

Minnesota State Colleges and Universities

**State
Farm Business Management Program
Database**

Dairy Farm Sort - 2008

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, 2009



A MEMBER OF THE MINNESOTA STATE COLLEGES
AND UNIVERSITIES SYSTEM

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

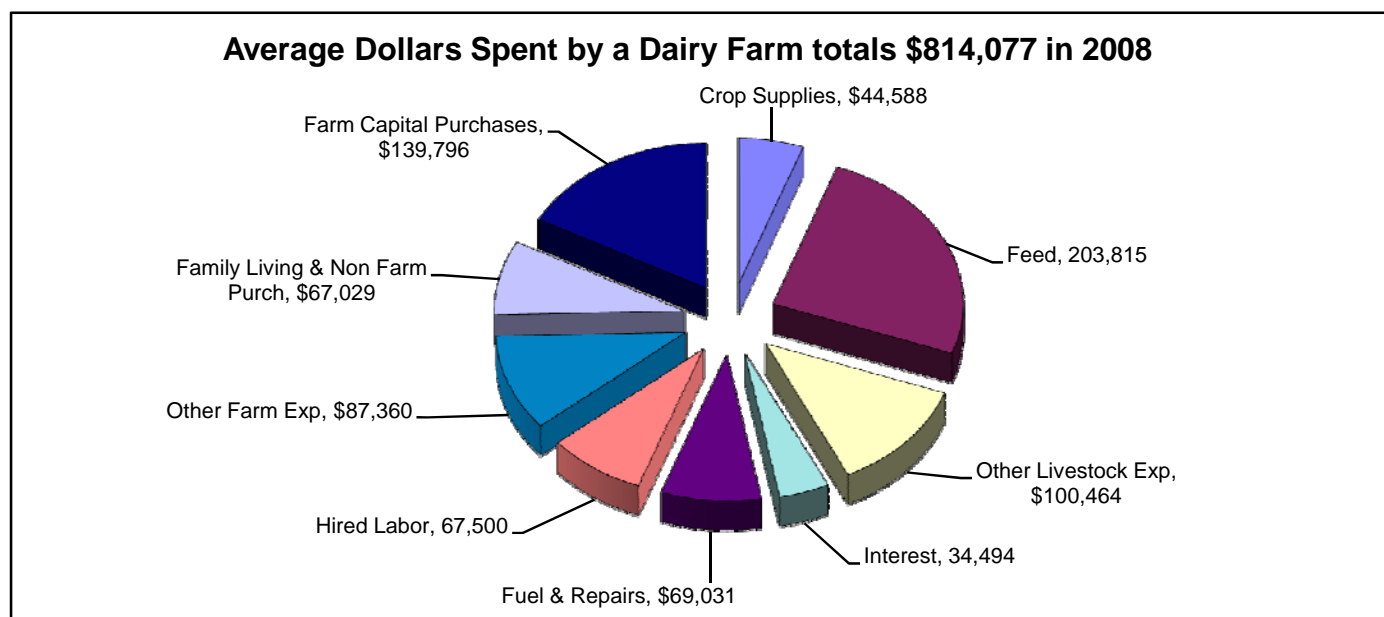
For more information, contact Dr. Richard Joerger at richard.joerger@so.mnscu.edu or
visit the Farm Business Management Program Website: www.mgt.org

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	449	18	103	154	88	82
<u>Income Statement</u>						
Gross cash farm income	726,459	80,870	171,509	358,109	718,731	2,299,251
Total cash farm expense	607,251	73,227	139,450	283,726	587,783	1,968,989
Net cash farm income	119,208	7,643	32,059	74,383	130,948	330,261
Inventory change	23,204	812	783	6,369	12,218	100,851
Depreciation and capital adjust	-33,638	-6,576	-8,194	-21,168	-38,492	-91,173
Net farm income	108,773	1,880	24,649	59,584	104,674	339,940
Median net farm income	58,164	1,510	20,236	59,731	106,228	262,868
<u>Profitability (cost)</u>						
Rate of return on assets	8.1%	-2.1%	3.1%	6.4%	7.1%	10.4%
Rate of return on equity	10.4%	-13.5%	-0.1%	6.9%	8.1%	15.0%
Operating profit margin	17.2%	-10.9%	9.4%	17.2%	16.6%	18.4%
Asset turnover rate	47.2%	19.2%	33.4%	37.0%	43.0%	56.6%
<u>Liquidity</u>						
Current assets	227,972	34,161	56,092	123,949	226,320	694,178
Current liabilities	134,387	40,805	41,921	78,702	127,414	389,219
Ending current ratio	1.70	0.84	1.34	1.57	1.78	1.78
Ending working capital	93,584	-6,644	14,170	45,247	98,906	304,959
End working capital to gross inc	12.40%	-7.70%	8.00%	12.10%	13.30%	12.70%
Term debt coverage ratio	1.57	0.55	0.78	1.19	1.41	1.97
Replacement coverage ratio	1.44	0.49	0.71	1.05	1.28	1.84
<u>Solvency (cost)</u>						
Number of farms	449	18	103	154	88	82
Total farm assets	1,228,999	338,059	399,623	773,724	1,326,976	3,269,049
Total farm liabilities	627,223	189,776	231,711	407,608	673,321	1,610,199
Total assets	1,323,440	406,021	484,436	875,866	1,431,758	3,359,742
Total liabilities	648,282	209,774	252,757	426,306	689,493	1,641,962
Ending net worth	674,958	196,247	231,679	449,559	742,265	1,716,682
Net worth change	58,655	-4,359	5,186	19,611	45,355	230,446
Farm debt to asset ratio	51%	56%	58%	53%	51%	49%
Total debt to asset ratio	49%	52%	52%	49%	48%	49%
<u>Solvency (market)</u>						
Number of farms	449	18	103	154	88	82
Total farm assets	1,556,856	513,027	582,747	1,044,209	1,699,392	3,883,799
Total farm liabilities	627,223	189,776	231,711	407,608	673,321	1,610,199
Total assets	1,664,612	602,257	679,782	1,159,466	1,814,413	3,991,660
Total liabilities	775,918	249,768	302,391	514,240	838,197	1,943,870
Ending net worth	888,694	352,488	377,390	645,226	976,215	2,047,790
Net worth change	81,651	5,220	15,039	41,216	73,878	270,626
Farm debt to asset ratio	40%	37%	40%	39%	40%	41%
Total debt to asset ratio	47%	41%	44%	44%	46%	49%
<u>Nonfarm Information</u>						
Net nonfarm income	11,163	26,723	14,426	11,473	9,755	4,896
Farms reporting living expenses	103	3	23	45	24	8
Total family living expense	40,831	24,130	33,542	41,168	44,573	54,930
Total living, invest, & capital	59,114	29,527	45,306	54,593	82,795	64,301
<u>Crop Acres</u>						
Total acres owned	182	146	138	171	187	265
Total crop acres	312	117	120	218	328	772
Total crop acres owned	123	95	66	127	145	173
Total crop acres cash rented	189	21	54	90	181	598
Total crop acres share rented	1	-	0	1	1	0

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

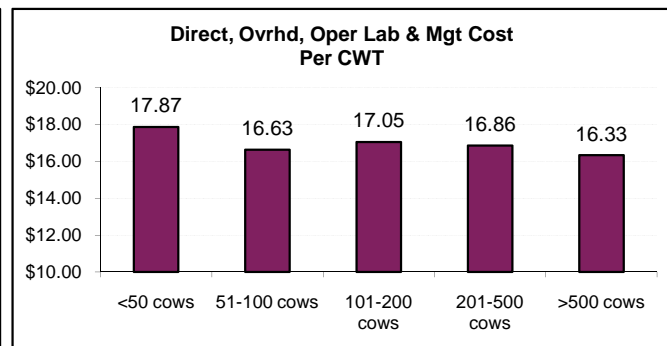
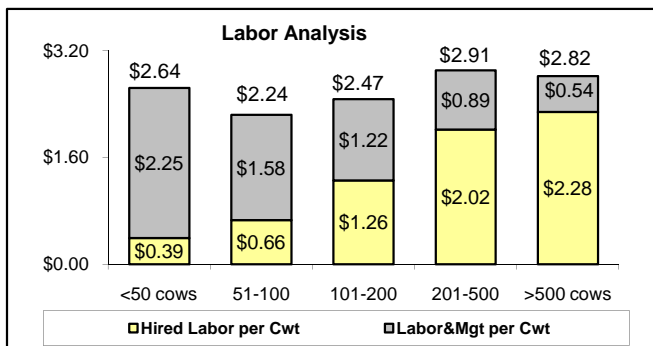
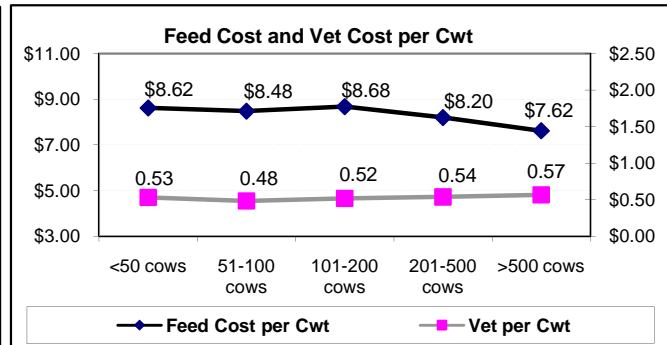
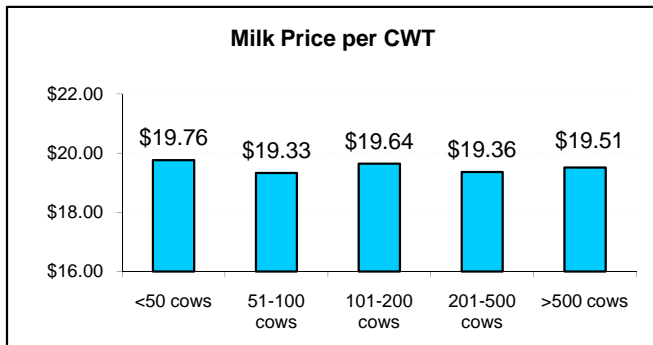
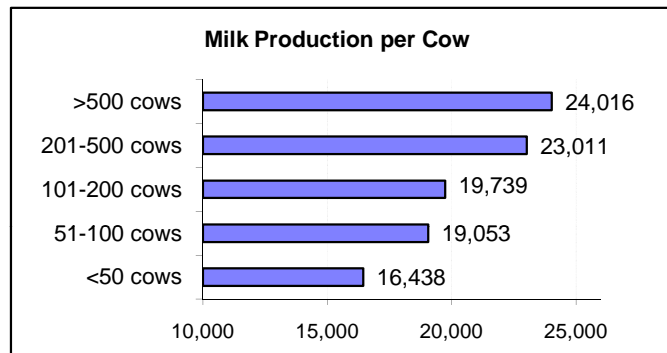
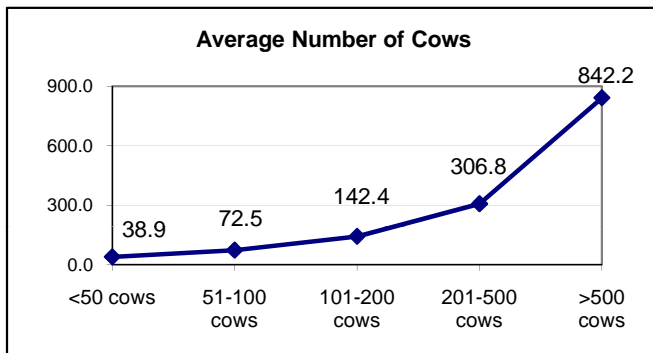
	Avg. Of All Farms	50,001 - 100,000	100,001 - 250,000	250,001 - 500,000	500,001 - 1,000,000	Over 1,000,000
Number of farms	449	18	103	154	88	82
<u>Liquidity</u>						
Current ratio	1.7	0.84	1.34	1.57	1.78	1.78
Working capital	93,584	-6,644	14,170	45,247	98,906	304,959
Working capital to gross inc	12.40%	-7.70%	8.00%	12.10%	13.30%	12.70%
<u>Solvency (market)</u>						
Farm debt to asset ratio	48%	43%	48%	47%	48%	49%
Farm equity to asset ratio	52%	57%	52%	53%	52%	51%
Farm debt to equity ratio	0.94	0.75	0.92	0.9	0.93	0.97
<u>Profitability (cost)</u>						
Rate of return on farm assets	8.10%	-2.10%	3.10%	6.40%	7.10%	10.40%
Rate of return on farm equity	10.40%	-13.50%	-0.10%	6.90%	8.10%	15.00%
Operating profit margin	17.20%	-10.90%	9.40%	17.20%	16.60%	18.40%
Net farm income	108,907	1,741	24,910	59,585	104,502	340,559
EBIDTA	177,180	20,628	45,072	103,120	181,751	519,891
<u>Repayment Capacity</u>						
Capital debt repayment capacity	126,495	10,126	21,665	60,090	125,476	415,634
Capital debt repayment margin	46,129	-8,301	-5,958	9,705	36,228	204,761
Replacement margin	38,556	-10,529	-9,029	3,082	27,156	189,878
Term debt coverage ratio	1.57	0.55	0.78	1.19	1.41	1.97
Replacement coverage ratio	1.44	0.49	0.71	1.05	1.28	1.84
<u>Efficiency</u>						
Asset turnover rate (cost)	47.2%	19.2%	33.4%	37.0%	43.0%	56.6%
Operating expense ratio	76.6%	76.0%	74.5%	72.3%	75.5%	78.4%
Depreciation expense ratio	4.4%	7.7%	4.6%	5.7%	5.2%	3.8%
Interest expense ratio	4.6%	12.8%	6.7%	6.0%	5.2%	3.7%
Net farm income ratio	14.4%	2.0%	14.1%	16.0%	14.1%	14.1%



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	105	189	111	59	20
Milk sold (hd)	3,219.85	3,667.35	3,859.19	4,440.88	4,672.64
Milk used in home (hd)	3.57	1.93	0.71	0.05	-
Milk fed to animals (hd)	20.84	12.17	17.91	13.16	12.02
Dairy Calves sold (hd)	75.19	33.81	28.25	30.80	27.39
Transferred out (hd)	101.84	62.50	63.27	36.16	30.74
Cull sales (hd)	149.23	149.41	138.05	131.95	168.60
Butchered (hd)	7.32	5.53	1.81	1.85	0.11
Hedging gain/loss	-	-0.09	-0.95	-9.11	-38.48
Other income	7.67	15.22	9.02	6.15	2.61
Purchased (hd)	-128.07	-89.96	-107.35	-141.60	-88.74
Transferred in (hd)	-146.96	-110.82	-140.97	-99.80	-39.90
Inventory change (hd)	30.29	44.12	91.72	126.54	58.22
Dairy repl net cost	-241.69	-411.86	-364.11	-374.36	-452.24
Gross margin	3,099.08	3,379.30	3,596.55	4,162.65	4,352.97
Direct Expenses					
Protein Vit Minerals (lb.)	363.57	468.41	535.52	671.65	699.64
Complete Ration (lb.)	184.26	212.80	236.58	274.58	193.65
Corn (bu.)	205.08	240.97	243.36	233.92	222.37
Corn Silage (lb.)	160.03	210.56	221.08	249.89	265.21
Hay, Alfalfa (lb.)	280.87	233.96	234.50	199.44	138.53
Haylage, Alfalfa (lb.)	49.55	138.75	104.09	152.00	150.97
Other feed stuffs (lb)	173.37	109.42	139.12	104.63	159.81
Veterinary	87.23	92.25	102.28	124.01	136.18
BST	3.63	8.76	15.14	36.76	74.55
Supplies	253.87	251.96	246.41	287.32	229.95
Fuel & oil	79.66	83.90	99.96	111.99	122.37
Repairs	116.80	115.45	100.17	97.42	104.43
Custom hire	12.04	21.04	37.97	45.23	79.13
Hired labor	21.08	34.10	68.34	169.68	143.65
Hauling and trucking	67.72	56.52	44.22	52.53	38.71
Marketing	34.68	38.68	36.67	39.45	58.64
Bedding	19.64	38.65	50.79	73.39	80.26
Total direct expenses	2,113.09	2,356.17	2,516.18	2,923.90	2,898.05
Return over direct expense	985.99	1,023.13	1,080.37	1,238.75	1,454.93
Overhead Expenses					
Hired labor	43.74	92.02	179.85	294.95	404.51
Building leases	10.15	13.53	14.91	63.76	93.11
Utilities	74.02	76.62	55.22	44.87	44.84
Interest	99.27	105.55	128.12	113.05	115.88
Mach & bldg depreciation	110.62	125.00	141.70	137.74	124.19
Miscellaneous	116.79	98.54	88.60	97.77	112.26
Total overhead expenses	454.59	511.28	608.40	752.13	894.78
Total dir & ovhd expenses	2,567.68	2,867.44	3,124.58	3,676.03	3,792.83
Net return	531.40	511.85	471.97	486.62	560.15
Labor & management charge	369.30	300.80	240.02	204.48	128.84
Net return over lbr & mgt	162.09	211.06	231.95	282.14	431.31
Cost of Production per CWT					
Total direct expense per cwt.	12.85	12.37	12.75	12.71	12.07
Total dir & ovhd expense per cwt.	15.62	15.05	15.83	15.98	15.79
With other revenue adjustments	16.50	16.64	17.25	17.24	17.17
With labor and management	18.75	18.21	18.47	18.13	17.71
Est. labor hours per unit	48.28	42.44	36.47	42.75	43.83
Other Information					
Avg. number of Cows	38.9	72.5	142.4	306.8	842.2
Milk produced per Cow	16,438	19,053	19,739	23,011	24,016
Culling percentage	23.8	24.6	23.2	22.0	28.0
Turnover rate	32.6	32.8	31.7	29.9	36.6
Cow death loss percent	7.7	7.2	8.1	7.6	8.5
Percent of barn capacity	91.6	104.4	107.8	110.6	116.9
Feed cost per day	3.88	4.42	4.70	5.17	5.01
Feed cost per cwt of milk	8.62	8.48	8.68	8.20	7.62
Feed cost per Cow	1,416.72	1,614.87	1,714.24	1,886.12	1,830.18
Avg. milk price per cwt.	19.76	19.33	19.64	19.36	19.51

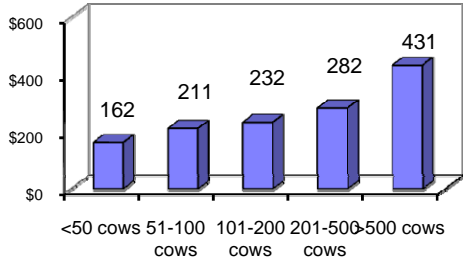
Selected Dairy Enterprise Factors from the Farm Business Management Program Database

Herd Size	State Ave.	up to 50 cows	51-100 cows	101-200 cows	201-500 cows	over 500 cows
Number of Farms	484	105	189	111	59	20
Ave # of Cows	140.4	38.9	72.5	142.4	306.8	842.2
Milk Prod. Per Cow	21,300	16,438	19,053	19,739	23,011	24,016
Feed Cost per Cwt	\$8.21	\$8.62	\$8.48	\$8.68	\$8.20	\$7.62
Interest per Cwt	\$0.61	\$0.60	\$0.55	\$0.65	\$0.49	\$0.48
Vet per Cwt	\$0.53	\$0.53	\$0.48	\$0.52	\$0.54	\$0.57
Hired Labor per Cwt	\$1.60	\$0.39	\$0.66	\$1.26	\$2.02	\$2.28
Deprec/Lease per Cwt	\$0.83	\$0.73	\$0.73	\$0.79	\$0.88	\$0.90
Milk Price per Cwt	\$19.47	\$19.76	\$19.33	\$19.64	\$19.36	\$19.51
Dir & Ovhd Cost per Cwt	\$15.71	\$15.62	\$15.05	\$15.83	\$15.98	\$15.79
Return over Dir & Ovhd per Cow	\$506	\$531	\$512	\$472	\$487	\$560
Herd Profit over Dir&Ovhd	\$71,097	\$20,671	\$37,109	\$67,209	\$149,295	\$471,758
Labor&Mgt per Cwt	\$1.05	\$2.25	\$1.58	\$1.22	\$0.89	\$0.54
Net per Cow after Labor&Mgt	\$283	\$162	\$211	\$232	\$282	\$431
Herd Profit over Labor&Mgt	\$39,719	\$6,306	\$15,301	\$33,030	\$86,561	\$363,249

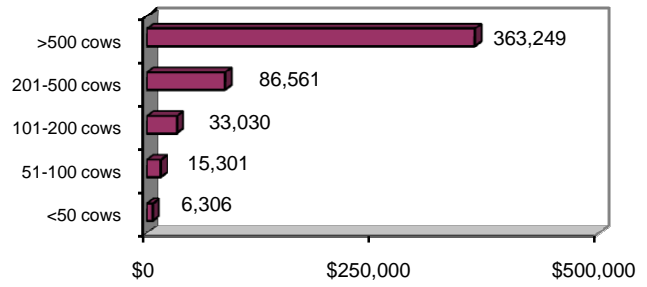


Selected Dairy Enterprise Factors from the Farm Business Management Program Database

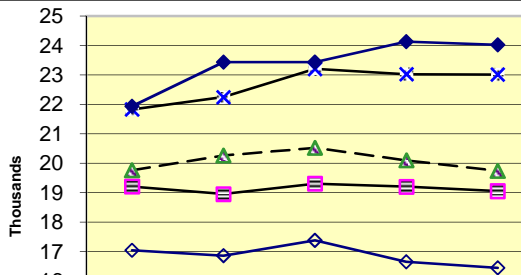
Return over Direct, Overhead, and Labor&Mgt per Cow



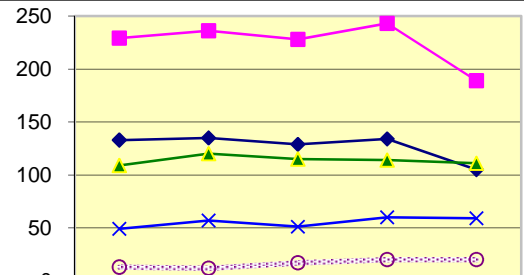
Dairy Herd Profit over Direct, Overhead, and Labor&Mgt



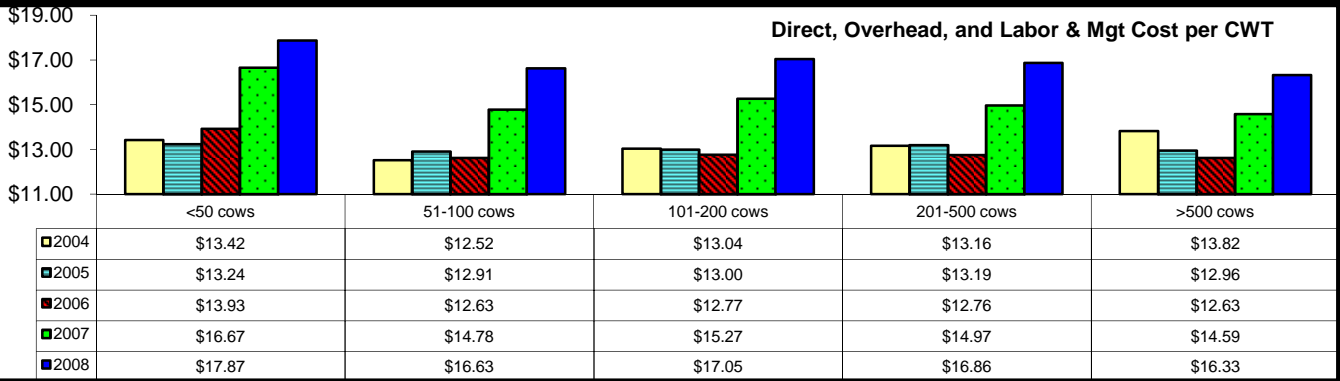
Pounds of Milk Produced per Cow



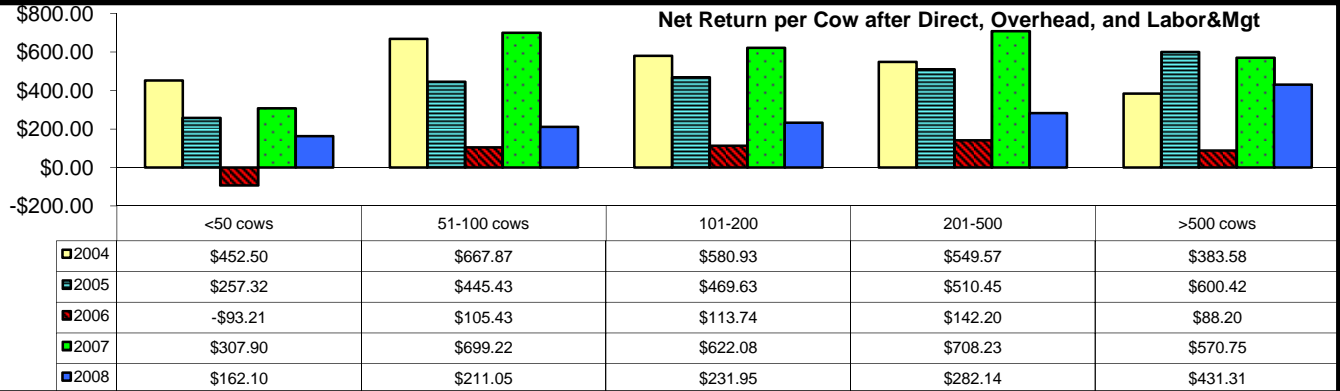
Number of Farms by Herd Size



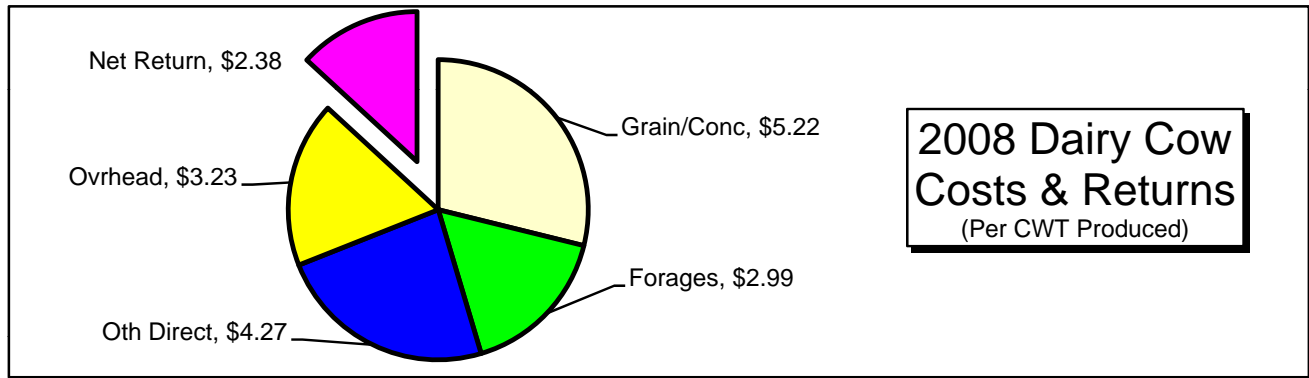
Direct, Overhead, and Labor & Mgt Cost per CWT



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

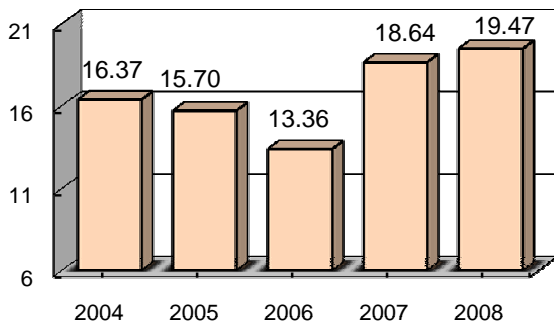


Summary of Selected Dairy Enterprise Factors - Average Farm Data

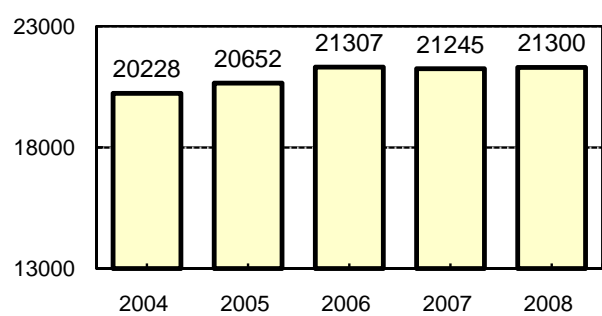


The data on this page is from the Dairy Cow Enterprise includes a "Net Cost for Dairy Replacements", new in 2008.

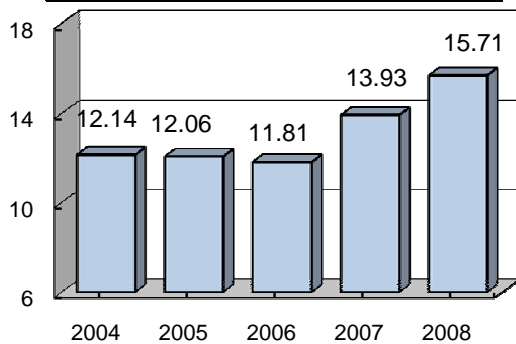
Ave Milk Price Recv'd



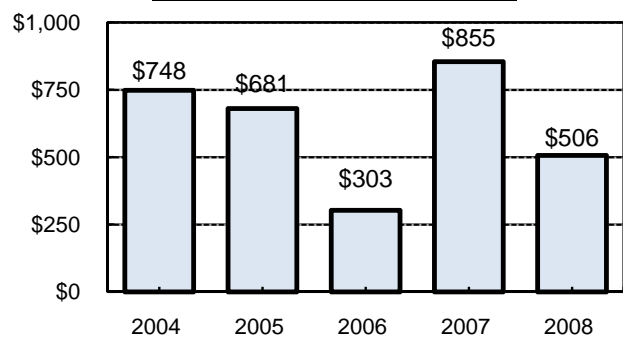
Milk Production per Cow



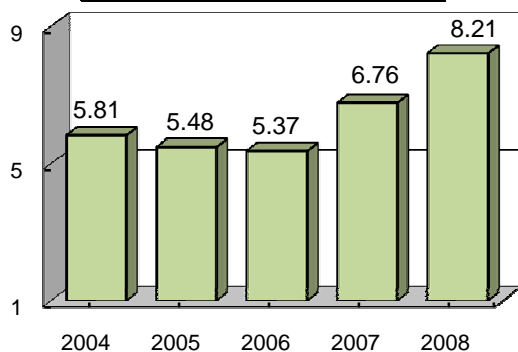
Dir & Ovhd Exp per CWT



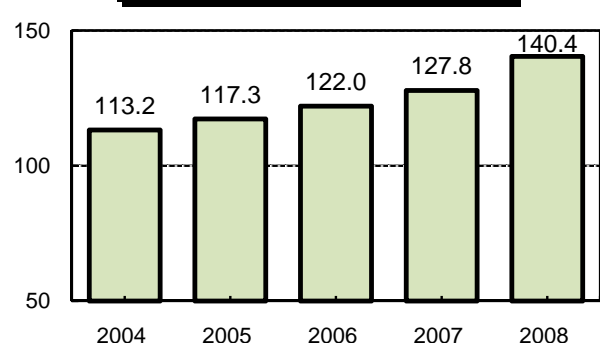
Net Return per Cow



Feed Cost per CWT



Ave. Number of Cows



A Twenty Year History of Selected Dairy Information

