

Dairy Farm Sort

from the

2006

Minnesota State Colleges and Universities

State Farm Business Management Program Database

Financial Sort Categories:

(By Gross Revenue)

\$50,001 to \$100,000

\$100,001 to \$250,000

\$250,001 to \$500,000

\$500,001 to \$1,000,000

Over \$1,000,000

Enterprise Sort Categories:

(By Herd Size)

Up to 50 Cows

51 to 100 Cows

101 to 200 Cows

201 to 500 Cows

Over 500 Cows



A MEMBER OF THE MINNESOTA STATE COLLEGES
AND UNIVERSITIES SYSTEM

April, 2007



In Cooperation with the
Center for Farm Financial Management
University of Minnesota

For more information, visit the
Farm Business Management Program Website: www.mgt.org

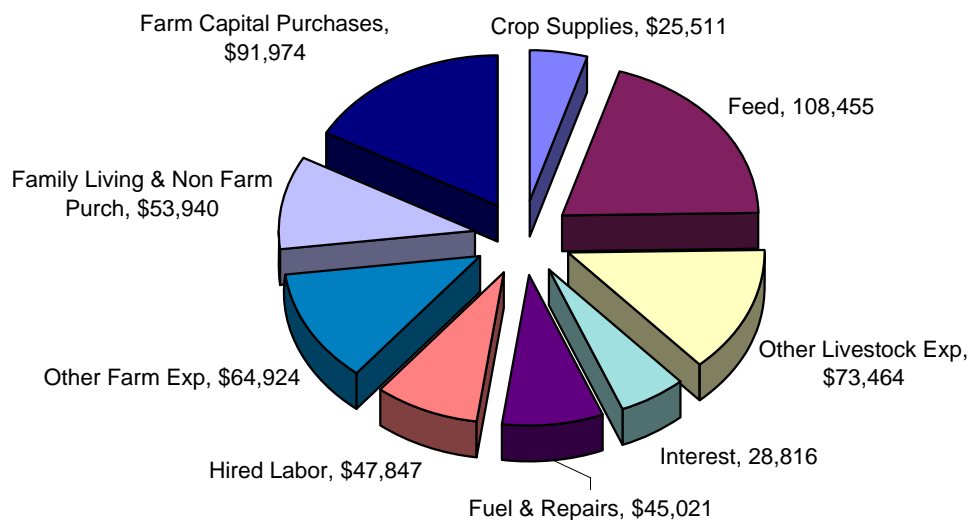
General Financial Summary
Farm Business Management Education Programs
Minnesota State Colleges and Universities
(Dairy Farms Sorted by Gross Farm Income)

	Avg. Of All Farms	50,001 - 100,000	100,001 - 250,000	250,001 - 500,000	500,001 - 1,000,000	Over 1,000,000
Number of farms	453	41	168	135	54	48
<u>Income Statement</u>						
Gross cash farm income	467,681	79,146	176,779	346,138	697,018	1,963,863
Total cash farm expense	394,038	64,896	143,481	280,863	592,356	1,699,908
Net cash farm income	73,644	14,250	33,298	65,274	104,662	263,955
Inventory change	10,804	-602	4,251	10,623	8,902	46,809
Depreciation and capital adjust	-23,702	-8,210	-7,322	-21,679	-34,353	-89,748
Net farm income	60,746	5,439	30,227	54,219	79,212	221,016
<u>Profitability (cost)</u>						
Labor and management earnings	34,237	204	16,307	30,592	39,057	136,024
Rate of return on assets	5.50%	-1.60%	3.90%	5.50%	5.70%	6.90%
Rate of return on equity	4.70%	-16.00%	1.90%	4.80%	4.60%	7.50%
Operating profit margin	13.20%	-6.90%	12.60%	15.30%	13.40%	12.90%
Asset turnover rate	41.90%	23.30%	31.10%	36.20%	42.20%	53.30%
<u>Liquidity</u>						
Ending current ratio	1.42	0.91	1.52	1.49	1.46	1.36
Ending working capital	41,902	-2,397	22,374	37,999	61,602	142,283
End working capital to gross inc	9.00%	-3.00%	12.70%	11.00%	8.80%	7.20%
Term debt coverage ratio	108.50%	83.60%	90.60%	110.10%	100.60%	121.00%
Expense as a percent of income	82.60%	83.10%	79.70%	78.90%	84.20%	84.80%
Interest as a percent of income	6.00%	11.00%	7.50%	6.80%	6.50%	4.80%
<u>Solvency (cost)</u>						
Number of farms	453	41	168	135	54	48
Ending farm assets	940,171	258,356	480,030	809,785	1,407,871	3,091,055
Ending farm liabilities	493,056	173,734	247,538	406,895	744,533	1,641,860
Ending total assets	1,033,185	312,250	572,007	913,556	1,497,331	3,204,548
Ending total liabilities	514,398	192,921	265,382	429,783	756,918	1,685,471
Ending net worth	518,788	119,329	306,625	483,773	740,414	1,519,077
Net worth change	31,866	8,529	14,404	25,385	32,329	134,803
Ending farm debt to asset ratio	52%	67%	52%	50%	53%	53%
Beg total debt to asset ratio	49%	62%	45%	47%	49%	52%
End total debt to asset ratio	50%	62%	46%	47%	51%	53%
<u>Solvency (market)</u>						
Number of farms	453	41	168	135	54	48
Ending farm assets	1,197,544	367,136	644,045	1,066,061	1,732,132	3,763,478
Ending farm liabilities	579,465	197,653	294,288	495,747	862,707	1,889,510
Ending total assets	1,302,756	431,357	749,865	1,181,453	1,832,991	3,889,303
Ending total liabilities	603,559	219,299	315,352	521,417	876,707	1,936,079
Ending net worth	699,197	212,058	434,513	660,036	956,284	1,953,224
Net worth change	57,506	18,508	29,953	39,002	60,023	243,911
Ending farm debt to asset ratio	48%	54%	46%	47%	50%	50%
Beg total debt to asset ratio	46%	51%	42%	44%	47%	50%
End total debt to asset ratio	46%	51%	42%	44%	48%	50%
<u>Nonfarm Information</u>						
Net nonfarm income	12,405	21,819	12,932	11,217	11,918	6,843
Farms reporting living expenses	130	8	54	43	16	7
Total family living expense	33,994	18,838	31,442	38,203	38,632	34,982
Total living, invest, & capital	46,411	25,908	45,448	46,288	52,896	67,480
<u>Crop Acres</u>						
Total acres owned	187	128	156	190	193	350
Total crop acres	287	99	164	265	388	864
Total crop acres owned	121	55	96	129	162	208
Total crop acres cash rented	164	39	66	134	224	656
Total crop acres share rented	2	5	1	2	2	-

Financial Standards Measures
Farm Business Management Education Programs
Minnesota State Colleges and Universities
(Dairy Farms Sorted by Gross Farm Income)

	<u>Avg. Of All Farms</u>	<u>50,001 - 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>Over 1,000,000</u>
Number of farms	453	41	168	135	54	48
<u>Liquidity</u>						
Current ratio	1.42	0.91	1.52	1.49	1.46	1.36
Working capital	41,902	-2,397	22,374	37,999	61,602	142,283
<u>Solvency (market)</u>						
Farm debt to asset ratio	48%	54%	46%	47%	50%	50%
Farm equity to asset ratio	52%	46%	54%	53%	50%	50%
Farm debt to equity ratio	94%	117%	84%	87%	99%	101%
<u>Profitability (cost)</u>						
Rate of return on farm assets	5.5%	-1.6%	3.9%	5.5%	5.7%	6.9%
Rate of return on farm equity	4.7%	-16.0%	1.9%	4.8%	4.6%	7.5%
Operating profit margin	13.2%	-6.9%	12.6%	15.3%	13.4%	12.9%
Net farm income	60,746	5,439	30,227	54,219	79,212	221,016
<u>Repayment Capacity</u>						
Term debt coverage ratio	108%	84%	91%	110%	101%	121%
Capital replacement margin	5,833	-3,583	-2,976	5,966	587	50,139
<u>Efficiency</u>						
Asset turnover rate (cost)	41.9%	23.3%	31.1%	36.2%	42.2%	53.3%
Operating expense ratio	76.6%	72.2%	72.1%	72.1%	77.6%	80.1%
Depreciation expense ratio	4.9%	10.1%	4.0%	6.0%	4.8%	4.4%
Interest expense ratio	6.0%	11.0%	7.5%	6.8%	6.5%	4.8%
Net farm income ratio	12.5%	6.7%	16.4%	15.1%	11.0%	10.8%

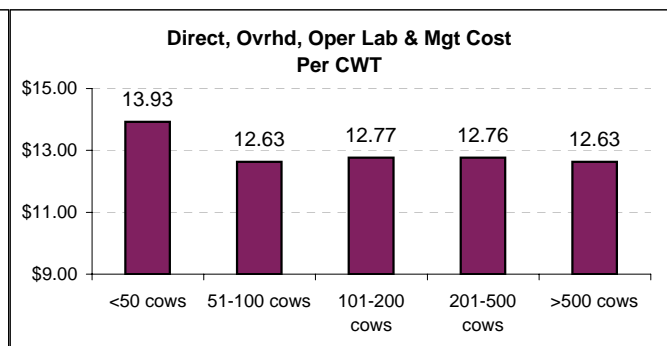
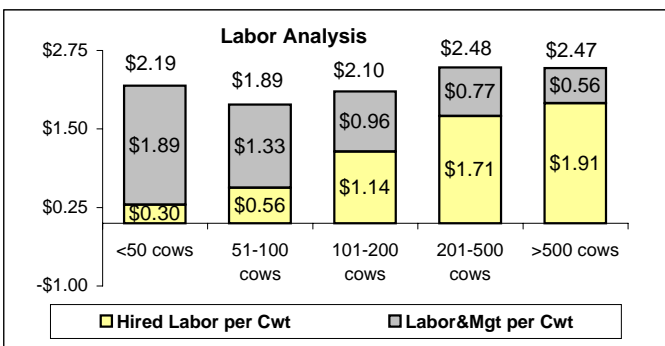
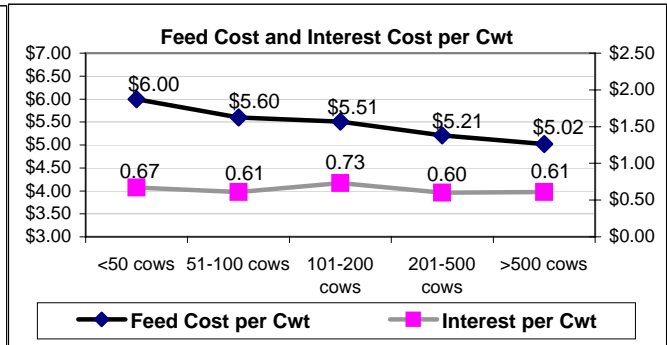
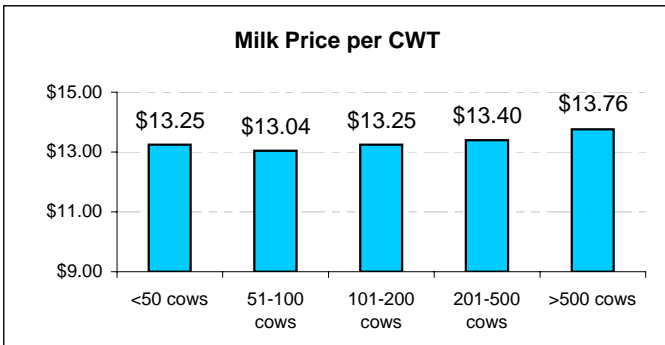
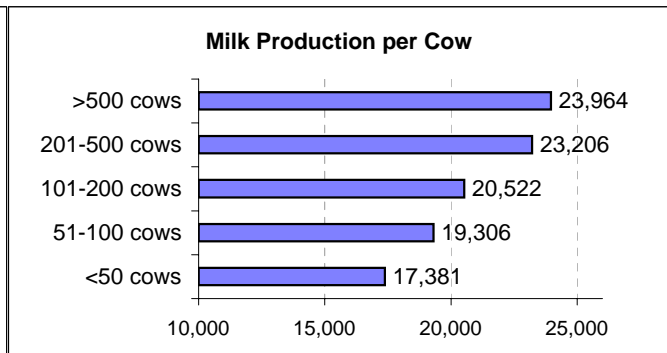
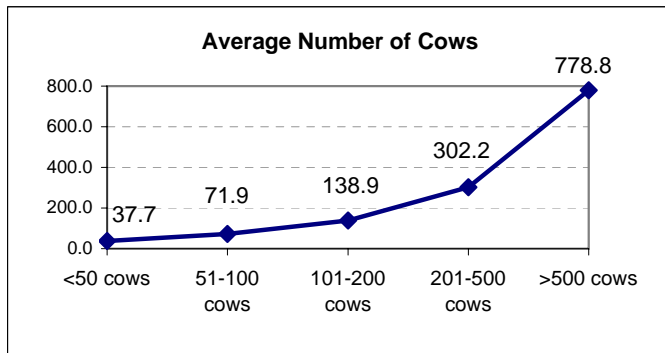
Average Dollars Spent by a Dairy Farm totals \$539,952 in 2006



State Database Dairy Cow Enterprise (Sorted by Herd Size)	Sorted by Average Number of Dairy Cows				
	Up to 50 Cows	51 to 100 Cows	101 to 200 Cows	201 To 500 Cows	Over 500 Cows
	***** Per Cow *****				
Number Of Farms	129	228	115	51	17
Milk sold	\$2,287.52	\$2,507.18	\$2,708.80	\$3,101.62	\$3,293.14
Milk used in home	4.27	1.68	0.53	0.37	-
Milk fed to animals	12.76	8.53	10.83	4.54	3.23
Dairy Calves sold	33.54	47.77	42.10	58.60	88.32
Transferred out	148.24	132.21	129.26	118.83	97.85
Cull sales	150.58	149.80	133.00	133.96	148.08
Butchered	7.73	4.12	2.86	1.60	0.65
Less purchased	-80.05	-77.74	-88.02	-43.57	-220.17
Less transferred in	-358.86	-400.68	-412.37	-416.84	-543.45
Inventory change	31.27	74.46	102.83	68.44	212.88
Total production	\$2,237.00	\$2,447.33	\$2,629.81	\$3,027.55	\$3,080.53
Other income	\$90.17	\$96.89	\$104.01	\$76.27	\$34.75
Gross return	\$2,327.17	\$2,544.21	\$2,733.83	\$3,103.83	\$3,115.28
Direct Expenses					
Corn (bu.)	129.20	141.76	149.16	153.79	120.91
Corn Silage (lb.)	126.04	136.17	140.36	159.61	165.97
Hay, Alfalfa (lb.)	208.64	167.49	146.00	133.85	64.46
Hay, Grass & Other (lb.)	33.00	16.40	17.93	6.98	13.58
Haylage, Alfalfa (lb.)	73.00	106.49	116.02	116.34	158.67
Complete Ration (lb.)	104.57	141.82	136.57	174.06	209.59
Protein Vit Minerals (lb.)	283.42	309.02	350.97	402.76	416.12
Cottonseed	2.90	7.64	11.71	32.40	27.72
Other feed stuffs	82.93	54.70	61.26	29.64	26.24
Breeding fees	37.95	38.77	35.71	46.85	34.61
Veterinary	84.96	89.15	97.07	125.50	137.38
BST	7.78	11.26	20.06	38.32	80.80
Supplies	124.11	113.79	104.93	120.69	119.34
DHIA	16.99	16.95	15.61	15.66	8.17
Fuel & oil	57.42	58.31	68.37	78.97	79.36
Repairs	118.50	107.38	109.32	97.47	103.56
Custom hire	11.76	16.41	17.52	32.29	52.04
Hired Labor	0.69	4.96	3.46	4.57	27.75
Hauling and trucking	57.84	42.32	31.88	34.76	24.48
Marketing	32.85	35.79	36.48	34.01	42.68
Bedding	17.35	34.46	43.59	60.22	83.42
Operating interest	17.77	12.46	17.96	14.05	10.06
Total direct expenses	1,629.69	1,663.51	1,731.92	1,912.80	2,006.90
Return over direct expense	697.48	880.70	1,001.90	1,191.03	1,108.38
Overhead Expenses					
Custom hire	8.43	5.47	15.34	20.49	11.43
Hired labor	50.82	103.95	230.20	391.78	429.40
Machinery leases	4.67	10.70	6.21	10.53	21.68
Building leases	4.41	13.50	18.28	49.11	51.55
Farm insurance	41.27	33.27	34.48	34.32	22.07
Utilities	92.92	81.19	70.44	59.94	55.15
Interest	98.75	105.28	132.25	125.24	136.57
Mach & bldg depreciation	103.04	113.21	138.70	130.32	98.01
Miscellaneous	57.05	52.60	45.15	48.31	60.10
Total overhead expenses	\$461.36	\$519.17	\$691.06	\$870.06	\$885.98
Total dir & ovhd expenses	\$2,091.05	\$2,182.68	\$2,422.98	\$2,782.86	\$2,892.88
Net return	\$236.12	\$361.54	\$310.84	\$320.97	\$222.40
Labor & management charge	\$329.33	\$256.11	\$197.10	\$178.77	\$134.20
Net return over lbr & mgt	-\$93.21	\$105.43	\$113.75	\$142.21	\$88.20
Cost of Production per CWT					
Total direct expense per cwt.	\$9.38	\$8.62	\$8.44	\$8.24	\$8.37
Total dir & ovhd expense per cwt.	\$12.03	\$11.31	\$11.81	\$11.99	\$12.07
With other revenue adjustments	\$11.90	\$11.17	\$11.74	\$12.00	\$12.83
With labor and management	\$13.80	\$12.49	\$12.70	\$12.77	\$13.39
Est. labor hours per unit	49.07	41.49	37.43	40.50	41.03
Other Information					
Avg. number of Cows	37.7	71.9	138.9	302.2	778.8
Milk produced per Cow	17,381	19,306	20,522	23,206	23,964
Culling percentage	25.4	24.2	23.1	23.8	27.6
Turnover rate	33.6	32.2	31.0	30.9	35.0
Percent of barn capacity	87.0	106.7	107.7	110.3	112.9
Lbs. milk/lb grain & conc.	2.6	2.5	2.3	2.3	2.3
Feed cost per cwt of milk	6.00	5.60	5.51	5.21	5.02
Feed cost per Cow	1,043.70	1,081.50	1,129.96	1,209.43	1,203.26
Avg. milk price per cwt.	13.25	13.04	13.25	13.40	13.76

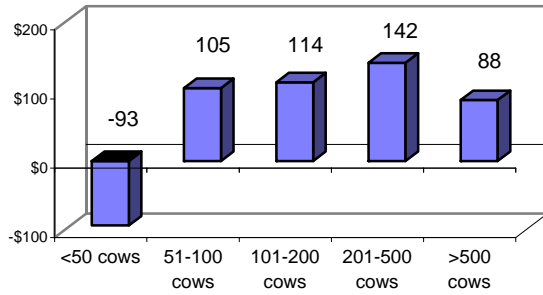
Selected Dairy Enterprise Factors from the 2006 Farm Business Management Program Database

Herd Size	State Ave.	up to 50 cows	51-100 cows	101-200 cows	201-500 cows	over 500 cows
Number of Farms	540	129	228	115	51	17
Ave # of Cows	122.0	37.7	71.9	138.9	302.2	778.8
Milk Prod. Per Cow	21,307	17,381	19,306	20,522	23,206	23,964
Feed Cost per Cwt	\$5.37	\$6.00	\$5.60	\$5.51	\$5.21	\$5.02
Interest per Cwt	\$0.64	\$0.67	\$0.61	\$0.73	\$0.60	\$0.61
Vet per Cwt	\$0.51	\$0.49	\$0.46	\$0.47	\$0.54	\$0.57
Hired Labor per Cwt	\$1.28	\$0.30	\$0.56	\$1.14	\$1.71	\$1.91
Deprec/Lease per Cwt	\$0.76	\$0.65	\$0.71	\$0.80	\$0.82	\$0.71
Milk Price per Cwt	\$13.36	\$13.25	\$13.04	\$13.25	\$13.40	\$13.76
Dir & Ovhd Cost per Cwt	\$11.81	\$12.03	\$11.31	\$11.81	\$11.99	\$12.07
Return to Dir & Ovhd per Cow	\$303	\$236	\$362	\$311	\$321	\$222
Herd Profit over Dir&Ovhd	\$36,909	\$8,902	\$25,995	\$43,176	\$96,997	\$173,205
Labor&Mgt per Cwt	\$0.96	\$1.89	\$1.33	\$0.96	\$0.77	\$0.56
Net per Cow after Labor&Mgt	\$98	-\$93	\$105	\$114	\$142	\$88
Herd Profit over Labor&Mgt	\$11,946	-\$3,514	\$7,580	\$15,798	\$42,973	\$68,690

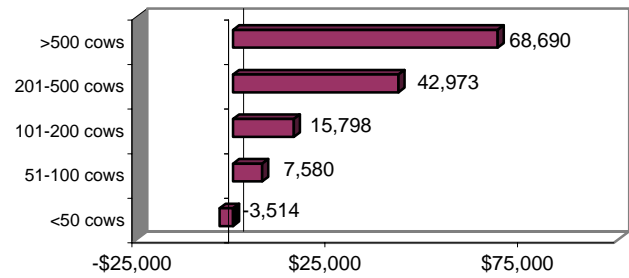


Selected Dairy Enterprise Factors from the 2006 Farm Business Management Program Database

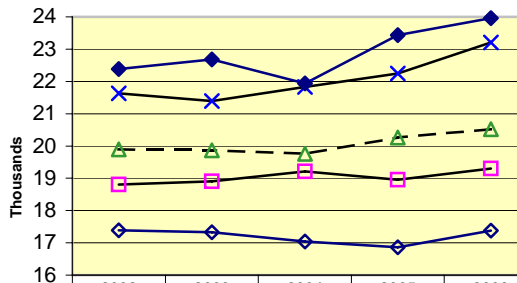
Return over Direct, Overhead, and Labor&Mgt per Cow



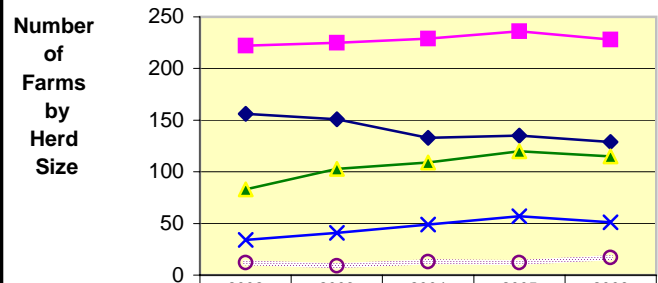
Dairy Herd Profit over Direct, Overhead, and Labor&Mgt



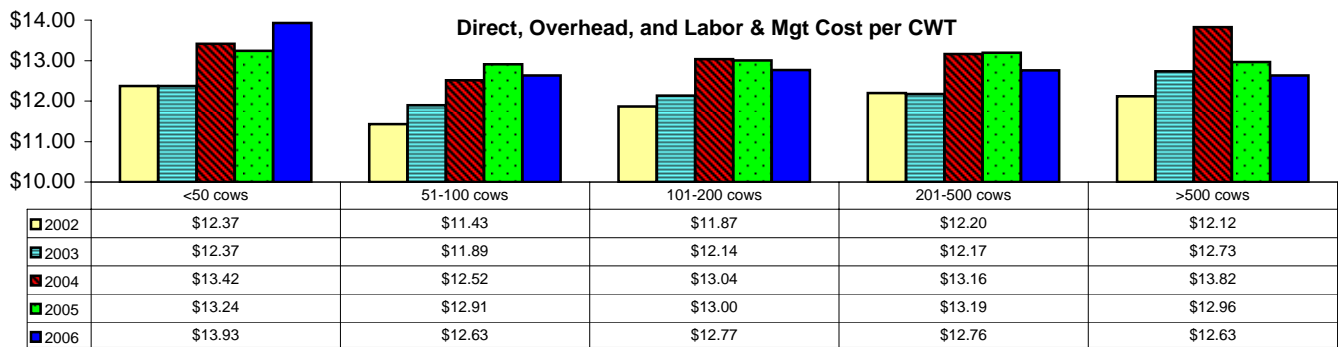
Pounds of Milk Produced per Cow



Number of Farms by Herd Size



Direct, Overhead, and Labor & Mgt Cost per CWT



Net Return per Cow after Direct, Overhead, and Labor&Mgt

