

Minnesota State Colleges and Universities

State Farm Business Management Program Database

Dairy Farm Sort - 2009

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

*** Including 5-yr & 20-yr trend of selected data from the statewide average. ***

Location of the Regional Program Center:

Central Lakes Community and Technical College

Minnesota West Community and Technical College

Northland Community and Technical College

Ridgewater Community and Technical College

Riverland Community and Technical College

South Central College

Minnesota Region:

Northeast and East Central

Southwestern

Northwestern & Red River Valley

Central and West Central

Southeastern

South Central

April, 2010



A MEMBER OF THE MINNESOTA STATE COLLEGES
AND UNIVERSITIES SYSTEM

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

For more information, contact Dr. Richard Joerger at richard.joerger@so.mnscu.edu or
visit the Farm Business Management Program Website: www.mgt.org

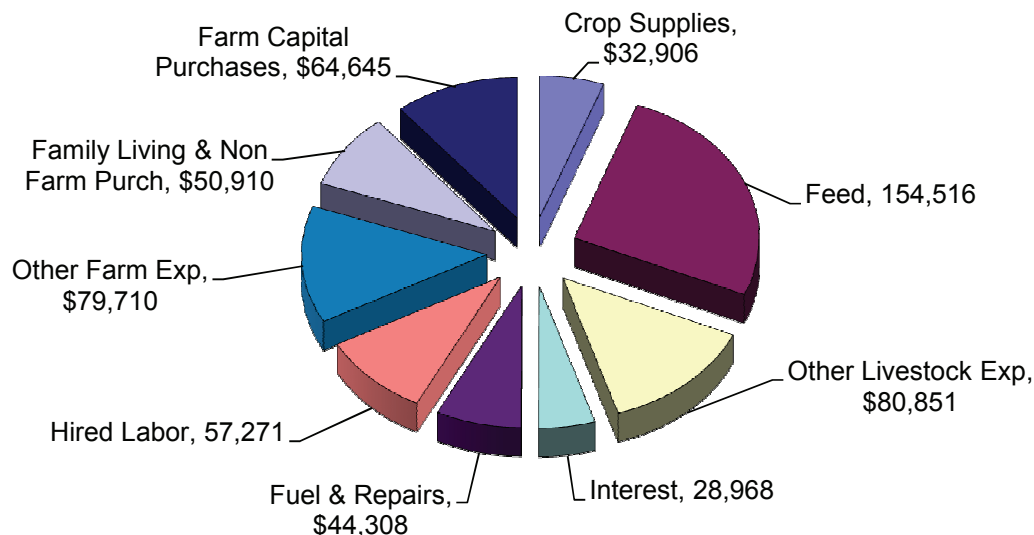
General Financial Summary
Farm Business Management Education Programs
Minnesota State Colleges and Universities
(Dairy Farms Sorted by Gross Farm Income)

	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	401	24	135	118	64	52
<u>Income Statement</u>						
Gross cash farm income	520,536	76,921	174,009	341,341	725,199	1,854,173
Total cash farm expense	478,531	80,683	156,187	301,620	658,061	1,747,184
Net cash farm income	42,005	-3,762	17,822	39,721	67,139	106,988
Inventory change	-18,276	9,178	-2,966	-6,968	-28,463	-85,015
Depreciation	-30,848	-6,768	-12,670	-22,799	-44,604	-94,502
Net farm income from operations	-7,119	-1,352	2,186	9,954	-5,928	-72,529
Gain or loss on capital sales	420	-	74	276	1,301	818
Average net farm income	-6,699	-1,352	2,260	10,230	-4,627	-71,711
Median net farm income	2,077	-2,898	3,116	8,596	-6,800	-56,899
<u>Profitability (cost)</u>						
Rate of return on assets	-1.8%	-5.4%	-2.0%	-0.4%	-1.5%	-2.5%
Rate of return on equity	-9.4%	-29.6%	-11.2%	-6.9%	-8.7%	-9.9%
Operating profit margin	-5.3%	-26.6%	-8.0%	-1.4%	-4.5%	-6.0%
Asset turnover rate	34.1%	20.5%	24.7%	29.7%	34.2%	41.5%
<u>Liquidity</u>						
Current assets	182,438	39,977	74,884	129,598	259,597	577,160
Current liabilities	133,137	33,276	54,772	82,737	191,499	442,540
Ending current ratio	1.37	1.20	1.37	1.57	1.36	1.30
Ending working capital	49,301	6,702	20,113	46,860	68,098	134,620
End working capital to gross inc	9.40%	7.90%	11.40%	13.60%	9.30%	7.20%
Term debt coverage ratio	0.20	0.56	0.18	0.34	0.28	0.06
Replacement coverage ratio	0.18	0.51	0.16	0.31	0.24	0.06
<u>Solvency (cost)</u>						
Number of farms	401	24	135	118	64	52
Total farm assets	1,102,070	277,745	517,038	820,354	1,565,751	3,201,897
Total farm liabilities	599,844	211,674	309,372	452,469	844,302	1,638,664
Total assets	1,197,509	337,063	601,573	948,113	1,666,658	3,272,722
Total liabilities	619,696	224,830	326,456	474,597	864,334	1,665,380
Ending net worth	577,588	112,233	275,117	473,516	802,324	1,605,610
Net worth change	-40,776	-16,261	-18,944	-16,183	-53,864	-152,872
Farm debt to asset ratio	54%	76%	60%	55%	54%	51%
Total debt to asset ratio	52%	67%	54%	50%	52%	51%
<u>Solvency (market)</u>						
Number of farms	401	24	135	118	64	52
Total farm assets	1,406,973	418,734	718,193	1,122,303	1,948,812	3,800,650
Total farm liabilities	702,230	242,804	365,004	547,999	986,665	1,875,203
Total assets	1,514,185	486,135	812,749	1,265,556	2,057,790	3,887,592
Total liabilities	724,121	258,821	383,887	572,603	1,007,970	1,904,475
Ending net worth	790,064	227,314	428,862	692,954	1,049,820	1,983,118
Net worth change	-12,953	5,267	6,992	2,625	-32,188	-84,635
Farm debt to asset ratio	50%	58%	51%	49%	51%	49%
Total debt to asset ratio	48%	53%	47%	45%	49%	49%
<u>Nonfarm Information</u>						
Net nonfarm income	12,524	22,868	13,510	11,181	11,111	7,402
Farms reporting living expenses	68	-	31	17	13	-
Total family living expense	36,648	-	33,667	42,816	35,881	-
Total living, invest, & capital	42,264	-	31,182	55,117	52,874	-
<u>Crop Acres</u>						
Total acres owned	171	129	138	165	216	251
Total crop acres	270	107	153	223	356	682
Total crop acres owned	112	62	84	115	149	171
Total crop acres cash rented	157	45	69	107	207	511
Total crop acres share rented	-	-	-	1	-	-

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	401	24	135	118	64	52
<u>Liquidity</u>						
Current ratio	1.37	1.20	1.37	1.57	1.36	1.30
Working capital	49,301	6,702	20,113	46,860	68,098	134,620
Working capital to gross inc	9.40%	7.90%	11.40%	13.60%	9.30%	7.20%
<u>Solvency (market)</u>						
Farm debt to asset ratio	50%	58%	51%	49%	51%	49%
Farm equity to asset ratio	50%	42%	49%	51%	49%	51%
Farm debt to equity ratio	1.00	1.38	1.03	0.95	1.03	0.97
<u>Profitability (cost)</u>						
Rate of return on farm assets	-1.8%	-5.4%	-2.0%	-0.4%	-1.5%	-2.5%
Rate of return on farm equity	-9.4%	-29.6%	-11.2%	-6.9%	-8.7%	-9.9%
Operating profit margin	-5.3%	-26.6%	-8.0%	-1.4%	-4.5%	-6.0%
Net farm income	-6,699	-1,352	2,260	10,230	-4,627	-71,711
EBIDTA	53,292	12,905	29,162	55,565	79,964	106,166
<u>Repayment Capacity</u>						
Capital debt repayment capacity	14,473	11,415	6,111	19,885	26,980	12,470
Capital debt repayment margin	-57,460	-8,976	-28,297	-38,380	-70,717	-189,224
Replacement margin	-65,281	-10,862	-32,249	-44,468	-84,392	-207,466
Term debt coverage ratio	0.20	0.56	0.18	0.34	0.28	0.06
Replacement coverage ratio	0.18	0.51	0.16	0.31	0.24	0.06
<u>Efficiency</u>						
Asset turnover rate (cost)	34.1%	20.5%	24.7%	29.7%	34.2%	41.5%
Operating expense ratio	89.9%	84.9%	83.5%	83.8%	89.1%	94.3%
Depreciation expense ratio	5.9%	7.9%	7.2%	6.6%	6.1%	5.1%
Interest expense ratio	5.5%	8.1%	7.8%	6.5%	5.5%	4.4%
Net farm income ratio	-1.3%	-1.6%	1.3%	3.0%	-0.6%	-3.8%

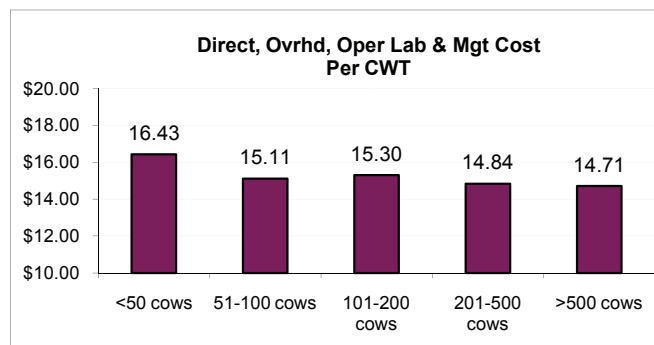
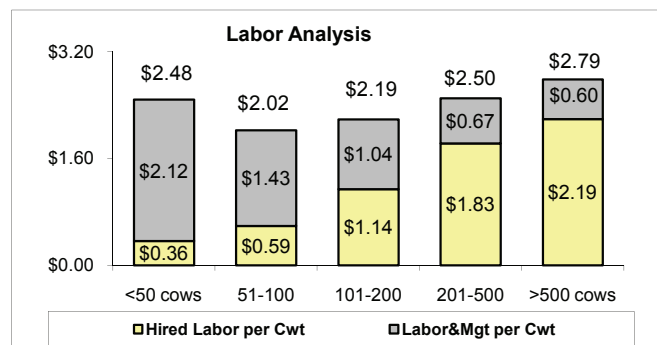
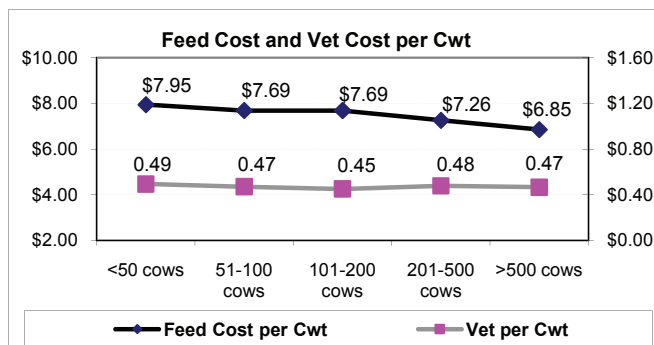
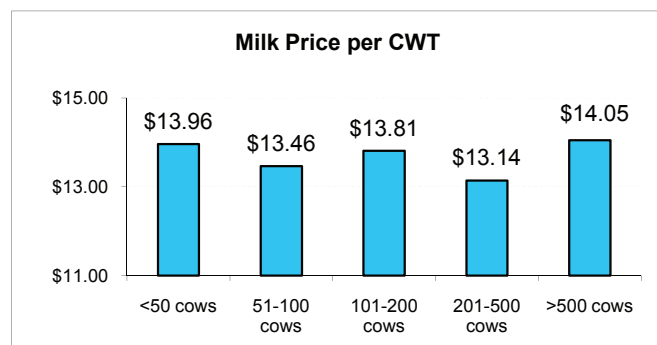
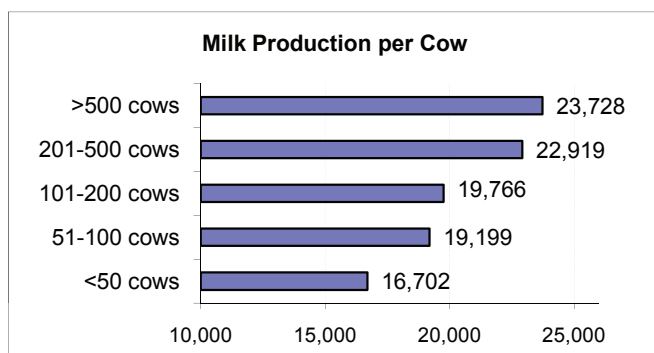
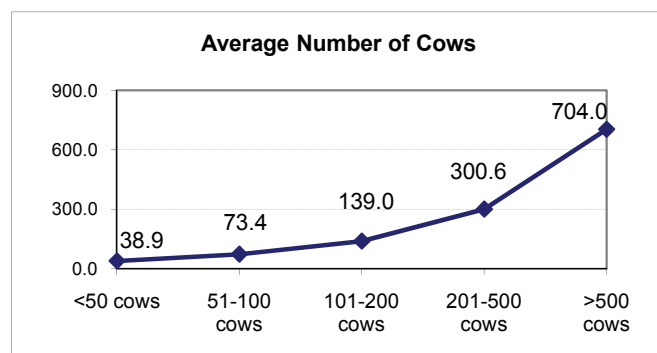
Average Dollars Spent by a Dairy Farm totals \$594,085 in 2009



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	104	203	116	66	19
Milk sold (hd)	2,311.39	2,570.88	2,716.60	3,000.70	3,310.87
Dairy Calves sold (hd)	29.84	21.59	22.57	30.57	28.00
Transferred out (hd)	80.96	65.15	43.55	30.87	22.72
Cull sales (hd)	114.90	137.39	134.31	135.05	130.77
Other income	223.14	265.99	288.34	243.53	133.50
Purchased (hd)	-91.78	-58.56	-48.27	-21.89	-27.82
Transferred in (hd)	-149.51	-94.66	-84.59	-83.83	-42.75
Inventory change (hd)	6.67	65.96	23.74	24.67	9.97
Dairy repl net cost	-223.23	-426.57	-448.05	-417.80	-520.81
Gross margin	2,302.39	2,549.03	2,648.20	2,941.87	3,044.44
Direct Expenses					
Protein Vit Minerals (lb.)	347.76	432.23	508.28	443.76	657.94
Complete Ration (lb.)	136.14	181.76	165.48	375.43	133.01
Corn (bu.)	175.71	199.30	198.80	207.35	185.94
Corn Silage (lb.)	161.85	212.26	195.92	237.50	271.24
Hay, Alfalfa (lb.)	265.48	237.65	196.34	160.04	127.76
Haylage, Alfalfa (lb.)	64.17	112.57	104.78	153.28	128.71
Other feed stuffs (lb)	176.32	100.67	150.65	86.66	120.22
Breeding fees	30.69	40.51	34.42	37.74	35.09
Veterinary	82.37	90.30	89.11	109.36	110.52
BST	4.64	8.46	17.15	36.31	64.16
Supplies	194.24	193.05	171.56	179.06	170.05
Fuel & oil	59.12	51.38	65.03	72.99	69.61
Repairs	98.21	96.86	87.88	89.21	81.38
Custom hire	16.19	23.88	36.43	50.15	92.38
Hired labor	18.27	39.29	54.19	185.68	169.24
Hauling and trucking	64.60	51.65	43.18	37.04	32.87
Marketing	40.95	42.97	43.38	42.54	44.11
Bedding	17.41	36.77	50.49	66.26	52.42
Total direct expenses	1,954.13	2,151.55	2,213.07	2,570.37	2,546.65
Return over direct expense	348.26	397.48	435.13	371.50	497.79
Overhead Expenses					
Hired labor	42.58	73.78	171.91	233.66	350.40
Building leases	15.35	12.72	18.63	49.13	66.48
Farm insurance	40.68	35.50	35.50	38.04	38.53
Utilities	84.33	72.85	67.05	48.22	53.11
Interest	88.53	101.21	112.35	118.78	102.24
Mach & bldg depreciation	97.17	117.51	144.83	131.82	140.22
Miscellaneous	68.37	60.90	54.65	56.44	51.55
Total overhead expenses	437.01	474.46	604.93	676.09	802.54
Total dir & ovhd expenses	2,391.15	2,626.02	2,818.00	3,246.45	3,349.19
Net return	-88.75	-76.99	-169.80	-304.58	-304.75
Labor & management charge	353.81	275.13	206.02	154.36	141.62
Net return over lbr & mgt	-442.56	-352.12	-375.83	-458.94	-446.38
Cost of Production per CWT					
Total direct expense per cwt.	11.70	11.21	11.20	11.22	10.73
Total dir & ovhd expense per cwt.	14.32	13.68	14.26	14.17	14.12
With other revenue adjustments	14.49	13.88	14.67	14.46	15.32
With labor and management	16.61	15.31	15.72	15.14	15.92
Est. labor hours per unit	47.72	41.45	38.71	43.38	37.88
Other Information					
Avg. number of Cows	38.9	73.4	139.0	300.6	704.0
Milk produced per Cow	16,702	19,199	19,766	22,919	23,728
Culling percentage	21.7	24.5	24.6	26.3	26.9
Turnover rate	32.8	33.2	31.7	34.2	34.7
Cow death loss percent	9.7	7.4	6.7	7.5	7.8
Percent of barn capacity	90.7	104.8	110.4	110.2	104.5
Feed cost per day	3.64	4.05	4.17	4.56	4.45
Feed cost per cwt of milk	7.95	7.69	7.69	7.26	6.85
Feed cost per Cow	1,327.44	1,476.44	1,520.26	1,664.02	1,624.82
Avg. milk price per cwt.	13.96	13.46	13.81	13.14	14.05

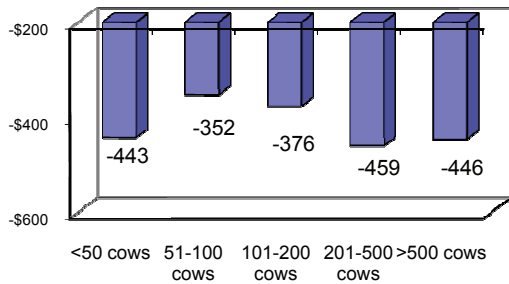
Selected Dairy Enterprise Factors from the Farm Business Management Program Database

Herd Size	State Ave.	up to 50 cows	51-100 cows	101-200 cows	201-500 cows	over 500 cows
Number of Farms	508	104	203	116	66	19
Ave # of Cows	134.4	38.9	73.4	139.0	300.6	704.0
Milk Prod. Per Cow	21,153	16,702	19,199	19,766	22,919	23,728
Feed Cost per Cwt	\$7.38	\$7.95	\$7.69	\$7.69	\$7.26	\$6.85
Interest per Cwt	\$0.51	\$0.53	\$0.53	\$0.57	\$0.52	\$0.43
Vet per Cwt	\$0.47	\$0.49	\$0.47	\$0.45	\$0.48	\$0.47
Hired Labor per Cwt	\$1.44	\$0.36	\$0.59	\$1.14	\$1.83	\$2.19
Deprec/Lease per Cwt	\$0.79	\$0.67	\$0.68	\$0.83	\$0.79	\$0.87
Milk Price per Cwt	\$13.59	\$13.96	\$13.46	\$13.81	\$13.14	\$14.05
Dir & Ovhd Cost per Cwt	\$14.08	\$14.32	\$13.68	\$14.26	\$14.16	\$14.11
Return over Dir & Ovhd per Cow	-\$210	-\$89	-\$77	-\$170	-\$305	-\$305
Herd Profit over Dir&Ovhd	-\$28,271	-\$3,452	-\$5,651	-\$23,602	-\$91,557	-\$214,544
Labor&Mgt per Cwt	\$0.96	\$2.12	\$1.43	\$1.04	\$0.67	\$0.60
Net per Cow after Labor&Mgt	-\$413	-\$443	-\$352	-\$376	-\$459	-\$446
Herd Profit over Labor&Mgt	-\$55,451	-\$17,216	-\$25,846	-\$52,239	-\$137,957	-\$314,244

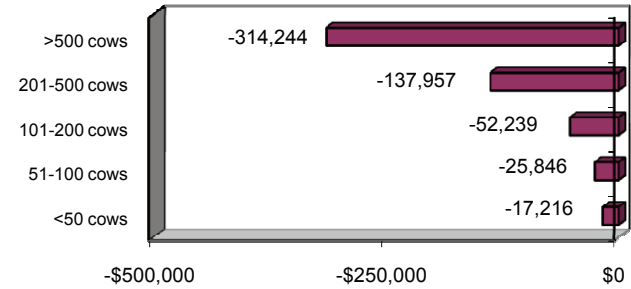


Selected Dairy Enterprise Factors from the Farm Business Management Program Database

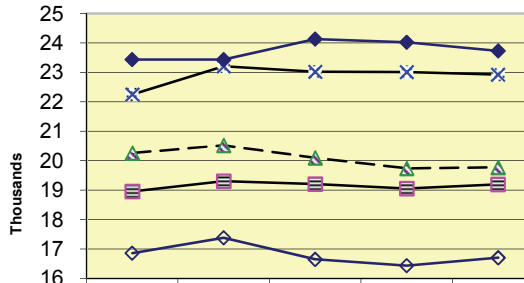
Return over Direct, Overhead, and Labor&Mgt per Cow



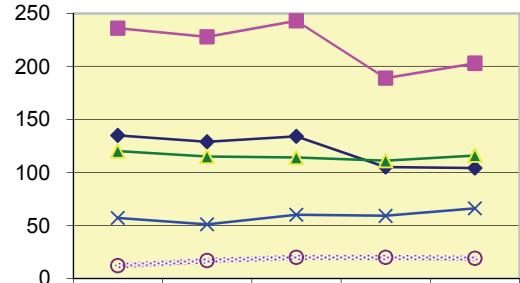
Dairy Herd Profit over Direct, Overhead, and Labor&Mgt



Pounds of Milk Produced per Cow



Number of Farms by Herd Size



\$19.00

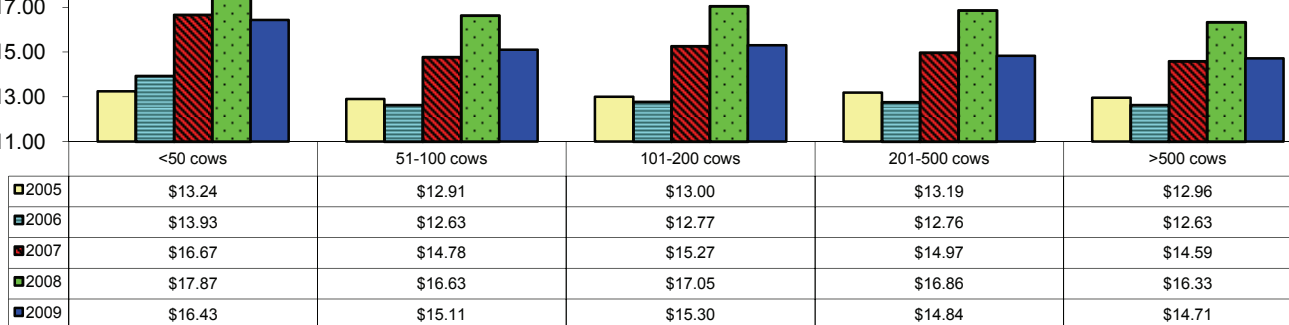
\$17.00

\$15.00

\$13.00

\$11.00

Direct, Overhead, and Labor & Mgt Cost per CWT



\$900.00

\$700.00

\$500.00

\$300.00

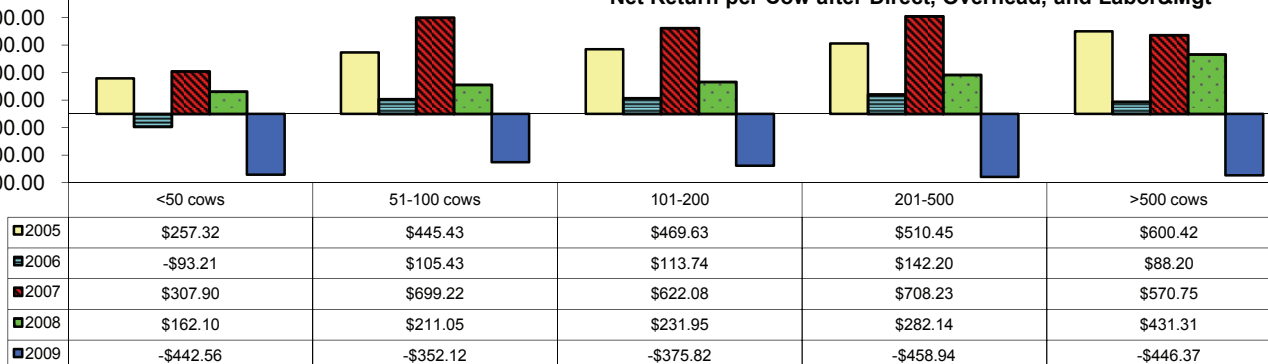
\$100.00

-\$100.00

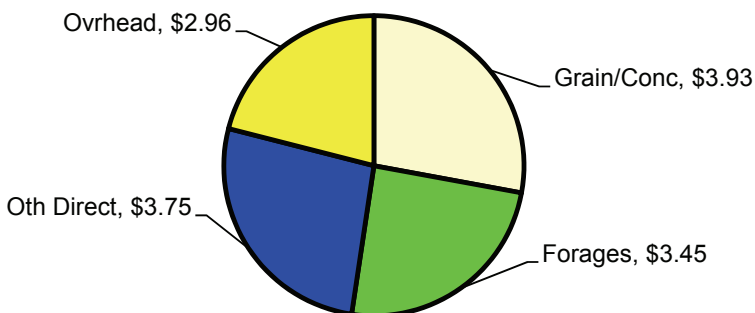
-\$300.00

-\$500.00

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

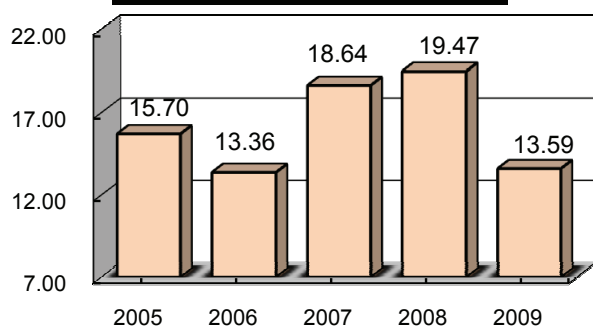


Summary of Selected Dairy Enterprise Factors - Average Farm Data

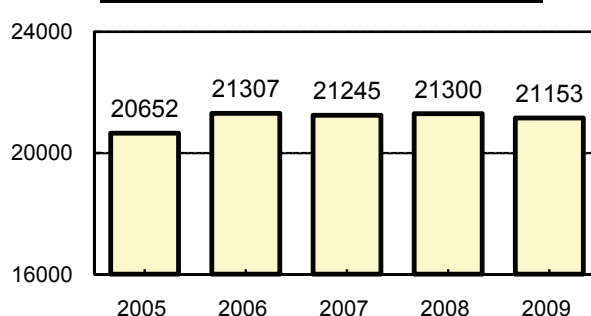


The data on this page is from the Dairy Cow Enterprise includes a "Net Cost for Dairy Replacements", new in 2008.

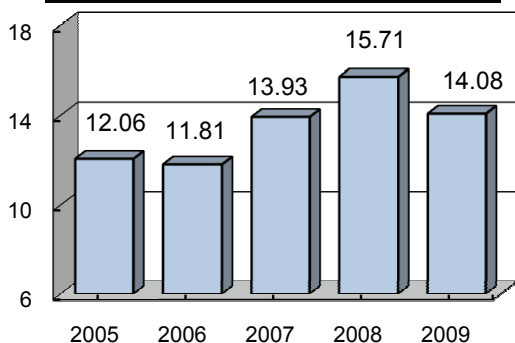
Ave Milk Price Recv'd



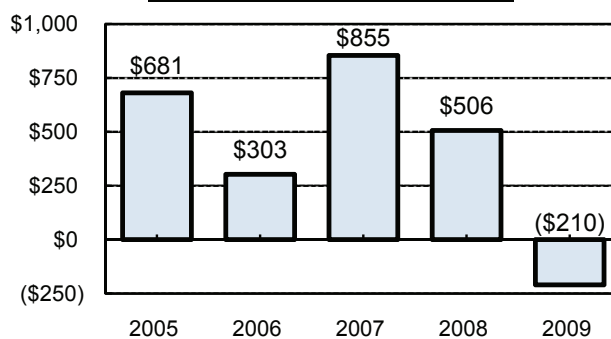
Milk Production per Cow



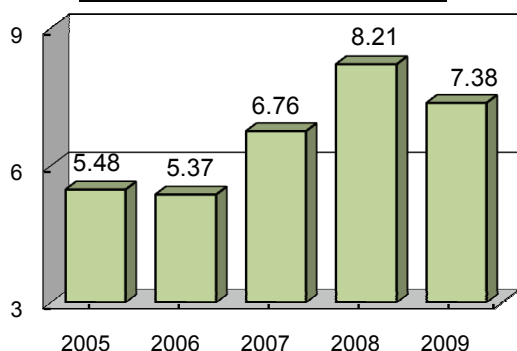
Dir & Ovhd Exp per CWT



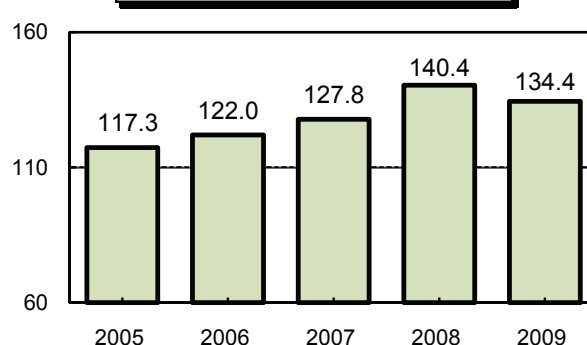
Net Return per Cow



Feed Cost per CWT



Ave. Number of Cows



A Twenty Year History of Selected Dairy Information

