration (lb.)	339.59	31.68
Milk (lb.)	10.59	1.38
Protein Vit Minerals (lb.)	584.74	67.21
Other feed stuffs		1.67
Breeding fees		4.35
Veterinary		38.64
Livestock supplies		20.73
Fuel & oil		9.66
Repairs		38.71
Custom hire		12.22
Utilities		0.95
Bedding		0.91
Operating interest		18.80
Total direct expenses		601.64
Return over direct expense		268.39
Overhead expenses		
Hired labor		11.68
Machinery & bldg leases		18.18
RE & pers. property taxes		4.99
Farm insurance		11.10
Utilities		16.69
Dues & professional fees		1.49
Interest		23.49
Mach & bldg depreciation		16.85
Miscellaneous		7.91
Total overhead expenses		112.38
Total listed expenses		714.02
Net return		156.01
Est. labor hours per unit		7.50
Labor & management charge		64.17
Net return over lbr & mgt		91.83
Other Information		
No. purchased or trans in		76
Number sold or trans out		53
Average number of head		88
Percentage death loss		2.6
Feed cost per average head		273.98
Feed cost/head sold+trans		456.67
Avg. purchase weight		159
Avg. sales weight		818
Avg. purch price / head		330.87
Avg. sales price / head		1085.58

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Dairy Steers -- Average per Head

Number of farms	Average For All Farms	Average For Low 20%	Average For High 20%			
	165	33	33			
Dairy Steers sold (lb)	Quantity 1064.87	Value 633.01	Quantity 742.12	Value 435.94	Quantity 1021.13	Value 656.77
Transferred out (lb)	2.22	1.49	8.87	4.88	2.38	1.64
Cull sales (lb)	4.12	3.25	10.52	6.20	0.00	4.39
Butchered (lb)	24.36	14.52	25.57	6.47	37.98	30.06
Less purchased (lb)	-274.98	-199.36	-127.78	-87.05	-251.52	-182.07
Less transferred in (lb)	-78.12	-56.92	-87.94	-71.23	-128.33	-82.93
Inventory change (lb)	35.74	106.21	-21.77	31.02	58.06	156.77
Total production (lb)	778.20	502.21	549.59	326.21	739.69	584.63
Other income		0.01		0.00		0.09
Gross return		502.22		326.21		584.72
Direct expenses						
Barley (bu.)	0.49	0.63	0.12	0.15	0.00	0.00
Corn (bu.)	86.53	147.42	69.05	114.82	63.83	106.50
Corn Silage (lb.)	2750.30	22.00	3067.57	27.24	1957.31	16.23
Corn, Ear (lb.)	89.63	1.96	340.66	8.02	0.00	0.00
Hay, Alfalfa (lb.)	414.26	12.39	281.58	8.08	498.58	13.44
Hay, Grass & Other (lb.)	310.67	6.86	810.63	17.48	210.26	3.92
Haylage, Alfalfa (lb.)	204.62	3.84	97.95	1.97	170.95	3.24
Haylage, Grass & Other (lb.)	26.24	0.45	157.22	2.85	0.00	0.00
Oats (bu.)	1.29	1.37	2.38	2.36	1.38	1.52
Pasture (aum)	0.26	0.52	0.00	0.00	0.96	0.21
Sorghum Silage (lb.)	91.59	1.37	0.00	0.00	0.00	0.00
Soybeans (bu.)	0.14	0.71	0.27	1.40	0.00	0.00
Stover (lb.)	64.91	0.46	74.39	0.37	238.26	1.19
Complete Ration (lb.)	39.18	3.87	22.04	3.64	99.70	6.63
Creep / Starter (lb.)	29.63	0.18	0.16	0.08	0.00	0.00
Milk (lb.)	10.07	1.13	0.00	0.00	7.15	0.91
Milk Replacer (lb.)	5.21	3.69	2.03	1.72	0.36	0.26
Protein Vit Minerals (lb.)	446.48	68.90	376.55	59.63	375.90	63.75
Other feed stuffs		2.70		11.92		0.00
Veterinary		12.08		12.94		13.69
Livestock supplies		7.73		10.32		8.07
Fuel & oil		5.48		3.70		6.70
Repairs		21.43		28.93		16.79
Custom hire		2.10		0.65		0.54
Hired labor		0.50		0.00		2.86
Machinery & bldg leases		0.49		0.00		1.34
Hauling and trucking		4.91		5.05		2.01
Marketing		5.58		7.12		3.54
Bedding		0.54		0.00		2.48
Operating interest		9.76		12.31		10.51
Total direct expenses		351.03		342.77		286.34
Return over direct expense		151.19		-16.56		298.38
Overhead expenses						
Hired labor		9.11		6.99		9.53
Machinery & bldg leases		5.09		2.21		4.99
RE & pers. property taxes		2.34		1.52		2.33
Farm insurance		5.75		4.68		4.88
Utilities		8.79		6.57		10.78
Dues & professional fees		0.60		0.77		0.83
Interest		14.03		11.31		13.55
Mach & bldg depreciation		16.05		12.25		19.11
Miscellaneous		5.78		7.57		5.13
Total overhead expenses		67.54		53.85		71.14
Total listed expenses		418.57		396.62		357.48
Net return		83.65		-70.41		227.24
Est. labor hours per unit		5.44		5.87		4.61
Labor & management charge		41.85		43.49		42.50
Net return over lbr & mgt		41.81		-113.90		184.75
Other Information						
No. purchased or trans in		59		34		53
Number sold or trans out		54		38		42
Percentage death loss		3.1		4.6		3.0
Avg. daily gain (lbs)		2.12		1.61		2.12
Lbs of conc / lb of gain		7.07		8.56		5.54
Lbs of feed / lb of gain		9.48		13.07		7.74
Feed cost per cwt of gain		36.04		47.63		29.45
Feed cost per head		280.44		261.75		217.80
Average purchase weight		440		445		382
Average sales weight		1262		973		1249
Avg purch price / head		318.70		303.29		276.62
Avg sales price / cwt		59.45		58.74		64.32

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Dairy Steers -- Average per Cwt Produced

	Average For All Farms	Average For Low 20%	Average For High 20%
	165	33	33
Number of farms			
Dairy Steers sold (lb)	136.84	81.34	135.03
Transferred out (lb)	0.29	0.19	1.61
Cull sales (lb)	0.53	0.42	1.91
Butchered (lb)	3.13	1.87	4.65
Less purchased (lb)	-35.33	-25.62	-23.25
Less transferred in (lb)	-10.04	-7.31	-16.00
Inventory change (lb)	4.59	13.65	-3.96
Total production (lb)	100.00	64.53	100.00
Other income	0.00	0.00	0.00
Gross return	64.54	59.36	79.05
Direct expenses			
Barley (bu.)	0.06	0.08	0.02
Corn (bu.)	11.12	18.94	12.56
Corn Silage (lb.)	353.42	2.83	558.16
Corn, Ear (lb.)	11.52	0.25	61.98
Hay, Alfalfa (lb.)	53.23	1.59	51.23
Hay, Grass & Other (lb.)	39.92	0.88	147.50
Haylage, Alfalfa (lb.)	26.29	0.49	17.82
Haylage, Grass & Other (lb.)	3.37	0.06	28.61
Oats (bu.)	0.17	0.18	0.43
Pasture (aum)	0.03	0.07	0.00
Sorghum Silage (lb.)	11.74	0.18	0.00
Soybeans (bu.)	0.02	0.09	0.05
Stover (lb.)	8.34	0.06	13.54
Complete Ration (lb.)	5.03	0.50	4.01
Creep / Starter (lb.)	3.81	0.02	0.03
Milk (lb.)	1.29	0.14	0.00
Milk Replacer (lb.)	0.67	0.47	0.37
Protein Vit Minerals (lb.)	57.37	8.85	68.51
Other feed stuffs	0.35	2.17	0.00
Veterinary	1.55	2.35	1.85
Livestock supplies	0.99	1.88	1.09
Fuel & oil	0.70	0.67	0.91
Repairs	2.75	5.26	2.27
Custom hire	0.27	0.12	0.07
Hired labor	0.06	0.00	0.39
Machinery & bldg leases	0.06	0.00	0.18
Hauling and trucking	0.63	0.92	0.27
Marketing	0.72	1.30	0.48
Bedding	0.07	0.00	0.34
Operating interest	1.25	2.24	1.42
Total direct expenses	45.11	62.37	38.71
Return over direct expense	19.43	-3.01	40.34
Overhead expenses			
Hired labor	1.17	1.27	1.29
Machinery & bldg leases	0.65	0.40	0.67
RE & pers. property taxes	0.30	0.28	0.32
Farm insurance	0.74	0.85	0.66
Utilities	1.13	1.20	1.46
Dues & professional fees	0.08	0.14	0.11
Interest	1.80	2.06	1.83
Mach & bldg depreciation	2.06	2.23	2.58
Miscellaneous	0.74	1.38	0.69
Total overhead expenses	8.68	9.80	9.62
Total listed expenses	53.79	72.17	48.33
Net return	10.75	-12.81	30.72
Est. labor hours per unit	0.70	1.07	0.62
Labor & management charge	5.38	7.91	5.75
Net return over lbr & mgt	5.37	-20.72	24.98
Other Information			
No. purchased or trans in	59	34	53
Number sold or trans out	54	38	42
Percentage death loss	3.1	4.6	3.0
Avg. daily gain (lbs)	2.12	1.61	2.12
Lbs of conc / lb of gain	7.07	8.56	5.54
Lbs of feed / lb of gain	9.48	13.07	7.74
Feed cost per cwt of gain	36.04	47.63	29.45
Feed cost per head	280.44	261.75	217.80
Average purchase weight	440	445	382
Average sales weight	1262	973	1249
Avg purch price / head	318.70	303.29	276.62
Avg sales price / cwt	59.45	58.74	64.32

Dairy Cow Special Sort MN AVG-Per Cow	Less than 40 Cows	40 to 59 Cows	60 to 99 Cows	100 To 149 Cows	150 To 299 Cows	300 and Up Cows
Number Of Farms	129	225	203	67	46	15
Milk Sold Value	\$2,263.38	\$2,573.95	\$2,733.04	\$2,846.32	\$3,037.20	\$3,079.13
Milk Used in the Home	4.70	4.29	3.25	1.18	0.52	0.32
Milk Fed to Animals	13.77	13.55	14.89	9.49	8.70	1.26
Dairy Calves Sold	55.03	17.44	11.49	14.05	15.83	6.29
Transferred Out	56.83	60.28	64.55	50.06	41.17	33.61
Cull Sales	112.38	114.23	116.33	113.67	105.20	112.35
Butchered	3.45	4.55	3.53	2.64	1.67	1.06
Less Purchased	-72.63	-55.72	-55.56	-91.89	-213.56	-151.45
Less Livestock Transferred In	-250.32	-296.32	-321.94	-332.71	-233.84	-354.67
Inventory Change	-29.22	-5.76	18.69	52.92	131.92	123.60
Total Production	2,157.37	2,430.50	2,588.26	2,665.72	2,894.81	2,851.49
Other Income	18.92	21.38	18.88	24.15	18.18	22.64
<b>Total Return</b>	<b>\$2,176.29</b>	<b>\$2,451.88</b>	<b>\$2,607.14</b>	<b>\$2,689.87</b>	<b>\$2,912.99</b>	<b>\$2,874.13</b>
<b>Direct Costs</b>						
Corn	129.92	138.84	139.31	148.95	138.10	145.51
Other Grain	5.36	4.29	4.03	0.00	0.00	0.00
Corn Silage	100.09	102.15	101.35	107.11	131.95	127.95
Alfalfa Hay	192.15	140.81	117.98	112.43	117.82	71.32
Mixed Hay	32.32	16.32	15.98	8.75	10.20	0.00
Alfalfa Haylage	38.49	112.97	112.58	116.38	134.63	170.67
Complete Ration	71.50	82.16	87.89	82.05	91.98	128.15
Protein, Vitamins, Minerals	229.83	267.13	312.15	367.74	396.77	326.75
Other	23.34	27.68	35.15	18.74	35.95	71.11
<b>Total Feed</b>	<b>\$823.00</b>	<b>\$892.35</b>	<b>\$926.42</b>	<b>\$962.15</b>	<b>\$1,057.40</b>	<b>\$1,041.46</b>
Breeding	22.43	25.46	29.90	26.30	28.82	27.83
Veterinary	61.78	72.83	91.25	105.29	139.58	160.61
Supplies	99.96	110.46	109.48	124.52	140.67	214.18
DHIA	8.79	14.00	13.67	15.26	10.63	0.00
Fuel and Oil	26.32	22.48	20.19	20.58	18.79	22.20
Repairs	107.45	108.40	120.70	108.53	108.01	53.82
Custom Hire	15.81	12.60	14.32	11.84	21.50	79.79
Hired Labor	3.68	9.40	8.68	7.22	48.89	44.94
Machinery, bldg. & lvtck Leases	4.19	4.08	8.79	27.11	19.22	16.10
Utilities	4.96	0.00	3.64	0.00	0.00	0.00
Hauling and trucking	45.43	43.99	37.14	27.52	22.58	0.00
Marketing	40.11	34.60	36.85	32.10	39.44	40.91
Operating Interest	12.00	16.02	9.04	12.70	10.82	21.55
<b>Total Direct Costs</b>	<b>\$1,275.91</b>	<b>\$1,366.67</b>	<b>\$1,430.07</b>	<b>\$1,481.12</b>	<b>\$1,666.35</b>	<b>\$1,723.39</b>
<b>Return to Direct Costs</b>	<b>\$900.38</b>	<b>\$1,085.21</b>	<b>\$1,177.07</b>	<b>\$1,208.75</b>	<b>\$1,246.64</b>	<b>\$1,150.74</b>
<b>Overhead Costs</b>						
Hired Labor	36.49	51.62	82.33	145.46	246.62	256.81
Machinery & Building Leases	11.04	14.86	33.15	25.43	37.04	36.71
RE & Pers. Property Taxes	12.80	11.32	11.54	7.81	9.54	0.00
Farm Insurance	28.67	25.92	23.05	21.84	30.05	20.05
Utilities	70.66	64.14	57.42	53.15	50.67	36.49
Dues & Professional Fees	4.82	3.34	3.79	4.25	12.41	0.00
Interest: Interm/Lg Term Debt	98.28	95.31	104.53	104.45	138.96	163.74
Mach & Bldg Depreciation	75.72	91.16	94.47	111.98	119.30	109.60
Miscellaneous	24.82	25.52	26.36	32.58	38.87	37.38
<b>Total Overhead Costs</b>	<b>\$363.30</b>	<b>\$383.19</b>	<b>\$436.64</b>	<b>\$506.95</b>	<b>\$683.46</b>	<b>\$660.78</b>
<b>Total Costs</b>	<b>\$1,639.21</b>	<b>\$1,749.86</b>	<b>\$1,866.71</b>	<b>\$1,988.07</b>	<b>\$2,349.81</b>	<b>\$2,384.17</b>
<b>Net Return</b>	<b>\$537.08</b>	<b>\$702.02</b>	<b>\$740.43</b>	<b>\$701.80</b>	<b>\$563.18</b>	<b>\$489.96</b>
Estimated Labor Hours per unit	47.14	40.18	35.99	31.76	31.18	35.67
Labor & Management Charge	\$290.43	\$233.20	\$183.59	\$162.20	\$148.13	\$112.42
Net Return over Lbr. & Mgt.	\$246.65	\$468.82	\$556.84	\$539.60	\$415.05	\$377.54
<b>Other Information</b>						
Average Number of Cows	31.1	49.3	74.5	120.2	200.5	454.7
Lbs of Milk Produced Per Cow	16,089	18,017	19,046	19,452	20,447	21,087
Culling Percentage	27.0	26.3	27.2	29.1	25.9	29.6
Percent of Barn Capacity	84.1	101.8	108.8	115.0	116.4	117.9
Lbs. Milk / Lb. Grain & Conc.	2.3	2.3	2.3	2.1	2.4	2.3
Feed Cost per Cwt of Milk	\$5.12	\$4.95	\$4.86	\$4.95	\$5.17	\$4.94
Feed Cost per Cow	\$823.00	\$892.35	\$926.42	\$962.16	\$1,057.41	\$1,041.47
Avg. Milk Price per CWT	\$14.20	\$14.40	\$14.47	\$14.74	\$14.92	\$14.72

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Beef Cow-Calf -- Average per Cow

Number of farms	Average For All Farms		Average For Low 20%		Average For High 20%	
	183	37	37		37	
Beef Calves sold (lb)	331.34	258.31	351.50	252.44	366.93	286.11
Transferred out (lb)	168.05	145.92	145.87	117.73	120.84	113.43
Cull sales (lb)	125.07	54.47	155.88	62.88	86.90	35.32
Butchered (lb)	6.82	4.21	6.55	3.66	7.66	5.70
Less purchased (lb)	-82.95	-58.77	-51.94	-35.92	-166.98	-106.08
Less transferred in (lb)	-41.13	-29.54	-53.98	-36.73	-15.94	-9.89
Inventory change (lb)	60.08	101.53	-527.79	12.55	95.29	195.20
Total production (lb)	567.28	476.14	26.10	376.61	494.69	519.79
Other income		3.44		0.00		14.25
Gross return		479.57		376.61		534.04
Direct expenses						
Barley (bu.)	0.33	0.73	0.32	2.58	0.00	0.00
Corn (bu.)	5.20	8.97	7.63	13.24	5.92	10.01
Corn Silage (lb.)	3458.47	29.76	4991.63	44.70	1445.66	12.69
Hay, Alfalfa (lb.)	1743.71	45.35	2219.14	73.14	1526.68	30.26
Hay, Grass & Other (lb.)	4744.18	85.48	4489.36	97.95	5054.07	84.50
Haylage, Alfalfa (lb.)	101.85	1.70	229.39	4.59	5.08	0.05
Haylage, Grass & Other (lb.)	244.38	1.79	995.87	9.06	0.00	0.00
Oatlage (lb.)	81.59	0.61	544.93	4.09	0.00	0.00
Oats (bu.)	2.02	2.14	2.68	2.94	2.41	2.84
Pasture (aum)	3.67	22.28	5.69	27.62	2.40	17.86
Stover (lb.)	191.84	1.53	85.85	0.70	126.99	0.49
Complete Ration (lb.)	113.30	5.89	18.57	3.56	294.22	5.73
Creep / Starter (lb.)	10.64	0.72	20.49	1.18	0.00	0.00
Protein Vit Minerals (lb.)	102.53	16.66	122.59	20.04	97.51	13.43
Other feed stuffs		0.92		0.89		1.06
Breeding fees		4.43		2.35		1.25
Veterinary		20.84		19.74		19.62
Livestock supplies		7.71		8.77		6.23
Fuel & oil		7.56		7.34		7.05
Repairs		14.99		27.21		13.95
Repair, machinery		4.62		6.75		3.93
Repair, livestock equip		1.46		2.37		0.36
Custom hire		1.02		0.58		0.65
Repair buildings		4.26		4.01		2.18
Hired labor		0.24		0.00		0.08
Machinery & bldg leases		0.53		0.00		0.00
Livestock leases		1.19		0.00		2.46
Hauling and trucking		1.46		2.87		0.97
Marketing		5.13		5.77		3.17
Bedding		0.53		1.56		0.21
Operating interest		9.74		11.00		6.90
Total direct expenses	310.25		406.58		247.94	
Return over direct expense	169.31		-29.96		286.10	
Overhead expenses						
Custom hire		0.74		1.22		1.66
Hired labor		5.33		4.16		4.77
Machinery & bldg leases		2.18		1.36		1.49
RE & pers. property taxes		4.96		5.72		4.29
Farm insurance		6.66		7.39		4.26
Utilities		10.78		14.10		9.72
Dues & professional fees		1.35		2.42		1.59
Interest		32.72		29.94		45.28
Mach & bldg depreciation		20.78		23.88		14.14
Miscellaneous		8.03		7.99		8.89
Total overhead expenses	93.54		98.17		96.10	
Total listed expenses	403.80		504.75		344.03	
Net return	75.77		-128.13		190.00	
Est. labor hours per unit		8.48		8.28		8.92
Labor & management charge	67.74		77.77		70.32	
Net return over lbr & mgt	8.03		-205.91		119.69	
Other Information						
Number of cows		67.4		48.3		63.8
Pregnancy percentage		95.3		93.2		95.6
Pregnancy loss percentage		1.2		1.2		1.2
Culling percentage		10.8		13.1		8.3
Calving percentage		94.1		92.1		94.4
Weaning percentage		88.5		84.2		89.7
Calves sold per cow		0.84		0.82		0.84
Calf death loss percent		6.1		8.0		5.7
Average weaning weight		519		480		506
Lbs weaned/exposed female		459		404		454
Feed cost per cow		224.55		306.28		178.91
Avg wgt/Beef Calf sold		648		676		633
Avg price / cwt		77.96		71.82		77.98

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All Beef Backgrounding -- Average per Cwt Produced

Number of farms	Average For All Farms		Average For Low 20%		Average For High 20%	
	28		6		6	
Backgd Strs sold (lb)	231.65	161.47	227.78	143.12	281.56	202.02
Transferred out (lb)	31.17	21.75	37.43	25.40	22.74	13.22
Cull sales (lb)	0.09	0.04	0.00	0.00	0.00	0.00
Butchered (lb)	1.43	0.97	1.22	0.69	1.80	1.17
Less purchased (lb)	-66.09	-52.84	-64.73	-37.83	-6.67	-3.33
Less transferred in (lb)	-75.29	-65.60	-58.32	-56.26	-158.90	-129.48
Inventory change (lb)	-22.97	2.71	-43.39	-38.02	-40.52	17.03
Total production (lb)	100.00	68.50	100.00	37.10	100.00	100.63
Other income		0.00		0.00		0.00
Gross return		68.50		37.10		100.63
<b>Direct expenses</b>						
Barley (bu.)	0.13	0.13	0.00	0.00	0.00	0.00
Corn (bu.)	3.66	6.11	7.12	12.61	0.39	0.68
Corn Silage (lb.)	703.34	6.03	1055.65	9.50	18.19	0.16
Corn, Ear (lb.)	233.62	1.01	0.00	0.00	0.00	0.00
Hay, Alfalfa (lb.)	118.48	3.46	271.18	7.80	122.78	2.86
Hay, Grass & Other (lb.)	348.56	6.26	229.94	3.45	390.18	6.73
Haylage, Alfalfa (lb.)	55.78	1.12	0.00	0.00	0.00	0.00
Oats (bu.)	0.69	0.72	0.37	0.26	0.21	0.26
Pasture (aum)	0.11	1.05	0.00	1.11	0.00	1.71
Sorghum Silage (lb.)	1.30	0.01	0.00	0.00	0.00	0.00
Stover (lb.)	10.55	0.13	0.00	0.00	0.00	0.00
Wheat, Spring (bu.)	0.01	0.02	0.00	0.00	0.00	0.00
Complete Ration (lb.)	76.48	4.59	30.55	1.01	25.24	0.89
Protein Vit Minerals (lb.)	17.26	2.73	16.83	2.78	23.76	3.75
Other feed stuffs		0.95		0.00		0.00
Veterinary		2.44		1.66		1.91
Livestock supplies		0.80		0.80		2.28
Fuel & oil		0.62		0.52		0.45
Repairs		2.05		2.92		4.76
Custom hire		0.56		0.00		0.48
Utilities		0.11		0.00		0.00
Hauling and trucking		0.27		0.02		0.45
Marketing		1.79		3.96		1.19
Bedding		0.24		1.32		0.00
Operating interest		1.19		0.37		0.48
<b>Total direct expenses</b>	<b>44.37</b>		<b>50.08</b>		<b>29.05</b>	
<b>Return over direct expense</b>	<b>24.13</b>		<b>-12.98</b>		<b>71.58</b>	
<b>Overhead expenses</b>						
Custom hire		0.01		0.01		0.02
Hired labor		0.40		0.14		0.00
Machinery & bldg leases		0.25		0.51		0.00
RE & pers. property taxes		0.64		0.41		0.67
Farm insurance		0.61		0.38		1.33
Utilities		0.81		0.52		3.17
Dues & professional fees		0.06		0.16		0.09
Interest		2.63		2.01		6.31
Mach & bldg depreciation		1.70		1.25		2.09
Miscellaneous		0.43		0.07		0.39
<b>Total overhead expenses</b>	<b>7.53</b>		<b>5.46</b>		<b>14.07</b>	
<b>Total listed expenses</b>	<b>51.90</b>		<b>55.54</b>		<b>43.12</b>	
<b>Net return</b>	<b>16.60</b>		<b>-18.44</b>		<b>57.51</b>	
Est. labor hours per unit	0.99		1.47		2.12	
Labor & management charge	6.44		10.13		7.54	
Net return over lbr & mgt	10.16		-28.57		49.98	
<b>Other Information</b>						
No. purchased or trans in	102		77		56	
Number sold or trans out	115		96		60	
Percentage death loss	1.9		2.4		4.0	
Avg. daily gain (lbs)	1.36		1.81		0.98	
Lbs of conc / lb of gain	4.02		4.58		0.78	
Lbs of feed / lb of gain	11.39		13.11		5.97	
Feed cost per cwt of gain	34.31		38.53		17.03	
Feed cost per head	108.91		142.07		39.35	
Average purchase weight	497		560		163	
Average sales weight	800		839		737	
Avg purch price / cwt	79.95		58.45		49.92	
Avg sales price / cwt	69.70		62.83		71.75	

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All Beef Backgrounding -- Average per Head

	Average For All Farms		Average For Low 20%		Average For High 20%	
	28	6	6	6	6	6
Number of farms						
Backgnd Strs sold (lb)	735.30	512.53	839.95	527.76	650.52	466.75
Transferred out (lb)	98.95	69.03	138.04	93.65	52.53	30.54
Cull sales (lb)	0.29	0.13	0.00	0.00	0.00	0.00
Butchered (lb)	4.55	3.06	4.51	2.56	4.15	2.70
Less purchased (lb)	-209.79	-167.72	-238.69	-139.50	-15.41	-7.69
Less transferred in (lb)	-238.98	-208.23	-215.05	-207.45	-367.13	-299.14
Inventory change (lb)	-72.91	8.61	-160.00	-140.20	-93.63	39.34
Total production (lb)	317.42	217.42	368.75	136.82	231.04	232.50
Other income		0.00		0.00		0.00
Gross return		217.42		136.82		232.50
Direct expenses						
Barley (bu.)	0.42	0.42	0.00	0.00	0.00	0.00
Corn (bu.)	11.61	19.39	26.24	46.52	0.90	1.57
Corn Silage (lb.)	2232.52	19.14	3892.75	35.03	42.03	0.38
Corn, Ear (lb.)	741.56	3.20	0.00	0.00	0.00	0.00
Hay, Alfalfa (lb.)	376.08	10.98	1000.01	28.75	283.68	6.60
Hay, Grass & Other (lb.)	1106.40	19.87	847.91	12.72	901.47	15.55
Haylage, Alfalfa (lb.)	177.05	3.54	0.00	0.00	0.00	0.00
Oats (bu.)	2.20	2.27	1.36	0.95	0.48	0.59
Pasture (aum)	0.36	3.33	0.00	4.10	0.00	3.96
Sorghum Silage (lb.)	4.12	0.03	0.00	0.00	0.00	0.00
Stover (lb.)	33.48	0.42	0.00	0.00	0.00	0.00
Wheat, Spring (bu.)	0.05	0.07	0.00	0.00	0.00	0.00
Complete Ration (lb.)	242.76	14.58	112.65	3.74	58.31	2.05
Creep / Starter (lb.)	1.78	0.02	0.00	0.00	0.00	0.00
Protein Vit Minerals (lb.)	54.77	8.66	62.06	10.25	54.90	8.66
Other feed stuffs		3.00		0.00		0.00
Veterinary		7.74		6.14		4.42
Livestock supplies		2.55		2.93		5.27
Fuel & oil		1.96		1.92		1.03
Repairs		6.49		10.75		11.00
Custom hire		1.78		0.00		1.12
Utilities		0.34		0.00		0.00
Hauling and trucking		0.85		0.06		1.04
Marketing		5.67		14.59		2.76
Bedding		0.77		4.87		0.00
Operating interest		3.78		1.35		1.11
Total direct expenses	140.85		184.69			67.11
Return over direct expense	76.58		-47.86			165.39
Overhead expenses						
Custom hire	0.04		0.03		0.04	
Hired labor	1.26		0.53		0.00	
Machinery & bldg leases	0.79		1.89		0.00	
RE & pers. property taxes	2.03		1.51		1.54	
Farm insurance	1.94		1.40		3.07	
Utilities	2.57		1.92		7.32	
Dues & professional fees	0.18		0.59		0.21	
Interest	8.33		7.41		14.58	
Mach & bldg depreciation	5.39		4.60		4.84	
Miscellaneous	1.36		0.26		0.91	
Total overhead expenses	23.90		20.13		32.51	
Total listed expenses	164.75		204.82		99.62	
Net return	52.68		-68.00		132.88	
Est. labor hours per unit	3.15		5.42		4.89	
Labor & management charge	20.43		37.36		17.41	
Net return over lbr & mgt	32.24		-105.36		115.47	
Other Information						
No. purchased or trans in	102		77		56	
Number sold or trans out	115		96		60	
Percentage death loss	1.9		2.4		4.0	
Avg. daily gain (lbs)	1.36		1.81		0.98	
Lbs of conc / lb of gain	4.02		4.58		0.78	
Lbs of feed / lb of gain	11.39		13.11		5.97	
Feed cost per cwt of gain	34.31		38.53		17.03	
Feed cost per head	108.91		142.07		39.35	
Average purchase weight	497		560		163	
Average sales weight	800		839		737	
Avg purch price / cwt	79.95		58.45		49.92	
Avg sales price / cwt	69.70		62.83		71.75	

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All Beef Finish Calves -- Average per Cwt Produced

Number of farms	Average For All Farms		Average For Low 20%		Average For High 20%	
	96		19		19	
Fin Str Calf sold (lb)	195.91	125.84	199.24	126.66	209.82	139.32
Transferred out (lb)	2.03	1.43	1.81	1.23	4.39	3.17
Cull sales (lb)	0.03	0.04	0.00	0.00	0.00	0.00
Butchered (lb)	1.33	0.84	1.49	0.91	1.86	1.16
Less purchased (lb)	-86.35	-68.84	-86.74	-77.25	-104.52	-77.77
Less transferred in (lb)	-10.38	-8.99	-10.17	-8.47	-15.76	-13.57
Inventory change (lb)	-2.57	4.51	-5.63	-2.13	4.21	22.06
Total production (lb)	100.00	54.83	100.00	40.95	100.00	74.38
Other income	0.00		0.00		0.00	
Gross return		54.83		40.95		74.38
<b>Direct expenses</b>						
Corn (bu.)	11.16	18.94	12.97	22.13	12.28	19.87
Corn Silage (lb.)	349.13	2.84	653.00	5.28	229.87	1.96
Corn, Ear (lb.)	35.75	0.40	0.55	0.01	35.38	0.01
Hay, Alfalfa (lb.)	62.22	1.83	137.01	3.63	42.45	1.08
Hay, Grass & Other (lb.)	31.17	0.57	30.18	0.66	63.48	0.71
Haylage, Alfalfa (lb.)	41.74	0.64	33.52	0.75	24.77	0.37
Haylage, Grass & Other (lb.)	26.13	0.30	41.22	0.31	0.00	0.00
Oatlage (lb.)	9.68	0.07	0.00	0.00	0.00	0.00
Oats (bu.)	0.06	0.06	0.08	0.08	0.00	0.00
Pasture (aum)	0.00	0.04	0.00	0.00	0.00	0.00
Stover (lb.)	1.23	0.02	3.50	0.04	0.00	0.00
Complete Ration (lb.)	7.21	0.73	0.00	0.00	0.86	0.09
Creep / Starter (lb.)	0.76	0.06	0.00	0.00	0.00	0.00
Protein Vit Minerals (lb.)	53.53	5.34	46.67	5.72	42.62	4.29
Veterinary	1.69		2.23		1.91	
Livestock supplies	0.50		0.34		1.05	
Fuel & oil	0.74		0.90		1.11	
Repairs	2.27		3.60		2.58	
Custom hire	0.32		0.01		1.27	
Machinery & bldg leases	0.08		0.00		0.00	
Utilities	0.07		0.23		0.00	
Hauling and trucking	1.12		2.31		0.57	
Marketing	0.99		0.10		1.20	
Bedding	0.04		0.00		0.00	
Operating interest	2.91		2.71		3.16	
Total direct expenses	42.59		51.05		41.25	
Return over direct expense	12.24		-10.10		33.13	
<b>Overhead expenses</b>						
Hired labor	0.79		0.93		1.58	
Machinery & bldg leases	0.21		0.16		0.31	
RE & pers. property taxes	0.27		0.21		0.56	
Farm insurance	0.57		0.62		0.58	
Utilities	0.59		0.71		1.02	
Dues & professional fees	0.07		0.03		0.19	
Interest	1.39		2.20		1.13	
Mach & bldg depreciation	3.05		7.72		2.44	
Miscellaneous	0.75		0.75		0.84	
Total overhead expenses	7.70		13.33		8.66	
Total listed expenses	50.29		64.38		49.91	
Net return	4.54		-23.43		24.47	
Est. labor hours per unit	0.40		0.35		0.92	
Labor & management charge	4.20		4.11		3.89	
Net return over lbr & mgt	0.34		-27.54		20.59	
<b>Other Information</b>						
No. purchased or trans in	145		119		107	
Number sold or trans out	152		118		104	
Percentage death loss	0.7		0.7		0.8	
Avg. daily gain (lbs)	2.27		1.91		2.12	
Lbs of conc / lb of gain	7.20		7.76		7.34	
Lbs of feed / lb of gain	9.66		12.01		9.29	
Feed cost per cwt of gain	31.86		38.61		28.40	
Feed cost per head	190.58		271.88		166.31	
Average purchase weight	660		636		694	
Average sales weight	1260		1314		1243	
Avg purch price / cwt	79.72		89.06		74.40	
Avg sales price / cwt	64.23		63.57		66.40	

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Hogs, Farrow To Finish -- Average per Litter

	Average For	Average For	Average For			
	All Farms	Low 20%	High 20%			
Number of farms	89	18	18			
Raised Hogs sold (lb)	Quantity 2133.03	Value 783.86	Quantity 2011.13	Value 736.87	Quantity 2061.68	Value 755.29
Transferred out (lb)	12.82	6.30	51.44	28.33	3.43	1.71
Cull sales (lb)	111.64	25.42	142.38	32.22	99.90	26.35
Butchered (lb)	4.96	1.70	6.03	1.89	6.23	2.00
Less purchased (lb)	-47.92	-42.83	-85.37	-88.33	-18.37	-24.83
Less transferred in (lb)	-3.30	-1.43	-1.94	-0.88	-1.67	-0.84
Inventory change (lb)	-57.70	48.80	-1.98	29.17	-282.35	85.81
Total production (lb)	2153.54	821.81	2121.69	739.27	1868.84	845.50
Other income		7.41		5.14		13.20
Gross return		829.22		744.40		858.70
Direct expenses						
Barley (bu.)	0.33	0.47	1.01	1.55	0.00	0.00
Barley, Winter (bu.)	0.01	0.01	0.00	0.00	0.00	0.00
Corn (bu.)	79.48	135.96	34.59	56.82	98.20	157.69
Hay, Alfalfa (lb.)	1.33	0.06	0.88	0.03	0.00	0.00
Oats (bu.)	0.25	0.25	0.47	0.37	0.08	0.08
Soybeans (bu.)	0.00	0.02	0.00	0.00	0.00	0.00
Complete Ration (lb.)	1813.11	99.34	4396.03	271.21	62.25	9.26
Creep / Starter (lb.)	132.64	5.50	0.00	0.00	22.55	7.22
Protein Vit Minerals (lb.)	1362.95	183.64	528.87	78.98	1492.71	212.58
Other feed stuffs		1.27		0.00		0.00
Breeding fees		9.02		12.03		4.91
Veterinary		26.59		31.18		20.10
Livestock supplies		10.62		8.41		8.21
DHIA		0.12		0.00		0.00
Fuel & oil		7.30		4.43		7.92
Repairs		22.22		16.03		22.49
Custom hire		18.30		53.93		8.01
Hired labor		7.13		16.04		1.11
Machinery & bldg leases		27.42		117.24		6.73
Livestock leases		8.72		10.23		3.66
Utilities		3.94		4.00		1.40
Hauling and trucking		2.01		7.35		5.05
Marketing		5.23		7.37		0.70
Bedding		0.15		0.22		6.54
Operating interest		12.18		22.62		
Total direct expenses		587.49		720.05		483.65
Return over direct expense		241.73		24.35		375.05
Overhead expenses						
Custom hire		0.02		0.00		0.13
Hired labor		32.11		10.36		18.35
Machinery & bldg leases		6.67		0.11		2.45
RE & pers. property taxes		3.79		3.58		4.85
Farm insurance		8.00		6.67		8.45
Utilities		14.01		7.00		13.28
Dues & professional fees		1.49		1.58		2.21
Interest		31.67		13.26		24.90
Mach & bldg depreciation		45.80		23.03		45.26
Miscellaneous		6.47		4.15		6.64
Total overhead expenses		150.03		69.73		126.52
Total listed expenses		737.52		789.78		610.17
Net return		91.70		-45.38		248.53
Est. labor hours per unit		6.69		5.45		4.45
Labor & management charge		51.15		26.89		69.48
Net return over lbr & mgt		40.55		-72.27		179.05
Other Information						
Average number of sows		160.8		128.9		136.5
Litters farrowed		307		252		239
Litters per sow		1.91		1.96		1.75
Litters per crate		10.65		9.73		9.23
Pigs born per litter		10.23		9.64		9.51
Pigs weaned per litter		8.72		8.79		8.32
Pigs weaned per sow		16.47		16.74		14.50
Number sold per litter		8.60		8.12		8.22
Lbs of feed / lb of gain		3.62		3.27		3.79
Feed cost / cwt. of gain		19.81		19.28		20.70
Feed cost per litter		426.55		408.98		386.83
Avg wgt/Raised Hog sold		248		248		251
Avg price / cwt		36.75		36.64		36.63

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Hogs, Feeder Pig Prod -- Average per Litter

Number of farms	Average For All Farms		Average For Low 20%		Average For High 20%	
		24		5		5
Feeder Pigs sold (hd)	Quantity	6.13	Value	262.26	Quantity	3.03
Transferred out (hd)		1.99		62.77		5.68
Cull sales (hd)		0.23		24.96		0.61
Butchered (hd)		0.01		0.35		0.00
Less purchased (hd)		-0.19		-34.68		-0.06
Less transferred in (hd)		-0.06		-5.97		-0.18
Inventory change (hd)		0.09		19.76		-1.20
Total production (hd)		0.00		329.45		-50.67
Other income				9.54		0.00
Gross return				338.99		240.65
						0.00
						398.77
						0.59
						399.36
Direct expenses						
Barley (bu.)		0.03		0.04		0.00
Corn (bu.)		16.59		29.14		39.02
Hay, Alfalfa (lb.)		0.70		0.02		0.00
Complete Ration (lb.)		239.78		30.78		489.83
Creep / Starter (lb.)		0.02		0.02		0.00
Milk (lb.)		0.47		0.68		0.00
Milk Replacer (lb.)		0.01		0.01		0.00
Protein Vit Minerals (lb.)		508.63		68.39		478.33
Other feed stuffs				0.33		80.03
Breeding fees						572.41
Veterinary				5.07		0.00
Livestock supplies				17.69		7.16
Fuel & oil				7.95		20.88
Repairs				3.34		19.47
Custom hire				11.86		7.24
Hired labor				3.24		30.79
Machinery & bldg leases				4.68		1.93
Utilities				22.27		0.00
Hauling and trucking				0.72		0.00
Marketing				0.17		0.00
Operating interest				1.04		4.03
Total direct expenses				3.68		7.43
Return over direct expense				211.10		279.43
				127.89		-28.38
						193.56
						205.80
Overhead expenses						
Repairs				0.17		0.00
Hired labor				25.06		7.08
Machinery & bldg leases				11.60		3.35
RE & pers. property taxes				1.97		2.52
Farm insurance				3.96		6.64
Utilities				8.97		9.31
Dues & professional fees				0.57		0.26
Interest				21.38		28.49
Mach & bldg depreciation				34.25		23.15
Miscellaneous				6.38		3.68
Total overhead expenses				114.32		84.48
Total listed expenses				325.43		363.91
Net return				13.56		-112.86
						159.40
						352.96
						46.40
Est. labor hours per unit				5.14		6.50
Labor & management charge				29.83		52.47
Net return over lbr & mgt				-16.26		-165.33
						28.28
						18.12
Other Information						
Average number of sows				221.5		95.4
Litters farrowed				438		132
Litters per sow				1.97		1.38
Litters per crate				11.33		5.54
Pigs born per litter				9.77		9.65
Pigs weaned per litter				8.68		8.29
Pigs weaned per sow				16.87		11.42
Number sold per litter				6.13		3.03
Feed cost per litter				129.41		180.49
Avg wgt/Feeder Pig sold				60		59
Avg price / head				42.79		32.33
						18.62
						10.44
						7.44
						130.25
						51
						52.67

Livestock Enterprise Analysis, 1999  
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 Northland Community and Technical College

Sheep, Market Lamb Prod -- Average per Ewe

	<u>Average For All Farms</u>	
	15	
Number of farms	Quantity	Value
Lambs sold (lb)	6.49	1.36
Mkt Lambs sold (lb)	145.96	117.21
Cull sales (lb)	24.81	14.06
Butchered (lb)	0.43	0.30
Less purchased (lb)	-28.24	-35.46
Inventory change (lb)	0.18	17.51
Total production		114.98
Other income		0.00
Gross return		114.98
Direct expenses		
Corn (bu.)	8.20	13.78
Hay, Alfalfa (lb.)	802.08	25.12
Hay, Grass & Other (lb.)	217.73	4.67
Haylage, Alfalfa (lb.)	5.03	0.09
Oats (bu.)	0.73	0.89
Pasture (aum)	0.34	0.91
Complete Ration (lb.)	3.30	0.62
Protein Vit Minerals (lb.)	103.04	14.76
Other feed stuffs		0.02
Breeding fees		0.03
Veterinary		4.30
Livestock supplies		3.21
Fuel & oil		1.66
Repairs		7.46
Custom hire		2.75
Hired labor		1.12
Machinery & bldg leases		0.05
Utilities		0.25
Hauling and trucking		1.43
Marketing		0.35
Bedding		0.27
Operating interest		1.54
Total direct expenses		85.30
Return over direct expense		29.67
Overhead expenses		
Hired labor		2.59
Machinery & bldg leases		0.46
RE & pers. property taxes		0.49
Farm insurance		2.26
Utilities		5.40
Dues & professional fees		0.70
Interest		3.78
Mach & bldg depreciation		5.62
Miscellaneous		1.98
Total overhead expenses		23.27
Total listed expenses		108.57
Net return		6.40
Est. labor hours per unit		1.93
Labor & management charge		17.59
Net return over lbr & mgt		-11.19
Other Information		
Number of ewes		196.2
Pregnancy percentage		92.6
Pregnancy loss percentage		5.9
Female turnover rate		32.21
Lambs born / ewe exposed		1.37
Lambs born / ewe lambing		1.58
Lambs weaned/ewe exposed		1.25
Lambs sold per ewe		1.16
Lamb dth loss (died/born)		9.8
Average weaning weight		51
Lbs weaned/exposed female		63
Feed cost per ewe		60.86
Avg wgt/Mkt Lamb sold		126
Avg price / cwt		80.30

**MONEY SPENT BY THE AVERAGE  
NORTHWESTERN MINNESOTA FARMER**

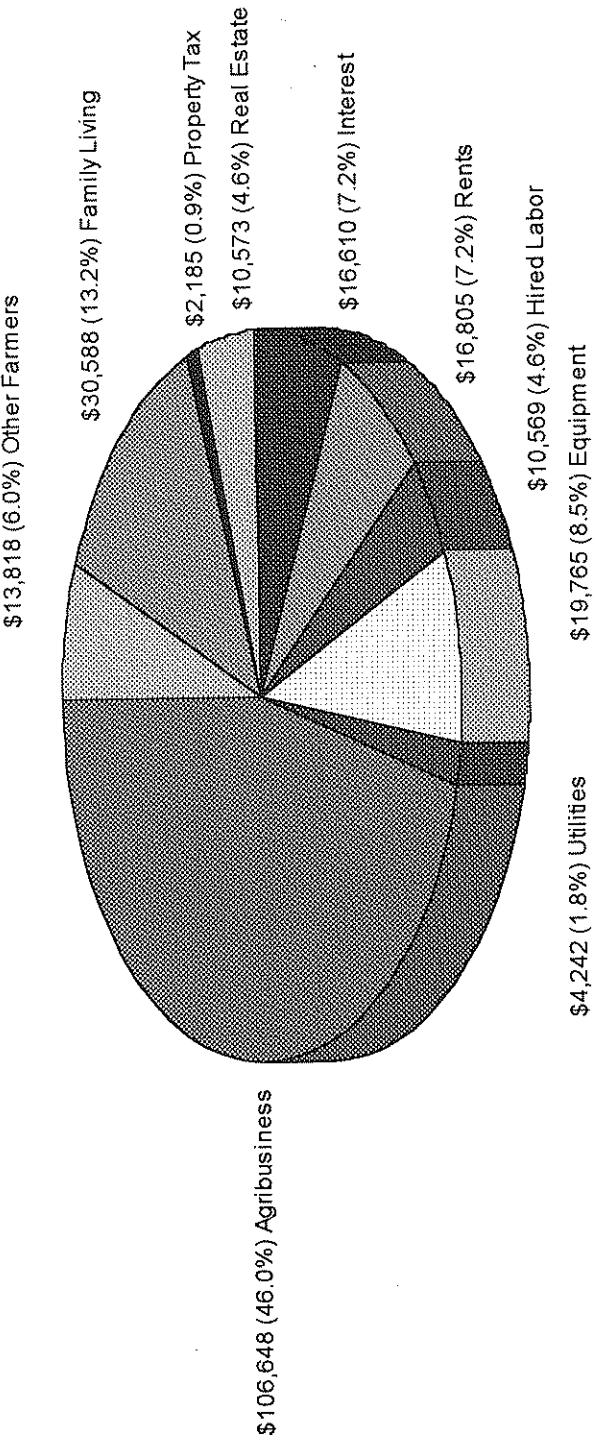
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**SUMMARY BY YEARS**

	<u>1995</u>	<u>1996</u>	<u>1997*</u>	<u>1998*</u>	<u>1999*</u>
TO OTHER FARMERS, For Livestock and Custom Work	\$8,647	\$9,564	\$10,570	\$13,467	\$13,818
TO THE AGRIBUSINESS COMMUNITY, For Fertilizer, Chemicals, Feed, Seed, Fuel, Repairs and Supplies	114,320	139,917	106,211	106,221	106,648
FOR EXTRA LABOR	9,952	11,330	7,641	8,558	10,569
FOR SUPPORT OF LOCAL GOVERNMENT Property Taxes	2,819	3,430	2,196	2,221	2,185
FOR UTILITIES, Telephone, Electricity, Water	3,250	3,688	4,085	4,160	4,242
FOR USE OF OTHER PEOPLES CAPITAL, Interest Rent Total	17,074 <u>32,441</u> 49,515	21,152 <u>34,753</u> 55,905	15,152 <u>15,097</u> 30,803	17,410 <u>16,680</u> 34,090	16,610 <u>16,805</u> 33,415
FOR FARM EQUIPMENT, Farm Power and Machinery	17,721	26,376	15,412	16,357	19,765
FOR REAL ESTATE, Purchases and Improvements	5,905	21,351	9,364	16,537	10,573
<b>TOTAL FARM PURCHASES</b>	<b>\$212,130</b>	<b>\$271,561</b>	<b>\$186,282</b>	<b>\$201,611</b>	<b>\$201,215</b>
HOUSEHOLD AND PERSONAL EXPENSE, For Food, Clothing, Furnishings, Education, Contributions, Medical, Gifts, Recreation and Investments	30,495	34,648	33,698	31,730	30,588
<b>TOTAL MONEY SPENT BY AN AVERAGE FARMER WITHIN THE COMMUNITY OR SERVICE AREA</b>	<b>\$242,625</b>	<b>\$306,209</b>	<b>\$219,980</b>	<b>\$233,341</b>	<b>\$231,803</b>

\* 1997, 1998 and 1999 data include only the data from this report and do not include the farms located in the valley, which are included in a separate report.

# Where the Money is Spent



## PROGRAM INFORMATION

Farm Business Management education has been a part of agriculture education programs in Minnesota since 1952. From the early cooperative efforts of the State Department of Agriculture Education (University of Minnesota), the program has expanded to serve over 6000 farm families each year in six Farm Management areas. Programs are now administered and managed by the Minnesota State College and University System through eight two-year Colleges.

The Farm Business Management Program is an educational program that is designed to help farm families achieve their farm business and family goals. This is done through improved management organization and efficiency of their farm operations. This purpose has not changed over the years.

To accomplish these purposes, programs have been organized to conform to the following guidelines:

- Farm families enroll in a specific management course.
- Each course has a specific objective and units of instruction to meet the objective.
- Courses are offered in sequence and farmers are expected to enroll in the first of the sequence of courses.
- There is continuity to each course. Each leads to the next course in the sequence.
- Instruction occurs both in the classroom and on the farm with the farm family.

Programs organize their curriculum around the same central theme. They are:

- Level 1 - Introduction to Farm System Management
- Level 2 - Farm System Analysis and Evaluation
- Level 3 - Interpreting and Modifying Farm System Management Plans
- Level 4 - Farm System Trends and Projections
- Level 5 - Integrating Current Information into Farm System Plans
- Level 6 - Examining the Context of Farm System Management Plans

The programs became course/credit based in FY92. Each individual enrollee completes a needs assessment with the instructor, after which the enrollee registers for classes and course work to meet these needs. A typical farm business enrollee registers for 10 credits per year. The purpose of this effort is to more adequately address the needs of the individual farmer, making enrollment even more beneficial.

Like most educational programs, members benefit from the instruction in relation to how much effort they put into study. Some farmers have benefited more, and some less, depending upon how seriously they studied the results of their business analysis and the kind of decisions they made as a result of their analysis.

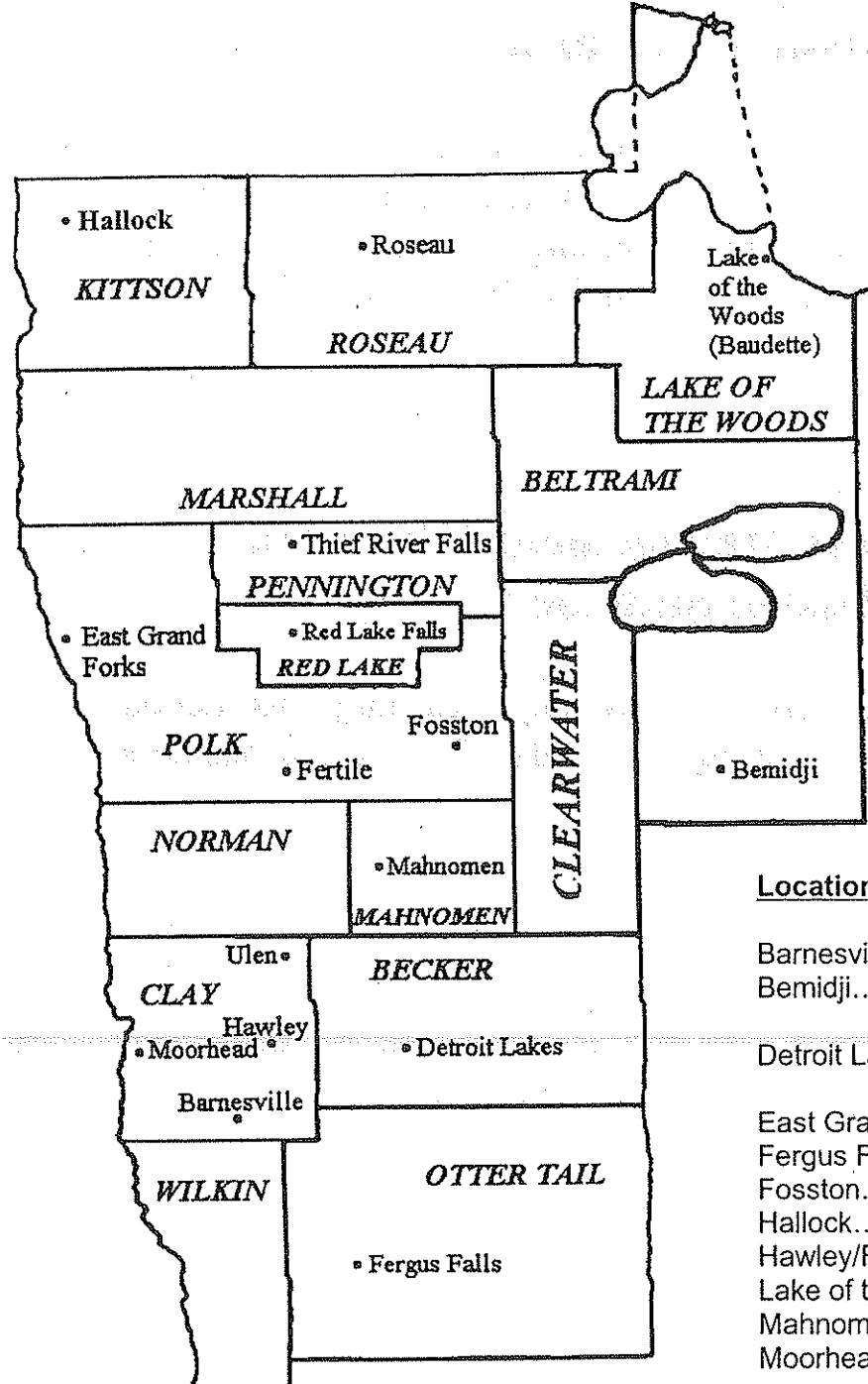


## **Northland Community and Technical College Mission Statement**

Northland Community and Technical College, an accredited college that provides technical and liberal arts education, is dedicated to creating a quality learning environment through partnerships with students, communities, businesses, and other educational institutions.

## **Farm Business Management Education Mission Statement**

Management Programs provide life-long learning instruction within our communities meeting the goals of a diverse business community.



## **NORTHLAND COMMUNITY AND TECHNICAL COLLEGE**

### **FARM BUSINESS MANAGEMENT PROGRAMS**

*Northwestern  
Minnesota*

<u>Location</u>	<u>Instructor</u>
Barnesville.....	Sheldon Schmies
Bemidji.....	Jim Sackett
	Steve Ziegler
Detroit Lakes.....	Mark Berg
	Paul Ramsey
East Grand Forks.....	Ron Dvergsten
Fergus Falls.....	Rudy Hasbargen
Fosston.....	Doug Fjerstad
Hallock.....	Chad Anvinson
Hawley/Fertile.....	Dennis Olsen
Lake of the Woods.....	Gerald Ausmus
Mahnomen/Ulen.....	Mike Lockhart
Moorhead.....	Rick Morgan
	Greg Tullis
Red Lake Falls.....	Greg Kalinoski
Roseau.....	Duane Jaenicke
Thief River Falls.....	Greg Dvergsten
	Danie Packard