

Minnesota State Colleges and Universities

State Farm Business Management Program Database

Dairy Farm Sort - 2012

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, 2013



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, visit the Farm Business Management Program Website at:

www.fbm.mnscu.edu

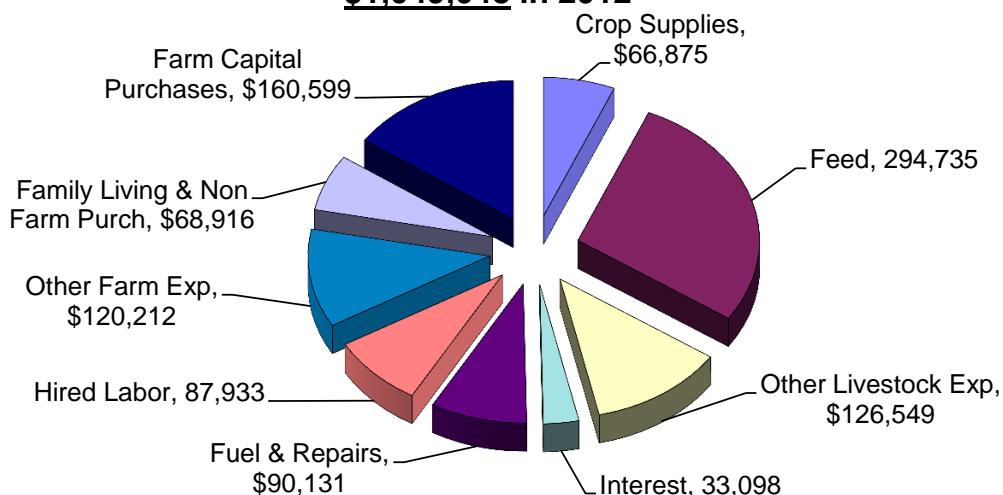
General Financial Summary
Farm Business Management Education Programs
Minnesota State Colleges and Universities
(Dairy Farms Sorted by Gross Farm Income)

	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	339	5	56	105	79	92
<u>Income Statement</u>						
Gross cash farm income	968,973	73,271	176,953	366,151	696,418	2,442,095
Total cash farm expense	819,533	75,769	145,913	296,311	580,268	2,089,557
Net cash farm income	149,440	-2,498	31,040	69,840	116,149	352,538
Inventory change	71,369	15,328	12,438	33,207	65,656	160,718
Depreciation	-45,664	-5,118	-8,409	-19,687	-34,748	-110,437
Net farm income from operations	175,145	7,712	35,069	83,360	147,058	402,819
Gain or loss on capital sales	1239	29,670	-	774	1,164	1,071
Average net farm income	176,384	37,381	35,069	84,134	148,221	403,890
Median net farm income	105,693	15,206	33,489	74,299	132,958	301,242
<u>Profitability (cost)</u>						
Rate of return on assets	9.9%	0.6%	4.7%	8.2%	9.7%	11.0%
Rate of return on equity	14.5%	-3.8%	5.4%	11.6%	14.6%	15.7%
Operating profit margin	20.6%	3.7%	14.6%	22.4%	22.7%	20.1%
Asset turnover rate	48.2%	17.1%	32.2%	36.5%	42.7%	54.5%
<u>Liquidity</u>						
Current assets	342,020	25,405	77,423	161,746	272,174	792,991
Current liabilities	153,292	12,957	44,640	64,366	110,352	368,420
Ending current ratio	2.23	1.96	1.73	2.51	2.47	2.15
Ending working capital	188,728	12,449	32,783	97,380	161,822	424,571
End working capital to gross inc	18.30%	16.30%	17.40%	24.60%	21.30%	16.40%
Term debt coverage ratio	2.28	1.38	1.35	2.01	2.34	2.42
Replacement coverage ratio	2.04	1.28	1.21	1.71	2.04	2.2
<u>Solvency (cost)</u>						
Number of farms	339	5	56	105	79	92
Total farm assets	1,611,018	284,031	435,417	830,618	1,327,361	3,565,211
Total farm liabilities	734,484	120,482	269,463	409,679	637,622	1,518,548
Total assets	1,720,889	347,619	513,727	950,253	1,456,598	3,670,178
Total liabilities	754,283	131,047	287,207	427,972	660,343	1,538,704
Ending net worth	966,606	216,572	226,520	522,281	796,255	2,131,474
Net worth change	126,151	56,966	23,132	55,269	117,258	284,047
Farm debt to asset ratio	46%	42%	62%	49%	48%	43%
Total debt to asset ratio	44%	38%	56%	45%	45%	42%
<u>Solvency (market)</u>						
Number of farms	339	5	56	105	79	92
Total farm assets	1,986,684	438,663	653,558	1,150,806	1,611,374	4,197,800
Total farm liabilities	890,578	167,994	323,768	509,369	761,991	1,837,135
Total assets	2,107,192	531,211	741,386	1,282,743	1,746,116	4,313,905
Total liabilities	912,953	184,641	344,173	531,734	786,706	1,858,098
Ending net worth	1,194,239	346,570	397,213	751,009	959,410	2,455,807
Net worth change	154,175	63,047	31,595	85,709	135,155	331,490
Farm debt to asset ratio	45%	38%	50%	44%	47%	44%
Total debt to asset ratio	43%	35%	46%	41%	45%	43%
<u>Nonfarm Information</u>						
Net nonfarm income	14,765	24,148	17,141	20,048	14,153	6,313
Farms reporting living expenses	57	-	12	28	13	3
Total family living expense	45,622	-	38,686	46,616	48,583	-
Total living, invest, & capital	55,198	-	45,611	56,253	56,303	-
<u>Crop Acres</u>						
Total acres owned	168	95	120	157	156	227
Total crop acres	330	25	148	190	272	674
Total crop acres owned	118	21	73	100	110	181
Total crop acres cash rented	209	4	69	88	155	493
Total crop acres share rented	3	-	6	1	6	1

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

	Avg. Of <u>All Farms</u>	50,001 - <u>100,000</u>	100,001 - <u>250,000</u>	250,001 - <u>500,000</u>	500,001 - <u>1,000,000</u>	Over <u>1,000,000</u>
Number of farms	339	5	56	105	79	92
<u>Liquidity</u>						
Current ratio	2.23	1.96	1.73	2.51	2.47	2.15
Working capital	188,728	12,449	32,783	97,380	161,822	424,571
Working capital to gross inc	18.3%	16.3%	17.4%	24.6%	21.3%	16.4%
<u>Solvency (market)</u>						
Farm debt to asset ratio	45%	38%	50%	44%	47%	44%
Farm equity to asset ratio	55%	62%	50%	56%	53%	56%
Farm debt to equity ratio	0.81	0.62	0.98	0.79	0.9	0.78
<u>Profitability (cost)</u>						
Rate of return on farm assets	9.9%	0.6%	4.7%	8.2%	9.7%	11.0%
Rate of return on farm equity	14.5%	-3.8%	5.4%	11.6%	14.6%	15.7%
Operating profit margin	20.6%	3.7%	14.6%	22.4%	22.7%	20.1%
Net farm income	176,384	37,381	35,069	84,134	148,221	403,890
EBIDTA	253,942	19,969	54,809	121,881	210,629	581,752
<u>Repayment Capacity</u>						
Capital debt repayment capacity	203,239	23,338	36,728	90,824	167,427	477,832
Capital debt repayment margin	114,130	6,456	9,555	45,560	95,894	280,257
Replacement margin	103,510	5,088	6,300	37,642	85,555	261,101
Term debt coverage ratio	2.28	1.38	1.35	2.01	2.34	2.42
Replacement coverage ratio	2.04	1.28	1.21	1.71	2.04	2.2
<u>Efficiency</u>						
Asset turnover rate (cost)	48.2%	17.1%	32.2%	36.5%	42.7%	54.5%
Operating expense ratio	75.4%	73.8%	70.8%	69.2%	72.3%	77.5%
Depreciation expense ratio	4.4%	6.7%	4.5%	5.0%	4.6%	4.3%
Interest expense ratio	3.2%	9.4%	6.0%	4.8%	3.8%	2.7%
Net farm income ratio	17.1%	49.0%	18.7%	21.2%	19.5%	15.6%

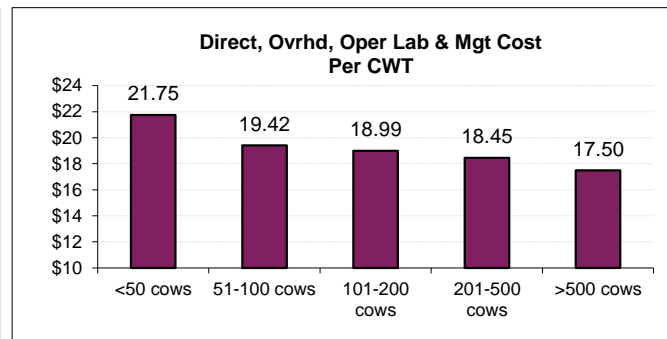
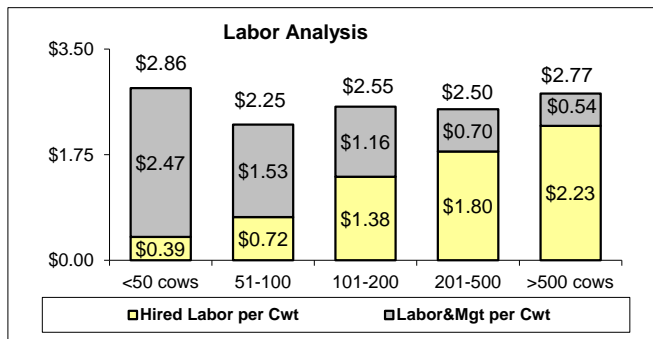
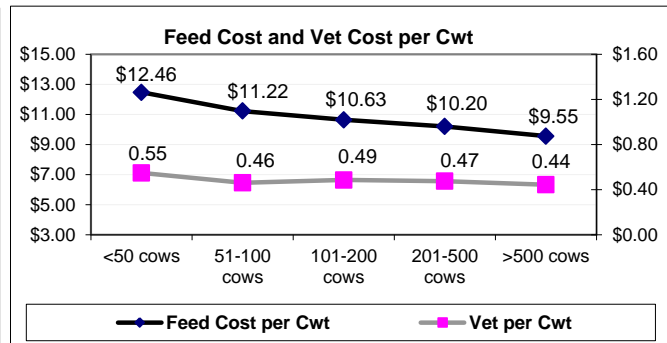
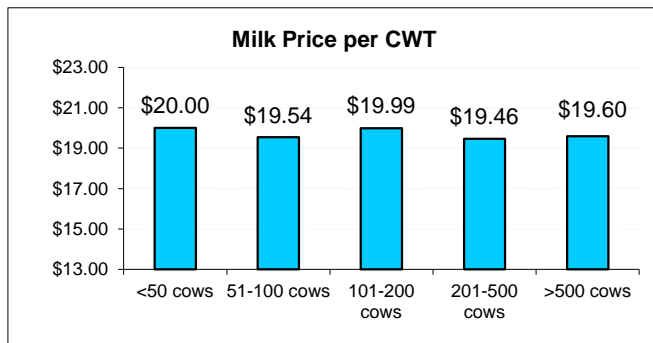
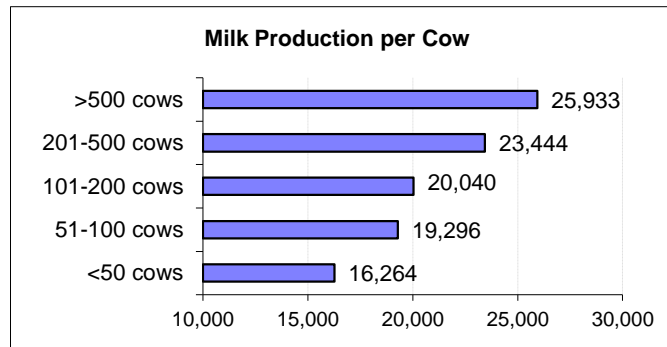
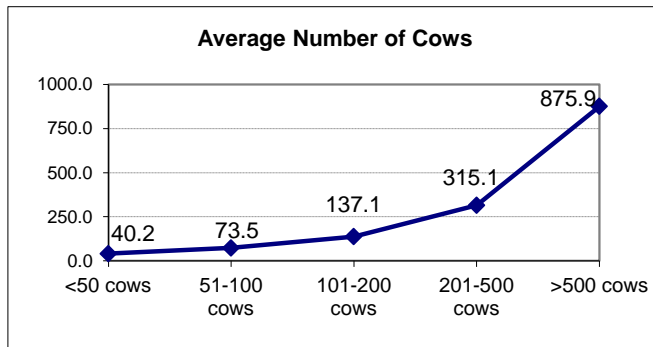
Average Dollars Spent by a Minnesota Dairy Farm totals
\$1,049,048 in 2012



State Database Dairy Cow Enterprise (Sorted by Herd Size)	Sorted by Average Number of Dairy Cows					
	Average	Up to 50 Cows	51 to 100 Cows	101 to 200 Cows	201 To 500 Cows	Over 500 Cows
	***** Per Cow *****					
Number Of Farms	424	60	160	118	64	22
Milk sold (hd)	4,368.09	3,231.90	3,749.67	3,973.29	4,528.96	5,050.60
Dairy Calves sold (hd)	55.50	25.11	57.62	36.59	47.08	82.69
Transferred out (hd)	42.07	57.25	72.83	53.99	38.56	15.08
Cull sales (hd)	274.54	255.83	264.36	269.97	259.29	302.88
Other income	114.68	123.85	139.66	150.69	130.73	51.27
Purchased (hd)	-44.58	-200.57	-45.04	-66.35	-34.86	-16.66
Transferred in (hd)	-56.73	-112.06	-110.87	-58.27	-71.35	-0.20
Inventory change (hd)	53.81	148.83	22.71	73.17	46.87	51.89
Dairy repl net cost	-578.86	-463.17	-483.97	-548.81	-538.18	-719.01
Gross margin	4,228.52	3,066.97	3,666.97	3,884.28	4,407.09	4,818.54
Direct Expenses						
Protein Vit Minerals (lb.)	678.66	471.28	603.07	657.00	709.22	736.91
Complete Ration (lb.)	338.88	233.19	212.17	217.18	439.87	425.89
Corn (bu.)	341.98	346.51	343.59	307.15	354.35	356.74
Corn Silage (lb.)	365.24	268.68	316.07	336.87	378.99	416.74
Hay, Alfalfa (lb.)	233.20	334.26	372.26	230.61	210.06	162.11
Haylage, Alfalfa (lb.)	160.32	106.81	163.52	151.34	176.44	155.74
Other feed stuffs (lb)	185.66	265.11	154.64	231.00	122.54	222.62
Breeding fees	44.93	36.17	44.77	35.57	47.69	51.12
Veterinary	104.47	88.92	88.99	97.25	111.17	114.90
BST	35.17	2.89	9.24	20.57	43.67	58.39
Supplies	199.24	205.47	197.22	175.50	209.13	209.26
Fuel & oil	98.29	70.06	79.34	93.24	99.51	116.35
Repairs	134.47	114.09	133.15	125.08	147.79	131.75
Custom hire	48.94	10.22	32.31	34.65	53.41	71.24
Hired labor	225.38	23.30	51.71	130.87	270.59	388.63
Hauling and trucking	41.36	60.00	59.62	43.59	36.38	31.21
Marketing	52.64	43.64	46.13	47.90	50.76	63.67
Bedding	61.67	17.43	38.19	58.61	67.83	77.65
Total direct expenses	3,350.48	2,698.03	2,945.99	2,993.99	3,529.39	3,790.93
Return over direct expense	878.04	368.94	720.98	890.29	877.70	1,027.60
Overhead Expenses						
Hired labor	146.25	39.97	86.73	146.11	152.46	189.49
Building leases	40.39	16.00	15.58	25.18	54.46	56.63
Utilities	62.92	94.00	82.67	69.06	52.39	52.83
Interest	92.99	70.96	88.35	103.57	108.49	73.46
Mach & bldg depreciation	139.38	98.28	128.55	136.97	148.24	143.87
Miscellaneous	102.92	118.93	103.16	98.57	115.67	91.09
Total overhead expenses	584.85	438.14	505.04	579.46	631.71	607.37
Total dir & ovhd expenses	3,935.32	3,136.16	3,451.03	3,573.44	4,161.10	4,398.30
Net return	293.19	-69.20	215.94	310.84	245.99	420.23
Labor & management charge	203.48	401.21	295.76	233.14	163.84	139.04
Net return over lbr & mgt	89.71	-470.41	-79.82	77.69	82.16	281.20
Cost of Production per CWT						
Total direct expense per cwt.	14.96	16.59	15.27	14.94	15.05	14.62
Total dir& ovhd expense per cwt.	17.57	19.28	17.88	17.83	17.75	16.96
With other revenue adjustments	18.31	20.43	18.41	18.44	18.39	17.94
With labor and management	19.22	22.89	19.94	19.60	19.09	18.48
Est. labor hours per unit	40.43	47.30	40.34	37.27	40.15	42.58
Other Information						
Avg. number of Cows	164.6	40.2	73.5	137.1	315.1	875.9
Milk produced per Cow	22,395	16,264	19,296	20,040	23,444	25,933
Culling percentage	30.7	29.1	28.6	29.4	30.0	34.1
Turnover rate	37.7	37.5	35.7	35.9	36.9	41.2
Cow death loss percent	6.4	7.1	6.0	5.6	6.7	6.9
Percent of barn capacity	109.4	86.9	106.5	99.9	118.0	115.5
Feed cost per day	6.31	5.55	5.93	5.84	6.55	6.79
Feed cost per cwt of milk	10.29	12.46	11.22	10.63	10.2	9.55
Feed cost per Cow	2,303.93	2,025.84	2,165.31	2,131.15	2,391.46	2,476.75
Avg. milk price per cwt.	19.64	20	19.54	19.99	19.46	19.6

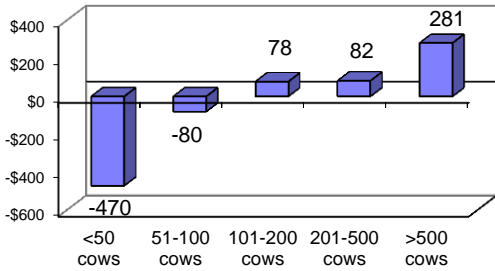
Selected Dairy Enterprise Factors from the Farm Business Management Program Database

Herd Size	State Ave.	up to 50 cows	51-100 cows	101-200 cows	201-500 cows	over 500 cows
Number of Farms	424	60	160	118	64	22
Ave # of Cows	164.6	40.2	73.5	137.1	315.1	875.9
Milk Prod. Per Cow	22,395	16,264	19,296	20,040	23,444	25,933
Feed Cost per Cwt	\$10.29	\$12.46	\$11.22	\$10.63	\$10.20	\$9.55
Interest per Cwt	\$0.42	\$0.44	\$0.46	\$0.52	\$0.46	\$0.28
Vet per Cwt	\$0.47	\$0.55	\$0.46	\$0.49	\$0.47	\$0.44
Hired Labor per Cwt	\$1.66	\$0.39	\$0.72	\$1.38	\$1.80	\$2.23
Deprec/Lease per Cwt	\$0.80	\$0.70	\$0.75	\$0.81	\$0.86	\$0.77
Milk Price per Cwt	\$19.64	\$20.00	\$19.54	\$19.99	\$19.46	\$19.60
Dir & Ovhd Cost per Cwt	\$17.57	\$19.28	\$17.88	\$17.83	\$17.75	\$16.96
Return over Dir & Ovhd per Cow	\$293	-\$69	\$216	\$311	\$246	\$420
Herd Profit over Dir&Ovhd	\$48,259	-\$2,782	\$15,872	\$42,616	\$77,511	\$368,079
Labor&Mgt per Cwt	\$0.91	\$2.47	\$1.53	\$1.16	\$0.70	\$0.54
Net per Cow after Labor&Mgt	\$90	-\$470	-\$80	\$78	\$82	\$281
Herd Profit over Labor&Mgt	\$14,766	-\$18,910	-\$5,867	\$10,653	\$25,885	\$246,294

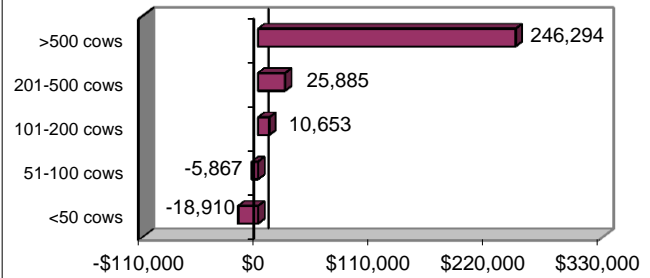


Selected Dairy Enterprise Factors from the Farm Business Management Program Database

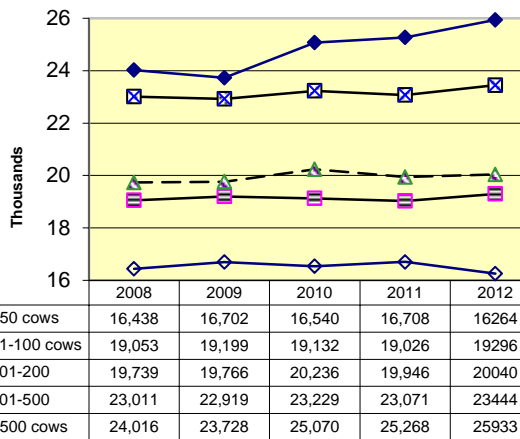
Return over Direct, Overhead, and Labor&Mgt per Cow



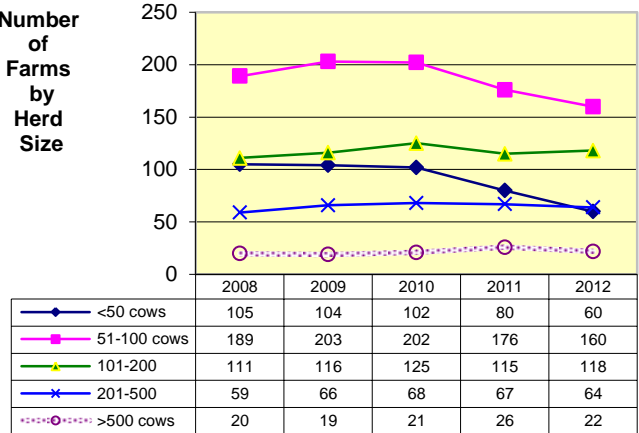
Dairy Herd Profit over Direct, Overhead, and Labor&Mgt



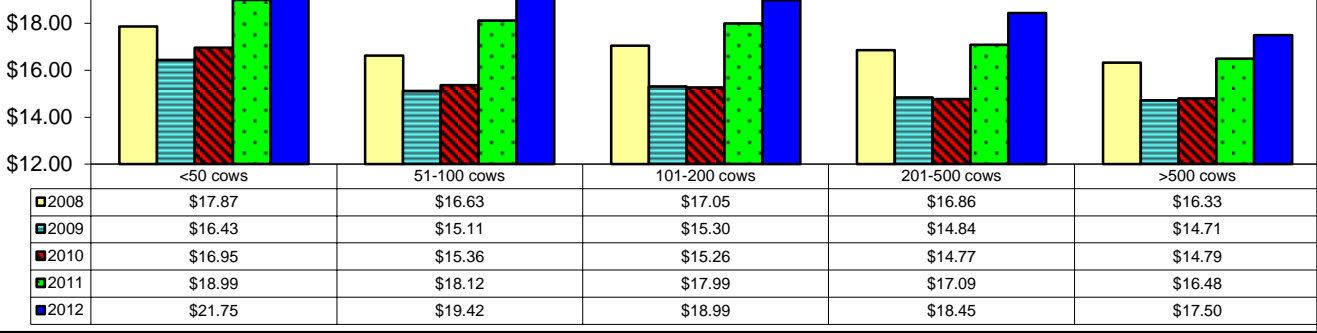
Pounds of Milk Produced per Cow



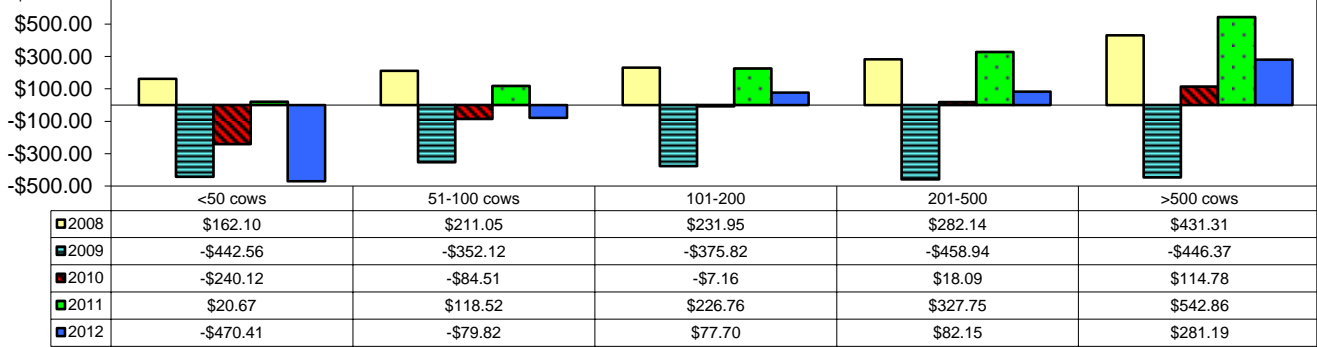
Number of Farms by Herd Size



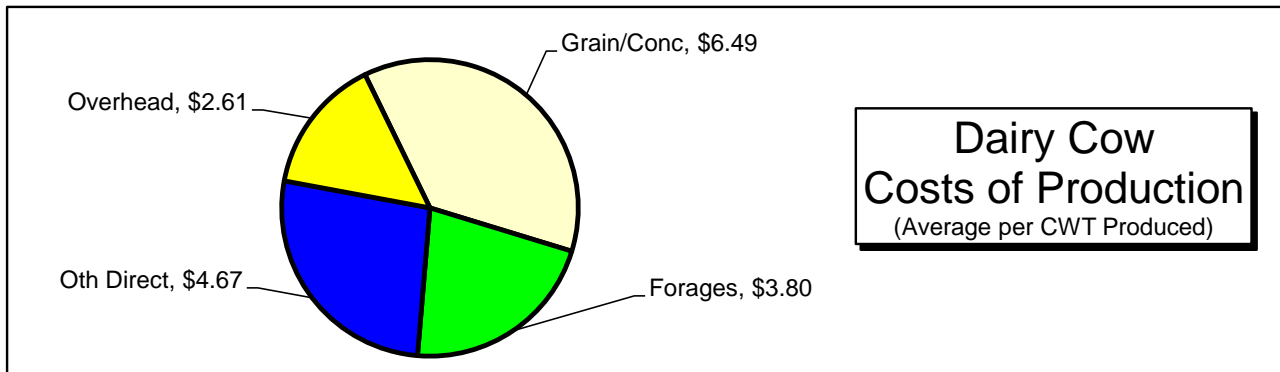
Direct, Overhead, and Labor & Mgt Cost per CWT



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

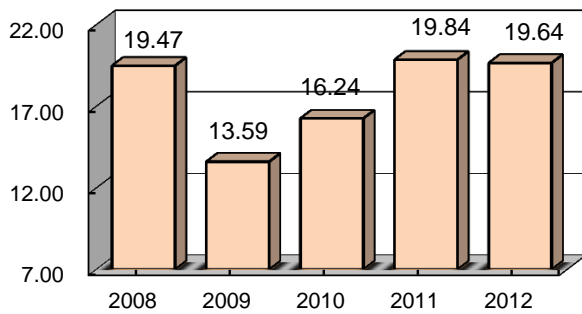


Summary of Selected Dairy Enterprise Factors - Average Farm Data

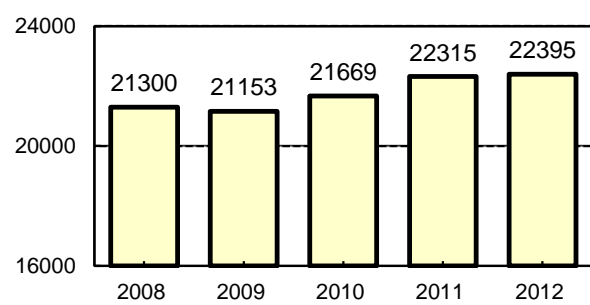


The data on this page includes all Dairy Cow Enterprises in the state FBM database.

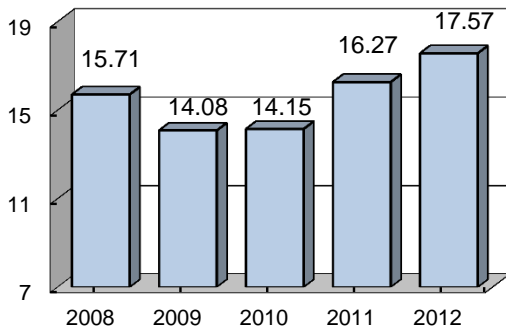
Ave Milk Price Recv'd



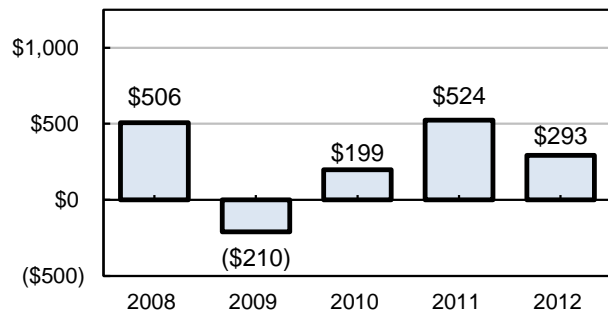
Milk Production per Cow



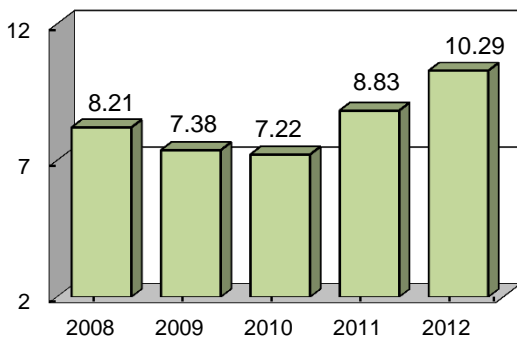
Dir & Ovhd Exp per CWT



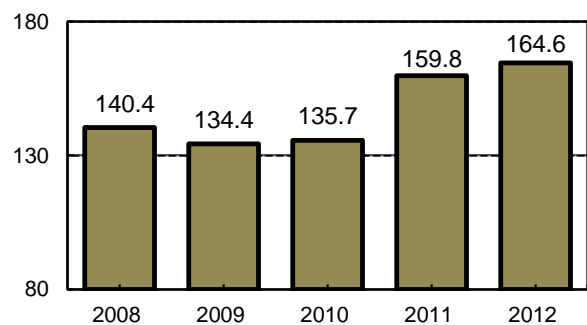
Net Return per Cow



Feed Cost per CWT



Ave. Number of Cows



A Twenty Year History of Selected Dairy Information

