

Minnesota State Colleges and Universities

**State
Farm Business Management Program
Database**

Dairy Farm Sort - 2010

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, 2011



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.fbm.mnscu.edu

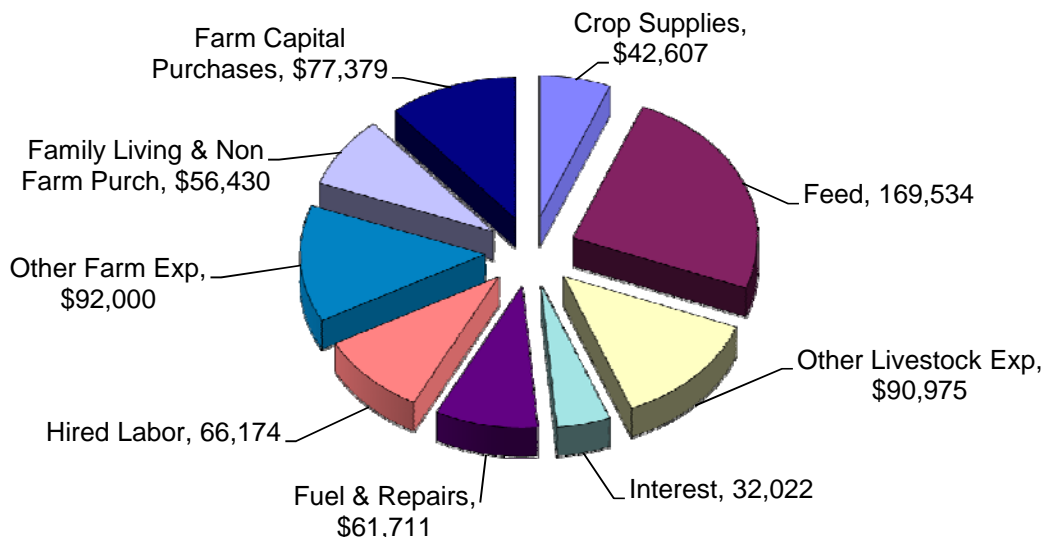
General Financial Summary
Farm Business Management Education Programs
Minnesota State Colleges and Universities
(Dairy Farms Sorted by Gross Farm Income)

	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	416	21	108	133	81	70
<u>Income Statement</u>						
Gross cash farm income	634,369	80,779	175,552	345,483	711,240	1,993,708
Total cash farm expense	555,023	70,484	147,459	284,774	613,707	1,796,906
Net cash farm income	79,346	10,294	28,092	60,709	97,533	196,802
Inventory change	52,598	3,209	15,714	27,430	45,532	182,736
Depreciation	-34,966	-3,899	-11,523	-22,195	-39,525	-100,762
Net farm income from operations	96,977	9,605	32,283	65,944	103,540	278,776
Gain or loss on capital sales	521	-	653	307	810	568
Average net farm income	97,498	9,605	32,937	66,250	104,350	279,344
Median net farm income	57,784	1,864	31,913	66,947	92,370	236,257
<u>Profitability (cost)</u>						
Rate of return on assets	7.3%	0.1%	3.6%	6.5%	6.8%	9.1%
Rate of return on equity	9.5%	-10.7%	2.5%	8.2%	8.1%	12.6%
Operating profit margin	16.8%	0.4%	11.9%	18.2%	17.0%	17.1%
Asset turnover rate	43.5%	27.9%	30.1%	35.6%	39.9%	53.0%
<u>Liquidity</u>						
Current assets	228,359	29,245	79,250	143,618	250,320	663,104
Current liabilities	120,273	21,379	43,344	69,117	125,071	364,644
Ending current ratio	1.9	1.37	1.83	2.08	2	1.82
Ending working capital	108,086	7,866	35,906	74,502	125,249	298,460
End working capital to gross inc	15.9%	9.2%	19.0%	20.1%	16.7%	14.0%
Term debt coverage ratio	1.69	0.83	1.3	1.65	1.61	1.86
Replacement coverage ratio	1.48	0.77	1.15	1.4	1.41	1.65
<u>Solvency (cost)</u>						
Number of farms	416	21	108	133	81	70
Total farm assets	1,209,378	231,088	487,938	815,432	1,437,713	3,143,510
Total farm liabilities	617,398	166,279	292,915	427,017	712,653	1,529,163
Total assets	1,314,836	268,306	572,923	955,865	1,541,668	3,240,269
Total liabilities	644,979	176,706	310,515	453,674	739,593	1,580,817
Ending net worth	669,857	91,600	262,408	502,191	802,075	1,659,452
Net worth change	63,997	9,709	17,403	47,209	59,304	192,078
Farm debt to asset ratio	51%	72%	60%	52%	50%	49%
Total debt to asset ratio	49%	66%	54%	47%	48%	49%
<u>Solvency (market)</u>						
Number of farms	416	21	108	133	81	70
Total farm assets	1,529,810	347,066	677,446	1,110,781	1,853,030	3,674,921
Total farm liabilities	733,545	189,511	348,349	513,974	857,232	1,793,294
Total assets	1,648,386	399,769	772,581	1,267,739	1,963,934	3,789,898
Total liabilities	768,059	203,116	368,379	544,127	891,570	1,866,243
Ending net worth	880,328	196,652	404,202	723,613	1,072,364	1,923,656
Net worth change	72,775	9,078	28,708	56,731	81,473	183,182
Farm debt to asset ratio	48%	55%	51%	46%	46%	49%
Total debt to asset ratio	47%	51%	48%	43%	45%	49%
<u>Nonfarm Information</u>						
Net nonfarm income	14,048	19,927	17,929	17,028	10,072	4,780
Farms reporting living expenses	80	4	28	29	14	5
Total family living expense	42,036	22,812	36,932	44,839	45,221	60,820
Total living, invest, & capital	45,207	32,459	37,865	45,629	54,594	67,781
<u>Crop Acres</u>						
Total acres owned	166	87	118	183	194	199
Total crop acres	289	59	147	224	316	679
Total crop acres owned	116	37	77	112	157	160
Total crop acres cash rented	172	23	69	108	158	519
Total crop acres share rented	2	-	2	4	1	-

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	416	21	108	133	81	70
<u>Liquidity</u>						
Current ratio	1.9	1.37	1.83	2.08	2	1.82
Working capital	108,086	7,866	35,906	74,502	125,249	298,460
Working capital to gross inc	15.9%	9.2%	19.0%	20.1%	16.7%	14.0%
<u>Solvency (market)</u>						
Farm debt to asset ratio	48%	55%	51%	46%	46%	49%
Farm equity to asset ratio	52%	45%	49%	54%	54%	51%
Farm debt to equity ratio	0.92	1.2	1.06	0.86	0.86	0.95
<u>Profitability (cost)</u>						
Rate of return on farm assets	7.3%	0.1%	3.6%	6.5%	6.8%	9.1%
Rate of return on farm equity	9.5%	-10.7%	2.5%	8.2%	8.1%	12.6%
Operating profit margin	16.8%	0.4%	11.9%	18.2%	17.0%	17.1%
Net farm income	97,498	9,605	32,937	66,250	104,350	279,344
EBIDTA	163,838	20,286	55,966	108,669	182,076	464,038
<u>Repayment Capacity</u>						
Capital debt repayment capacity	121,022	13,303	37,478	77,382	131,175	358,177
Capital debt repayment margin	49,469	-2,723	8,710	30,551	49,553	165,976
Replacement margin	39,141	-3,970	4,894	22,021	37,982	140,558
Term debt coverage ratio	1.69	0.83	1.3	1.65	1.61	1.86
Replacement coverage ratio	1.48	0.77	1.15	1.4	1.41	1.65
<u>Efficiency</u>						
Asset turnover rate (cost)	43.5%	27.9%	30.1%	35.6%	39.9%	53.0%
Operating expense ratio	75.8%	76.2%	70.5%	70.6%	75.8%	78.3%
Depreciation expense ratio	5.2%	4.6%	6.1%	6.0%	5.3%	4.7%
Interest expense ratio	4.7%	7.8%	6.4%	5.7%	5.2%	4.0%
Net farm income ratio	14.4%	11.3%	17.4%	17.9%	13.9%	13.1%

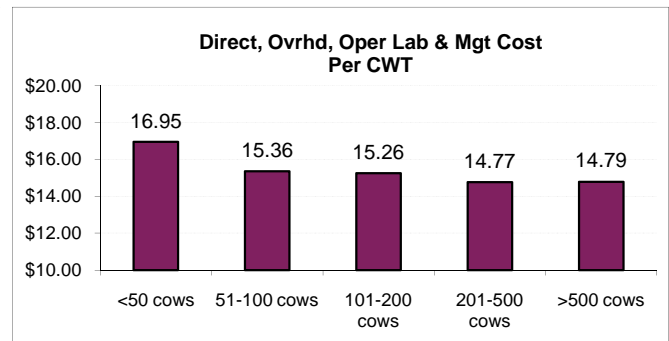
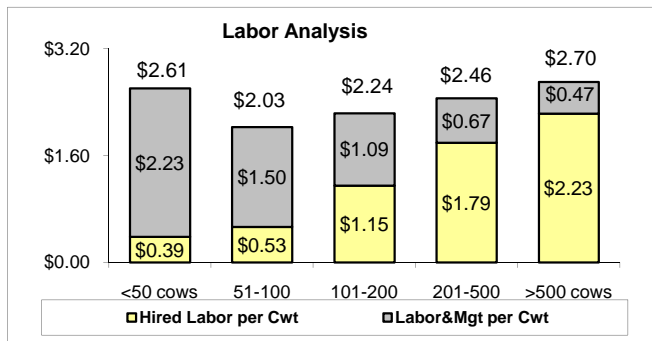
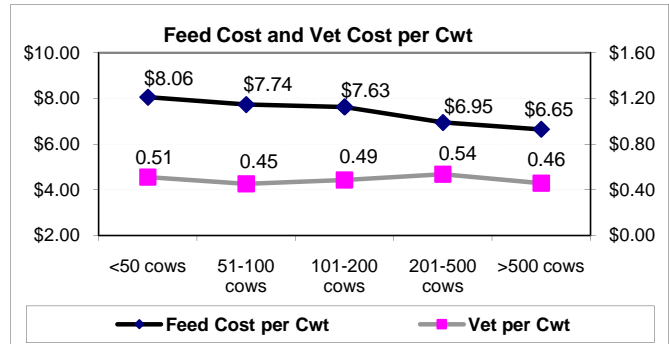
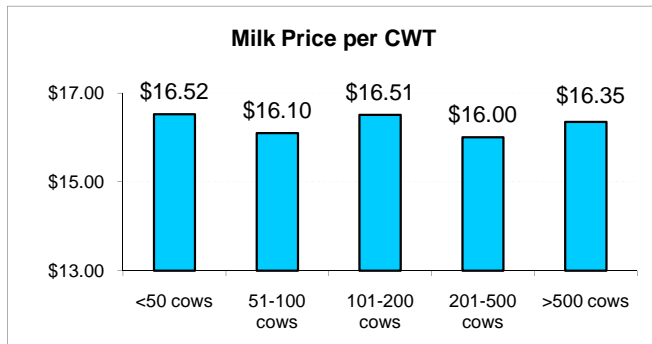
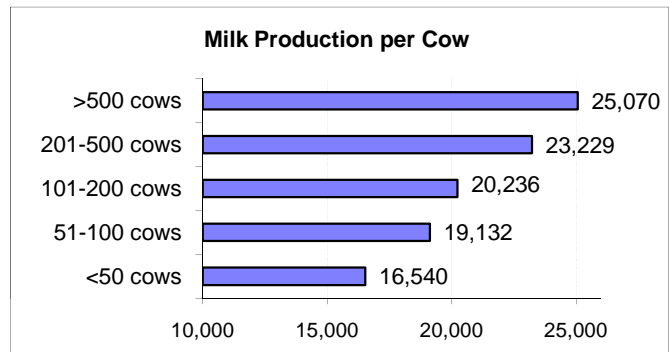
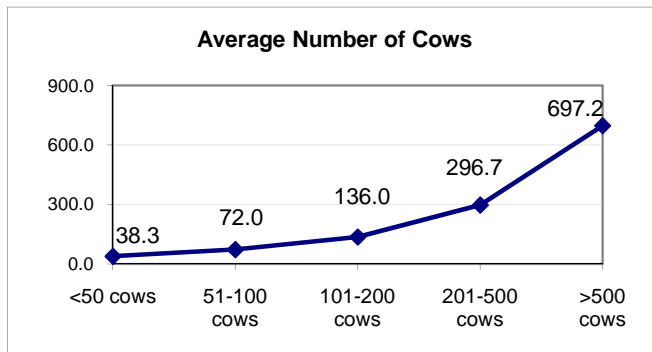
Average Dollars Spent by a Dairy Farm totals \$688,832 in 2010



State Database Dairy Cow Enterprise (Sorted by Herd Size)	Sorted by Average Number of Dairy Cows				
	Up to	51 to	101 to	201 To	Over
	50 Cows	100 Cows	200 Cows	500 Cows	500 Cows
	***** Per Cow *****				
Number Of Farms	102	202	125	68	21
Milk sold (hd)	2,704.17	3,058.54	3,324.38	3,698.38	4,078.31
Dairy Calves sold (hd)	34.19	29.87	30.55	39.39	39.21
Transferred out (hd)	80.21	64.93	46.27	52.89	9.10
Cull sales (hd)	177.62	181.43	169.31	161.11	200.98
Other income	49.27	43.06	37.03	31.37	51.14
Purchased (hd)	-109.58	-56.25	-56.48	-42.49	-26.16
Transferred in (hd)	-145.19	-82.43	-69.90	-93.05	-71.27
Inventory change (hd)	73.96	15.30	54.65	39.64	76.98
Dairy repl net cost	-300.96	-399.85	-454.86	-437.97	-535.35
Gross margin	2,563.70	2,854.60	3,080.95	3,449.26	3,822.94
Direct Expenses					
Protein Vit Minerals (lb.)	319.64	458.44	432.01	493.71	568.44
Complete Ration (lb.)	167.33	158.16	207.10	272.47	330.65
Corn (bu.)	196.47	220.38	224.69	230.36	188.87
Corn Silage (lb.)	191.40	222.06	213.39	238.23	271.50
Hay, Alfalfa (lb.)	236.65	195.83	206.49	132.11	93.10
Haylage, Alfalfa (lb.)	74.30	113.10	95.07	143.38	91.62
Other feed stuffs (lb)	146.82	112.47	165.54	104.26	122.08
Breeding fees	34.86	38.36	33.27	40.69	41.24
Veterinary	84.55	86.64	98.36	124.73	114.91
BST	5.08	7.32	17.73	35.85	58.06
Supplies	198.18	195.08	181.01	198.51	227.39
Fuel & oil	64.37	64.24	75.93	81.81	89.16
Repairs	105.87	100.56	98.01	102.51	97.33
Custom hire	14.84	24.66	37.63	52.82	116.43
Hired labor	6.19	38.42	59.12	155.38	251.80
Hauling and trucking	69.42	57.46	47.17	34.81	33.39
Marketing	39.30	39.09	41.13	44.44	55.63
Bedding	21.42	40.20	51.91	67.54	73.35
Total direct expenses	1,976.70	2,172.48	2,285.56	2,553.62	2,824.94
Return over direct expense	587.00	682.12	795.39	895.64	998.00
Overhead Expenses					
Hired labor	57.57	63.76	173.40	261.20	307.59
Building leases	20.32	14.21	19.04	54.83	60.37
Farm insurance	38.54	38.07	33.47	38.00	38.08
Utilities	81.17	79.33	64.07	55.58	44.70
Interest	83.03	98.79	96.78	116.56	82.22
Mach & bldg depreciation	98.86	121.98	133.57	130.49	158.75
Miscellaneous	79.40	64.33	61.94	65.77	72.95
Total overhead expenses	458.88	480.45	582.27	722.43	764.66
Total dir & ovhd expenses	2,435.58	2,652.93	2,867.83	3,276.05	3,589.60
Net return	128.11	201.67	213.12	173.21	233.34
Labor & management charge	368.23	286.18	220.28	155.12	118.56
Net return over lbr & mgt	-240.11	-84.51	-7.15	18.09	114.78
Cost of Production per CWT					
Total direct expense per cwt.	11.95	11.35	11.29	10.99	11.27
Total dir& ovhd expense per cwt.	14.73	13.87	14.17	14.10	14.32
With other revenue adjustments	15.72	15.03	15.45	15.24	15.41
With labor and management	17.94	16.53	16.54	15.90	15.88
Est. labor hours per unit	48.14	41.16	38.71	51.74	46.09
Other Information					
Avg. number of Cows	38.3	72.0	136.0	296.7	697.2
Milk produced per Cow	16,540	19,132	20,236	23,229	25,070
Culling percentage	28.0	26.9	27.2	27.0	30.7
Turnover rate	38.8	35.8	35.1	34.9	37.9
Cow death loss percent	9.4	7.9	7.2	7.6	7.1
Percent of barn capacity	91.3	100.4	108.3	112.5	114.1
Feed cost per day	3.65	4.06	4.23	4.42	4.57
Feed cost per cwt of milk	8.06	7.74	7.63	6.95	6.65
Feed cost per Cow	1,332.60	1,480.44	1,544.30	1,614.52	1,666.26
Avg. milk price per cwt.	16.52	16.10	16.51	16.00	16.35

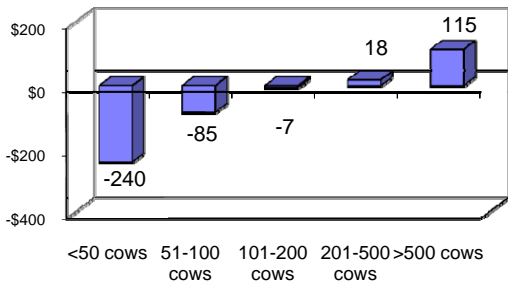
Selected Dairy Enterprise Factors from the Farm Business Management Program Database

Herd Size	State Ave.	up to 50 cows	51-100 cows	101-200 cows	201-500 cows	over 500 cows
Number of Farms	518	102	202	125	68	21
Ave # of Cows	135.7	38.3	72.0	136.0	296.7	697.2
Milk Prod. Per Cow	21,669	16,540	19,132	20,236	23,229	25,070
Feed Cost per Cwt	\$7.22	\$8.06	\$7.74	\$7.63	\$6.95	\$6.65
Interest per Cwt	\$0.46	\$0.50	\$0.52	\$0.48	\$0.50	\$0.33
Vet per Cwt	\$0.49	\$0.51	\$0.45	\$0.49	\$0.54	\$0.46
Hired Labor per Cwt	\$1.46	\$0.39	\$0.53	\$1.15	\$1.79	\$2.23
Deprec/Lease per Cwt	\$0.79	\$0.72	\$0.71	\$0.75	\$0.80	\$0.87
Milk Price per Cwt	\$16.24	\$16.52	\$16.10	\$16.51	\$16.00	\$16.35
Dir & Ovhd Cost per Cwt	\$14.15	\$14.73	\$13.87	\$14.17	\$14.10	\$14.32
Return over Dir & Ovhd per Cow	\$199	\$128	\$202	\$213	\$173	\$233
Herd Profit over Dir&Ovhd	\$26,974	\$4,907	\$14,520	\$28,984	\$51,391	\$162,685
Labor&Mgt per Cwt	\$0.93	\$2.23	\$1.50	\$1.09	\$0.67	\$0.47
Net per Cow after Labor&Mgt	-\$3	-\$240	-\$85	-\$7	\$18	\$115
Herd Profit over Labor&Mgt	-\$470	-\$9,197	-\$6,085	-\$974	\$5,367	\$80,025

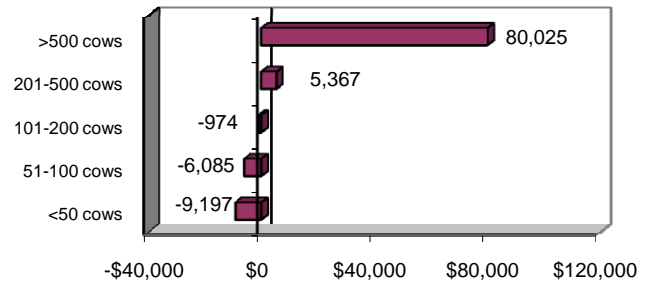


Selected Dairy Enterprise Factors from the Farm Business Management Program Database

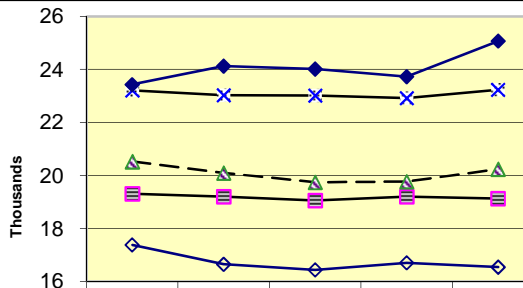
Return over Direct, Overhead, and Labor&Mgt per Cow



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

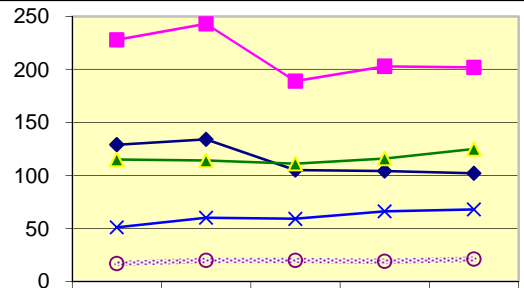


Pounds of Milk Produced per Cow



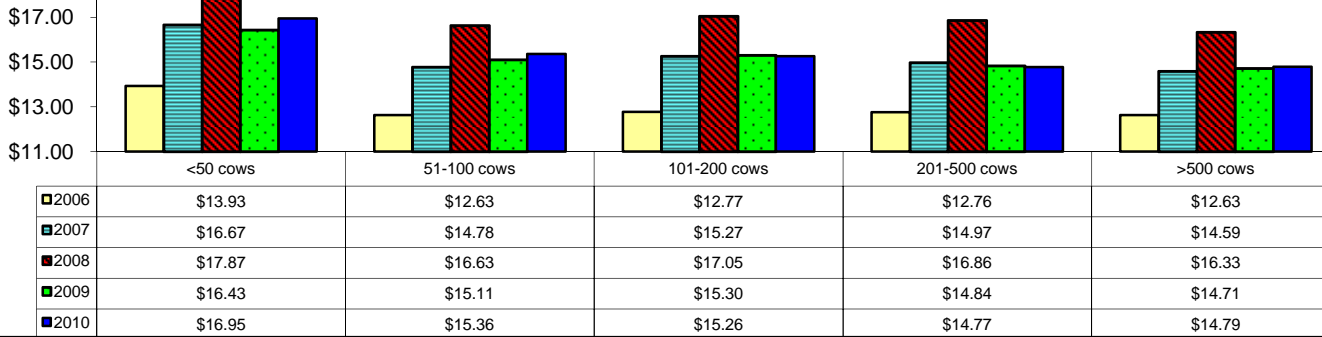
Year	<50 cows	51-100 cows	101-200 cows	201-500 cows	>500 cows
2006	17,381	19,306	20,522	23,206	23,432
2007	16,648	19,203	20,098	23,023	24,126
2008	16,438	19,053	19,739	23,011	24,016
2009	16,702	19,199	19,766	22,919	23,728
2010	16,540	19,132	20,236	23,229	25,070

Number of Farms by Herd Size

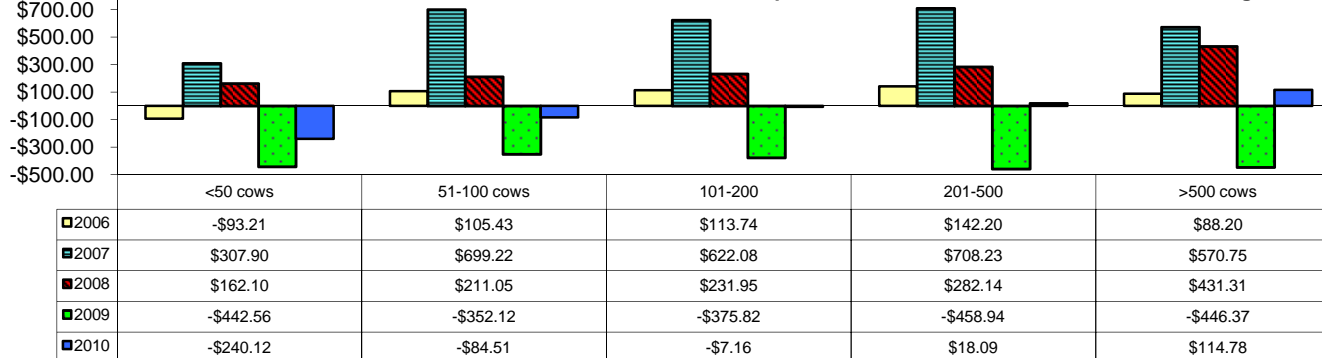


Year	<50 cows	51-100 cows	101-200 cows	201-500 cows	>500 cows
2006	129	228	115	51	17
2007	134	243	114	60	20
2008	105	189	111	59	20
2009	104	203	116	66	19
2010	102	202	125	68	21

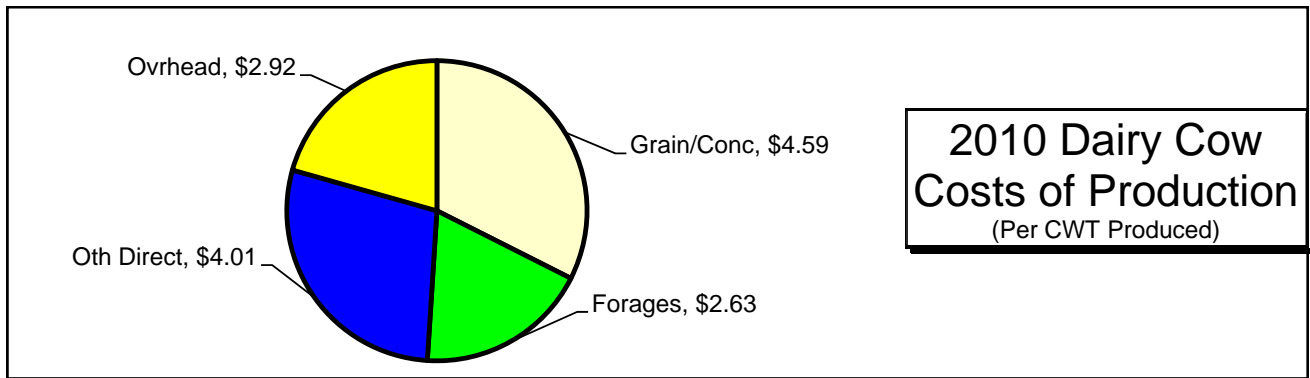
Direct, Overhead, and Labor & Mgt Cost per CWT



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

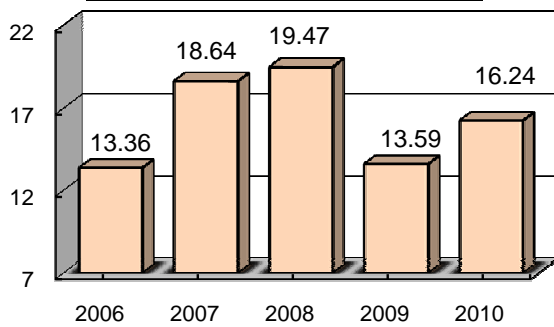


Summary of Selected Dairy Enterprise Factors - Average Farm Data

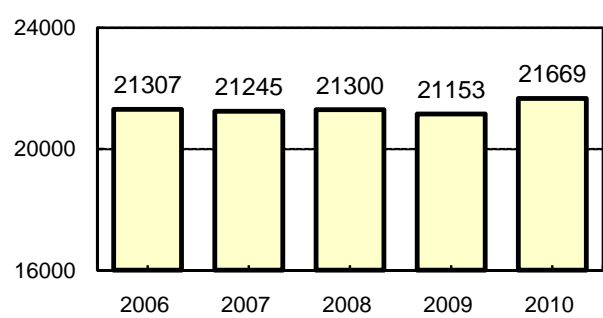


The data on this page includes all Dairy Cow Enterprises in the state FBM database.

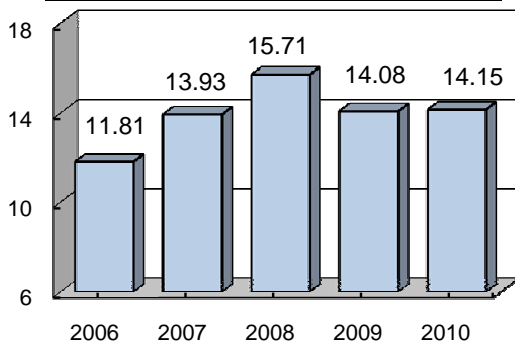
Ave Milk Price Recv'd



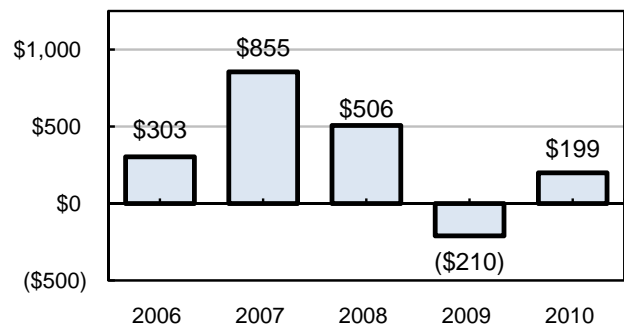
Milk Production per Cow



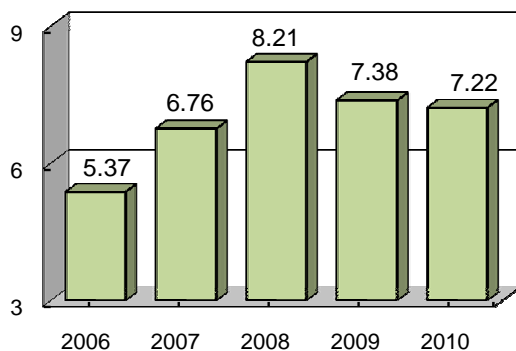
Dir & Ovhd Exp per CWT



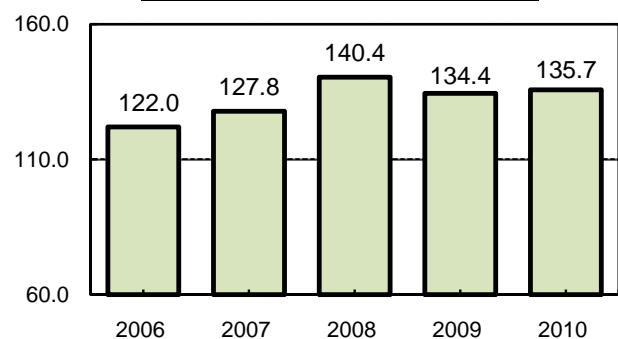
Net Return per Cow



Feed Cost per CWT



Ave. Number of Cows



A Twenty Year History of Selected Dairy Information

