



Dairy
**SUCCESS &
PROFITABILITY REVIEW**

2022 MY FARM REVIEW

8 - Dairy SPR 300+ Cows



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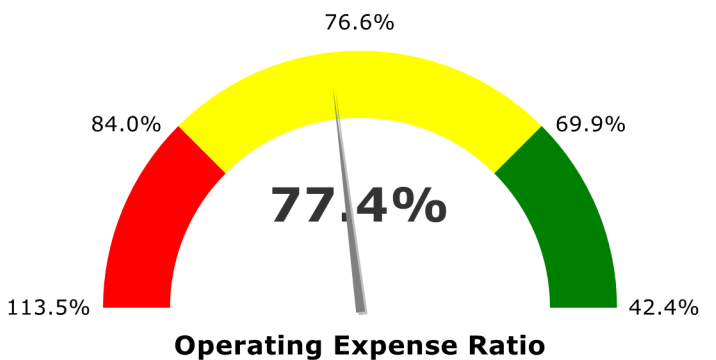
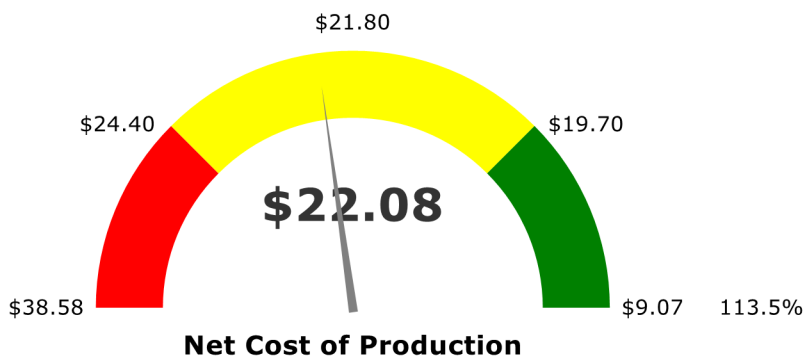
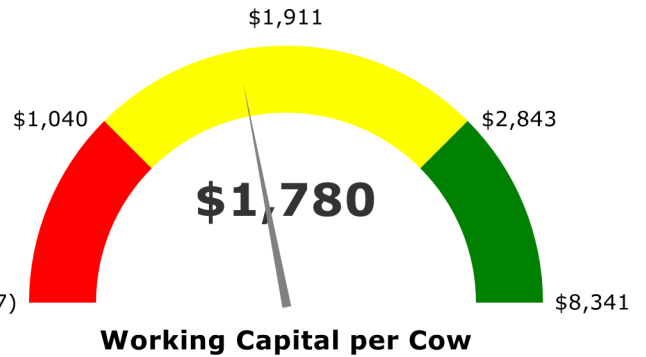
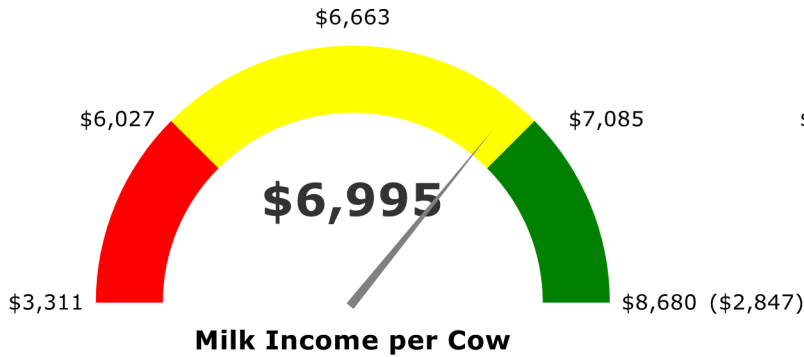
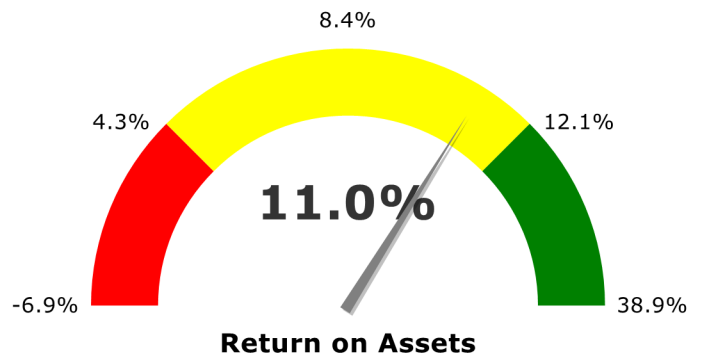
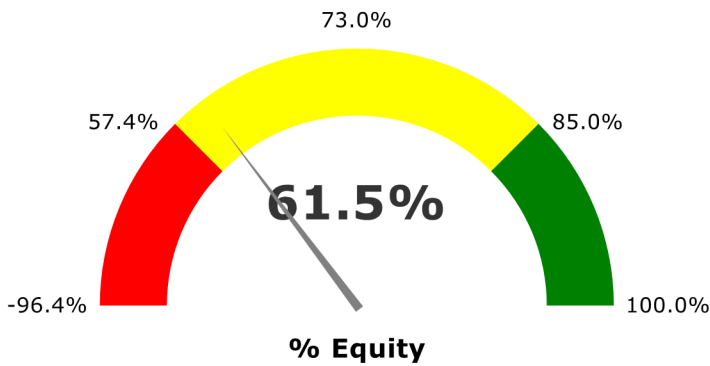
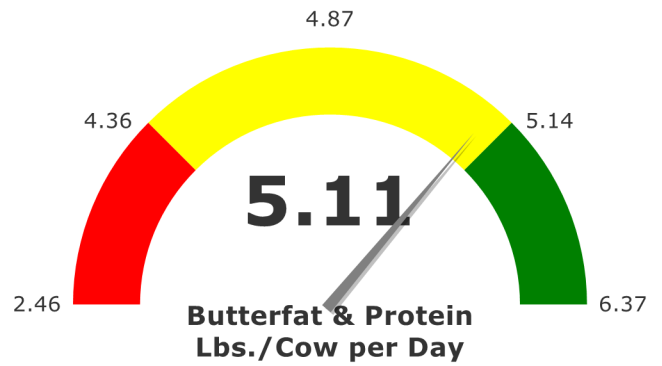
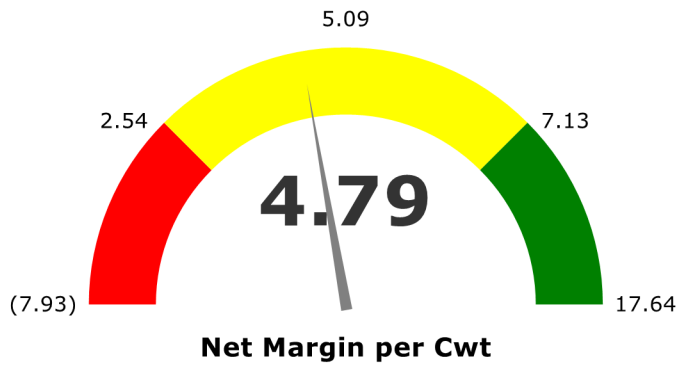
2022 Dairy Success and Profitability Review

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Dairy SPR Top 25%--Range of Key Factors

(Top 25% consists of 43 farms)

Gross Margin Analysis	Net Margin per Cwt.	Gross Milk Price	Cost of Goods Sold per Cwt.	% Gross Margin	Overhead per Cwt.	Operating Expense Ratio
Top	\$17.64	\$31.49	(\$13.74)	153.8%	\$5.64	42.4%
					\$6.88	
75th Percentile	\$10.82	\$27.86	\$3.93	85.7%	\$7.40	60.3%
		\$27.26				
50th Percentile	\$9.45	\$27.14	\$7.81	71.6%	\$9.90	64.5%
25th Percentile	\$7.91	\$26.68	\$10.20	61.9%	\$12.75	69.1%
				47.3%		77.4%
Bottom	\$7.13	\$25.02	\$15.19	47.3%	\$26.76	97.2%
	\$4.79		\$15.21			

Some Keys to Profitability	Milk Income per Cow	Lbs. Milk Sold per Cow	Lbs. Milk Sold per FTWE	Feed and Crop as % of Milk Inc.	Cows per FTWE	Energy Corrected Milk Sold per Cow
Top	\$8,680	31,491	2,028,493	20.4%	74	33,993
		26,026				
75th Percentile	\$7,237	25,878	1,403,913	30.5%	55	28,200
	\$6,995		1,278,553		52	27,687
50th Percentile	\$6,836	25,000	982,474	36.5%	41	26,695
25th Percentile	\$6,366	23,036	762,151	41.2%	33	24,840
				43.0%		
Bottom	\$3,852	12,744	321,117	61.1%	15	13,461

Other Financial	EBITDA per Cow	ROA	Debt to EBITDA	Working Capital per Cow	Other Income per Cwt. (1)	Total Labor Expense per Cwt.
Top	\$6,434	38.9%	-	\$8,341	\$34.59	\$0.02
75th Percentile	\$3,945	14.6%	0.62	\$3,847	\$15.87	\$2.31
		11.0%				
50th Percentile	\$3,296	10.6%	1.71	\$3,009	\$9.57	\$3.71
25th Percentile	\$2,937	8.3%	2.33	\$2,089	\$6.39	\$4.13
			2.48	\$1,780	\$3.53	\$4.32
Bottom	\$2,219	3.1%	8.53	(\$117)	\$2.40	\$11.34
	\$2,040					

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Range of Key Factors for All Herds

(All Herds consists of 171 farms)

Financial Performance	Net Margin per Cwt.	ROA	ROE	% Equity	Working Capital per Cow	Debt to EBITDA (2)	EBITDA per Cow
Top	\$17.64	38.9%	84.1%	100.0%	\$8,341	-	\$6,434
75th Percentile	\$7.13	12.1%	17.8%	85.0%	\$2,843	0.97	\$3,044
		11.0%	15.9%				
50th Percentile	\$5.09	8.4%	9.6%	73.0%	\$1,911	2.02	\$2,291
	\$4.79			61.5%	\$1,780	2.48	\$2,040
25th Percentile	\$2.54	4.3%	4.1%	57.4%	\$1,040	3.94	\$1,608
Bottom	(\$7.93)	-6.9%	-14.4%	-96.4%	(\$2,847)	9,999.00	(\$93)

Gross Revenue	Milk Income per Cow	Lbs. Milk Sold per Cow	Gross Milk Price	Net Milk Price	Energy Corrected Milk Sold per Cow
Top	\$8,680	32,208	\$33.57	\$31.01	33,993
75th Percentile	\$7,085	26,209	\$27.65	\$25.67	27,966
	\$6,995	26,026	\$27.26	\$25.37	27,687
50th Percentile	\$6,663	24,945	\$27.08	\$25.02	26,513
25th Percentile	\$6,027	22,402	\$26.35	\$24.11	23,630
Bottom	\$3,311	10,286	\$23.23	\$18.91	13,168

Production Efficiency	% Gross Margin	Full Time Worker Equivalents	Lbs. Milk per FTWE	Feed as % of Milk Income	Feed and Crop as % of Milk Inc.
Top	153.8%	66.8	2,107,215	6.5%	20.4%
75th Percentile	64.2%	7.9	1,337,662	24.3%	34.3%
			1,278,553		
50th Percentile	51.6%	4.5	1,051,445	30.9%	40.6%
	47.3%			32.9%	43.0%
25th Percentile	43.3%	2.7	819,580	34.9%	46.0%
Bottom	16.3%	0.9	241,089	60.7%	61.1%

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Range of Key Factors for All Herds

(All Herds consists of 171 farms)

Capacity	Overhead per Cwt.	Overhead per Cow	Cows per FTWE	Acres per Cow
Top	\$3.19	\$837	103	7.8
	\$6.88			
75th Percentile	\$7.36	\$1,758	55	2.9
		\$1,790	52	
50th Percentile	\$8.97	\$2,118	44	2.0
				1.7
25th Percentile	\$11.81	\$2,772	34	1.5
Bottom	\$28.28	\$5,753	15	-

Industry Skills	Butter Fat Percent	Protein Percent	Butterfat & Protein Lbs./Cow per Day	Somatic Cell Count	Death Rate in Herd
Top	5.5%	4.0%	6.37	56	0.0%
75th Percentile	4.1%	3.2%	5.14	123	2.8%
	4.1%	3.2%	5.11		
50th Percentile	4.0%	3.1%	4.87	164	4.7%
				180	5.9%
25th Percentile	3.9%	3.1%	4.36	215	6.9%
Bottom	3.6%	2.8%	2.46	486	14.2%

Cost Control	Net Cost of Production	Operating Expense Ratio	Cost of Goods Sold per Cwt.	Other Inc per Cwt. (1)	Total Labor Exp per Cwt.	Feed & Crop Exp per Cow	Capital Purch per Cow
Top	\$9.07	42.4%	(\$13.74)	\$34.59	\$0.02	\$819	-
75th Percentile	\$19.70	69.9%	\$9.94	\$9.21	\$2.91	\$2,147	\$358
50th Percentile	\$21.80	76.6%	\$13.02	\$6.26	\$3.86	\$2,653	\$864
	\$22.08	77.4%			\$4.32	\$2,896	\$1,258
25th Percentile	\$24.40	84.0%	\$14.93	\$4.04	\$4.88	\$3,102	\$1,519
			\$15.21	\$3.53			
Bottom	\$38.58	113.5%	\$22.87	(\$0.99)	\$11.34	\$4,556	\$19,352

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Income Statement Comparison	(\$ per Cow)				
	My Farm 2022	Dairy SPR Average	300+ Cows Peer Group	Dairy SPR Top 25%	Top 25% Difference
Average Number of Cows	811	357	811	219	592
Gross Milk Pounds Shipped	21,114,436	9,073,335	21,114,436	5,538,579	15,575,857
Butterfat Percent	4.06%	4.06%	4.06%	4.06%	-
Protein Percent	3.18%	3.16%	3.18%	3.13%	0.05%
Other non-fat Solid Percent	5.79%	5.78%	5.79%	5.79%	-
Butterfat & Protein Lbs./Cow	1,869	1,829	1,869	1,823	46
Somatic Cell Count (000's omitted)	180	175	180	149	31
Milk Shipped per Cow	26,026	25,436	26,026	25,255	771
Milk Income	6,995	6,848	6,995	6,938	57
<u>Cost of Goods Sold (Variable Costs):</u>					
Employee Labor	871	716	871	515	356
Purchased Feed	2,265	2,172	2,265	1,882	383
Boarding Expense	95	75	95	97	(2)
Custom Hire	218	247	218	294	(76)
Crop Expense (Seed, Fertilizer, & Chemicals)	631	644	631	793	(162)
Fuel	247	241	247	260	(13)
Livestock Expense (Supplies, Vet., Breeding)	503	506	503	458	45
Advertising/Milk Marketing Exp.	454	473	454	538	(84)
Cow Replacements	20	19	20	11	9
Other Expenses	79	87	79	80	(1)
Less Non-Milk Income	919	1,026	919	1,511	(592)
Less Non-Farm Income	50	88	50	260	(210)
Less Accrual Adjustments	456	423	456	907	(450)
Total Cost of Goods Sold	3,957	3,644	3,957	2,250	1,708
Gross Margin	3,038	3,205	3,038	4,688	(1,650)
<u>Overhead (Fixed Costs):</u>					
Owner	254	347	254	433	(179)
Repairs	432	434	432	489	(57)
Interest	197	207	197	229	(32)
Rent/Lease	196	219	196	272	(76)
Property Taxes	67	71	67	116	(49)
Insurance (Fire & Liability)	100	100	100	111	(11)
Utilities	153	148	153	144	9
Depreciation	391	430	391	541	(149)
Total Overhead	1,790	1,956	1,790	2,334	(544)
Net Cost of Production	5,748	5,601	5,748	4,584	1,164
Net Margin (Net Income)	1,247	1,247	1,247	2,353	(1,106)
Add Back Depreciation	391	430	391	541	(149)
Adjustment for Accruals	(456)	(423)	(456)	(907)	450
Principal Payments	(379)	(389)	(379)	(424)	45
Net Residual Income	803	865	803	1,564	(761)

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Income Statement Comparison	(\$ per Cwt.)				
	My Farm 2022	Dairy SPR Average	300+ Cows Peer Group	Dairy SPR Top 25%	Top 25% Difference
Average Number of Cows	811	357	811	219	592
Gross Milk Pounds Shipped	21,114,436	9,073,335	21,114,436	5,538,579	15,575,857
Milk Shipped per Cow	26,026	25,436	26,026	25,255	771
Milk Income	26.88	26.92	26.88	27.47	(0.59)
<u>Cost of Goods Sold (Variable Costs):</u>					
Employee Labor	3.35	2.82	3.35	2.04	1.31
Purchased Feed	8.70	8.54	8.70	7.45	1.25
Boarding Expense	0.36	0.29	0.36	0.38	(0.02)
Custom Hire	0.84	0.97	0.84	1.16	(0.33)
Crop Expense (Seed, Fertilizer, & Chemicals)	2.42	2.53	2.42	3.14	(0.71)
Fuel	0.95	0.95	0.95	1.03	(0.08)
Livestock Expense (Supplies, Vet., Breeding)	1.93	1.99	1.93	1.81	0.12
Advertising/Milk Marketing Exp.	1.75	1.86	1.75	2.13	(0.39)
Cow Replacements	0.08	0.07	0.08	0.04	0.03
Other Expenses	0.30	0.34	0.30	0.31	(0.01)
Less Non-Milk Income	3.53	4.03	3.53	5.98	(2.45)
Less Non-Farm Income	0.19	0.35	0.19	1.03	(0.84)
Less Accrual Adjustments	1.75	1.66	1.75	3.59	(1.84)
Total Cost of Goods Sold	15.21	14.33	15.21	8.91	6.30
Gross Margin	11.67	12.60	11.67	18.56	(6.89)
<u>Overhead (Fixed Costs):</u>					
Owner	0.98	1.36	0.98	1.71	(0.74)
Repairs	1.66	1.71	1.66	1.94	(0.28)
Interest	0.76	0.81	0.76	0.91	(0.15)
Rent/Lease	0.75	0.86	0.75	1.08	(0.32)
Property Taxes	0.26	0.28	0.26	0.46	(0.20)
Insurance (Fire & Liability)	0.38	0.39	0.38	0.44	(0.05)
Utilities	0.59	0.58	0.59	0.57	0.02
Depreciation	1.50	1.69	1.50	2.14	(0.64)
Total Overhead	6.88	7.69	6.88	9.24	(2.36)
Net Cost of Production	22.08	22.02	22.08	18.15	3.93
Net Margin (Net Income)	4.79	4.90	4.79	9.32	(4.53)
Add Back Depreciation	1.50	1.69	1.50	2.14	(0.64)
Adjustment for Accruals	(1.75)	(1.66)	(1.75)	(3.59)	1.84
Principal Payments	(1.46)	(1.53)	(1.46)	(1.68)	0.22
Net Residual Income	3.09	3.40	3.09	6.19	(3.11)
Breakeven Milk Price	24.47	23.44	24.47	20.94	3.53
Class III Actual	21.96	21.96	21.96	21.96	-
Class III Basis	5.30	5.17	5.30	5.37	(0.06)
Class IV Actual	24.47	24.47	24.47	24.47	-
Class IV Basis	2.79	2.66	2.79	2.86	(0.06)

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Income Statement Comparison	(\$ per Cwt.)				
<u>Component Corrected Cwt.</u> (3.5% BF; 3.2% Prot.)	My Farm 2022	Dairy SPR Average	300+ Cows Peer Group	Dairy SPR Top 25%	Top 25% Difference
Average Number of Cows	811	357	811	219	592
Gross Milk Pounds Shipped	21,114,436	9,073,335	21,114,436	5,538,579	15,575,857
Component Corrected Milk Pounds Shipped	22,461,337	9,661,707	22,461,337	5,927,147	16,534,190
Component Correct Milk Shipped per Cow	27,687	27,085	27,687	27,027	659
Milk Shipped per Cow	26,026	25,436	26,026	25,255	771
Milk Income	25.26	25.28	25.26	25.67	(0.40)
<u>Cost of Goods Sold (Variable Costs):</u>					
Employee Labor	3.15	2.64	3.15	1.91	1.24
Purchased Feed	8.18	8.02	8.18	6.96	1.22
Boarding Expense	0.34	0.28	0.34	0.36	(0.01)
Custom Hire	0.79	0.91	0.79	1.09	(0.30)
Crop Expense (Seed, Fertilizer, & Chemicals)	2.28	2.38	2.28	2.93	(0.65)
Fuel	0.89	0.89	0.89	0.96	(0.07)
Livestock Expense (Supplies, Vet., Breeding)	1.82	1.87	1.82	1.70	0.12
Advertising/Milk Marketing Exp.	1.64	1.75	1.64	1.99	(0.35)
Cow Replacements	0.07	0.07	0.07	0.04	0.03
Other Expenses	0.28	0.32	0.28	0.29	(0.01)
Less Non-Milk Income	3.32	3.79	3.32	5.59	(2.27)
Less Non-Farm Income	0.18	0.32	0.18	0.96	(0.78)
Less Accrual Adjustments	1.65	1.56	1.65	3.35	(1.71)
Total Cost of Goods Sold	14.29	13.45	14.29	8.32	5.97
Gross Margin	10.97	11.83	10.97	17.34	(6.37)
<u>Overhead (Fixed Costs):</u>					
Owner	0.92	1.28	0.92	1.60	(0.68)
Repairs	1.56	1.60	1.56	1.81	(0.25)
Interest	0.71	0.76	0.71	0.85	(0.13)
Rent/Lease	0.71	0.81	0.71	1.00	(0.30)
Property Taxes	0.24	0.26	0.24	0.43	(0.19)
Insurance (Fire & Liability)	0.36	0.37	0.36	0.41	(0.05)
Utilities	0.55	0.55	0.55	0.53	0.02
Depreciation	1.41	1.59	1.41	2.00	(0.59)
Total Overhead	6.47	7.22	6.47	8.64	(2.17)
Net Cost of Production	20.76	20.68	20.76	16.96	3.80
Net Margin (Net Income)	4.50	4.61	4.50	8.71	(4.20)
Add Back Depreciation	1.41	1.59	1.41	2.00	(0.59)
Adjustment for Accruals	(1.65)	(1.56)	(1.65)	(3.35)	1.71
Principal Payments	(1.37)	(1.44)	(1.37)	(1.57)	0.20
Net Residual Income	2.90	3.19	2.90	5.79	(2.89)
Breakeven Milk Price	22.36	22.09	22.36	19.88	2.48

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Key Performance Indicators						
	2018	2019	2020	2021	2022	Average
Average Number of Cows	591	740	715	691	811	709
Financial Performance Measures:						
Net Margin per Cwt.	(1.34)	1.42	2.62	1.52	4.79	1.81
ROA	-0.6%	4.2%	6.1%	4.3%	11.0%	5.0%
ROE	-3.2%	3.9%	8.1%	4.6%	15.9%	5.9%
% Equity	66%	63%	65%	64%	61%	64%
Working Capital Per Cow	785.83	841.30	1,165.11	1,322.31	1,780.22	1,178.95
Debt to EBITDA	10.39	4.47	3.24	4.45	2.48	5.01
EBITDA per Cow	458	1,112	1,463	1,153	2,040	1,245
Gross Revenue:						
Milk Income per Cow	4,196	4,675	4,753	4,905	6,995	5,105
Lbs. milk sold per Cow	24,248	24,204	25,159	25,438	26,026	25,015
Gross Milk Price	17.31	19.54	19.03	19.50	27.26	20.53
Net Milk Price	15.63	17.97	17.37	17.90	25.37	18.85
Energy Corrected Milk Sold per Cow	24,846	25,135	26,431	26,935	27,687	26,207
Production Efficiency:						
% Gross Margin	29%	42%	50%	45%	47%	43%
Full Time Worker Equivalents (FTWE)	13.1	15.4	14.4	14.0	17.0	14.8
Lbs. Milk Sold Per FTWE	1,090,452	1,182,611	1,281,132	1,283,996	1,278,553	1,223,349
Purchased Feed as % of Milk Income	31.4%	32.8%	37.5%	35.5%	32.9%	34.0%
Purchased Feed / Crop as % of Milk Incom	39.5%	41.7%	48.7%	44.0%	43.0%	43.4%
Capacity:						
Overhead per Cwt.	6.35	6.16	6.38	6.18	6.88	6.39
Overhead per Cow	1,540	1,490	1,604	1,572	1,790	1,599
Cows per FTWE	45	50	53	52	52	50
Acres per Cow	2.1	1.9	1.9	2.0	1.7	1.9
Industry Skills:						
Butter Fat Percent	3.77%	3.91%	4.01%	4.07%	4.06%	3.97%
Protein Percent	3.06%	3.11%	3.14%	3.17%	3.18%	3.13%
Butter Fat & Protein Lbs./Cow per Day	4.53	4.60	4.85	4.96	5.11	4.81
Somatic Cell Count (000's omitted)	194	187	176	186	180	185
Death Rate in Herd	5.8%	6.0%	6.0%	6.6%	5.9%	6.0%
Cost Control:						
Net Cost of Production	18.64	17.89	16.27	17.76	22.08	18.53
Operating Expense Ratio	95.4%	83.1%	80.6%	84.5%	77.4%	84.2%
Cost of Goods Sold per Cwt.	12.29	11.73	9.89	11.58	15.21	12.14
Non-milk Income per Cwt.	2.68	3.28	5.72	4.13	3.53	3.87
Total Labor Expense per Cwt.	3.89	3.85	4.01	3.84	4.32	3.98
Feed & Crop Expense per Cow	1,660	1,868	2,227	2,110	2,896	2,152
Capital Purchases per Cow	564	710	856	1,113	1,258	900

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Financial Statement -- Trend	(thousands)					
	2018	2019	2020	2021	2022	Average
Average Number of Cows	591	740	715	691	811	709
Gross Milk Pounds Shipped	14,320,753	17,917,865	17,979,745	17,568,466	21,114,436	17,780,253
Butterfat Percent	3.77%	3.91%	4.01%	4.07%	4.06%	3.97%
Protein Percent	3.06%	3.11%	3.14%	3.17%	3.18%	3.13%
Butterfat & Protein Lbs./Cow	1,656	1,684	1,776	1,815	1,869	1,760
Milk Shipped per Cow	24,248	24,204	25,159	25,438	26,026	25,015
Assets:						
Cash	54	78	92	96	138	91
Accounts Receivable	174	307	305	238	342	273
Feed & Crop Inventory	690	876	980	1,085	1,423	1,011
Supplies & Prepaid Expenses	87	41	89	56	137	82
Other Current Assets	16	57	56	70	16	43
Total Current Assets	1,020	1,360	1,523	1,544	2,056	1,501
Dairy Livestock	1,262	1,634	1,503	1,442	1,645	1,497
Machinery/Equipment	1,141	1,432	1,426	1,473	1,718	1,438
Real Estate	4,434	5,449	5,263	5,346	6,122	5,323
Other Assets	446	499	451	465	518	476
Total Fixed Assets	7,282	9,014	8,642	8,726	10,003	8,734
Total Assets	8,303	10,375	10,165	10,270	12,058	10,234
Liabilities & Equity:						
Accounts Payable & Accrued Expenses	122	119	102	79	128	110
Other Current Liabilities	224	344	330	269	157	265
Current Portion Term Loans	210	274	258	282	327	270
Total Current Liabilities	556	737	690	631	612	645
Term Loans	2,464	3,218	2,955	3,200	3,825	3,132
Less Current Portion	(210)	(274)	(258)	(282)	(327)	(270)
Total Term Loans	2,254	2,944	2,697	2,917	3,498	2,862
Total Liabilities	2,810	3,682	3,387	3,548	4,110	3,507
Owner's Equity	5,493	6,693	6,778	6,722	7,949	6,727
Ratios:						
% Equity	66.2%	62.6%	64.9%	63.7%	61.5%	63.8%
Current Ratio	1.83	2.98	4.26	4.36	6.25	3.94
Working Capital	464	623	833	913	1,444	855
Return on Assets	(0.6%)	4.2%	6.1%	4.3%	11.0%	5.0%
Return on Equity	(3.2%)	3.9%	8.1%	4.6%	15.9%	5.9%
Prior Year Total Assets		9,832	9,564	9,515	11,051	9,991
Prior Year Total Liabilities		3,508	3,406	3,268	4,001	3,546
Beginning Net Worth		6,324	6,158	6,247	7,050	6,445
+ Net Income: Profit or (Loss)		255	471	268	1,012	502
+ Asset Appreciation, or (Depreciation)		119	129	234	317	200
+ Extraordinary Capital Contributions		-	-	-	-	-
+ Asset Valuation Changes / Other Adj		-	-	-	-	-
Ending Net Worth	-	6,698	6,758	6,749	8,379	5,717

2022 Dairy Success and Profitability Review

8 - Dairy SPR 300+ Cows

Income Statement -- Trend	(thousands)					
	2018	2019	2020	2021	2022	Average
Average Number of Cows	591	740	715	691	811	709
Gross Milk Pounds Shipped	14,320,753	17,917,865	17,979,745	17,568,466	21,114,436	17,780,253
Butterfat Percent	3.77%	3.91%	4.01%	4.07%	4.06%	3.97%
Protein Percent	3.06%	3.11%	3.14%	3.17%	3.18%	3.13%
Other non-fat Solid Percent	5.77%	5.77%	5.78%	5.77%	5.79%	5.78%
Butterfat & Protein Lbs./Cow	1,656	1,684	1,776	1,815	1,869	1,760
Somatic Cell Count (000's omitted)	194	187	176	186	180	185
Milk Shipped per Cow	24,248	24,204	25,159	25,438	26,026	25,015
Milk Income	2,478	3,461	3,396	3,387	5,675	3,680
Cost of Goods Sold (Variable Costs):						
Employee Labor	420	550	535	518	707	546
Purchased Feed	778	1,095	1,251	1,199	1,838	1,232
Boarding Expense	68	114	103	83	77	89
Custom Hire	75	104	125	127	177	121
Crop Exp (Seed, Fertilizer, & Chemicals)	203	288	341	258	512	320
Fuel	89	105	76	99	200	114
Livestock Exp (Supplies, Vet., Breeding)	234	306	314	296	408	312
Advertising/Milk Marketing Exp.	239	268	282	273	369	286
Cow Replacements	8	12	7	29	16	14
Other Expenses	30	41	43	43	64	44
Less Non-Milk Income	451	588	1,029	726	745	708
Less Non-Farm Income	19	21	29	32	40	28
Less Accrual Adjustments	(85)	173	239	132	370	166
Total Cost of Goods Sold	1,760	2,102	1,778	2,034	3,210	2,177
Gross Margin	718	1,359	1,618	1,353	2,464	1,502
Overhead (Fixed Costs):						
Owner	136	140	187	157	206	165
Repairs	162	196	242	216	351	233
Interest	127	176	148	132	160	148
Rent/Lease	108	123	120	118	159	125
Property Taxes	39	44	45	44	54	45
Insurance (Fire & Liability)	51	64	51	62	81	62
Utilities	70	87	85	85	124	90
Depreciation	217	273	269	272	317	270
Total Overhead	909	1,103	1,147	1,085	1,452	1,139
Net Cost of Production	2,670	3,206	2,925	3,120	4,663	3,317
Net Margin (Net Income)	(191)	255	471	268	1,012	363
Add Back Depreciation	217	273	269	272	317	270
Adjustment for Accruals	85	(173)	(239)	(132)	(370)	(166)
Principal Payments	(191)	(257)	(256)	(253)	(308)	(253)
Net Residual Income	(79)	99	245	155	651	214

2022 Dairy Success and Profitability Review

8 - Dairy SPR 300+ Cows

Income Statement -- Trend	(\$ per cow)					
	2018	2019	2020	2021	2022	Average
Average Number of Cows	591	740	715	691	811	709
Gross Milk Pounds Shipped	14,320,753	17,917,865	17,979,745	17,568,466	21,114,436	17,780,253
Butterfat Percent	3.77%	3.91%	4.01%	4.07%	4.06%	3.97%
Protein Percent	3.06%	3.11%	3.14%	3.17%	3.18%	3.13%
Other non-fat Solid Percent	5.77%	5.77%	5.78%	5.77%	5.79%	5.78%
Butterfat & Protein Lbs./Cow	1,656	1,684	1,776	1,815	1,869	1,760
Somatic Cell Count (000's omitted)	194	187	176	186	180	185
Milk Shipped per Cow	24,248	24,204	25,159	25,438	26,026	25,015
Milk Income	4,196	4,675	4,753	4,905	6,995	5,105
<u>Cost of Goods Sold (Variable Costs):</u>						
Employee Labor	712	744	748	750	871	765
Purchased Feed	1,317	1,479	1,750	1,735	2,265	1,709
Boarding Expense	116	154	144	121	95	126
Custom Hire	127	140	175	183	218	169
Crop Exp (Seed, Fertilizer, & Chemicals)	343	389	477	374	631	443
Fuel	150	142	106	143	247	158
Livestock Exp (Supplies, Vet., Breeding)	397	414	440	429	503	436
Advertising/Milk Marketing Exp.	405	363	394	395	454	402
Cow Replacements	13	16	10	41	20	20
Other Expenses	51	55	61	62	79	61
Less Non-Milk Income	763	794	1,440	1,051	919	993
Less Non-Farm Income	32	28	41	46	50	39
Less Accrual Adjustments	(145)	233	334	191	456	214
Total Cost of Goods Sold	2,980	2,840	2,489	2,946	3,957	3,042
Gross Margin	1,216	1,835	2,264	1,959	3,038	2,062
<u>Overhead (Fixed Costs):</u>						
Owner	230	189	262	228	254	233
Repairs	274	265	338	312	432	324
Interest	215	238	207	191	197	209
Rent/Lease	183	166	167	170	196	176
Property Taxes	66	60	63	64	67	64
Insurance (Fire & Liability)	86	86	72	90	100	87
Utilities	118	117	119	124	153	126
Depreciation	368	369	376	393	391	379
Total Overhead	1,540	1,490	1,604	1,572	1,790	1,599
Net Cost of Production	4,520	4,330	4,093	4,517	5,748	4,642
Net Margin (Net Income)	(324)	345	660	387	1,247	463
Add Back Depreciation	368	369	376	393	391	379
Adjustment for Accruals	145	(233)	(334)	(191)	(456)	(214)
Principal Payments	(323)	(347)	(358)	(366)	(379)	(355)
Net Residual Income	(134)	134	343	224	803	274

2022 Dairy Success and Profitability Review

8 - Dairy SPR 300+ Cows

Income Statement -- Trend	(\$ per Cwt.)					
	2018	2019	2020	2021	2022	Average
Average Number of Cows	591	740	715	691	811	709
Gross Milk Pounds Shipped	14,320,753	17,917,865	17,979,745	17,568,466	21,114,436	17,780,253
Butterfat & Protein Lbs./Cow	1,656	1,684	1,776	1,815	1,869	1,760
Milk Shipped per Cow	24,248	24,204	25,159	25,438	26,026	25,015
Milk Income	17.31	19.31	18.89	19.28	26.88	20.33
Cost of Goods Sold (Variable Costs):						
Employee Labor	2.94	3.07	2.97	2.95	3.35	3.05
Purchased Feed	5.43	6.11	6.96	6.82	8.70	6.80
Boarding Expense	0.48	0.64	0.57	0.47	0.36	0.50
Custom Hire	0.53	0.58	0.69	0.72	0.84	0.67
Crop Exp (Seed, Fertilizer, & Chemicals)	1.42	1.61	1.90	1.47	2.42	1.76
Fuel	0.62	0.59	0.42	0.56	0.95	0.63
Livestock Exp (Supplies, Vet., Breeding)	1.64	1.71	1.75	1.68	1.93	1.74
Advertising/Milk Marketing Exp.	1.67	1.50	1.57	1.55	1.75	1.61
Cow Replacements	0.06	0.07	0.04	0.16	0.08	0.08
Other Expenses	0.21	0.23	0.24	0.24	0.30	0.24
Less Non-Milk Income	3.15	3.28	5.72	4.13	3.53	3.96
Less Non-Farm Income	0.13	0.12	0.16	0.18	0.19	0.16
Less Accrual Adjustments	(0.60)	0.96	1.33	0.75	1.75	0.84
Total Cost of Goods Sold	12.29	11.73	9.89	11.58	15.21	12.14
Gross Margin	5.01	7.58	9.00	7.70	11.67	8.19
Overhead (Fixed Costs):						
Owner	0.95	0.78	1.04	0.90	0.98	0.93
Repairs	1.13	1.10	1.35	1.23	1.66	1.29
Interest	0.89	0.98	0.82	0.75	0.76	0.84
Rent/Lease	0.75	0.69	0.67	0.67	0.75	0.71
Property Taxes	0.27	0.25	0.25	0.25	0.26	0.26
Insurance (Fire & Liability)	0.36	0.36	0.28	0.35	0.38	0.35
Utilities	0.49	0.49	0.47	0.49	0.59	0.50
Depreciation	1.52	1.52	1.49	1.55	1.50	1.52
Total Overhead	6.35	6.16	6.38	6.18	6.88	6.39
Net Cost of Production	18.64	17.89	16.27	17.76	22.08	18.53
Net Margin (Net Income)	(1.34)	1.42	2.62	1.52	4.79	1.81
Add Back Depreciation	1.52	1.52	1.49	1.55	1.50	1.52
Adjustment for Accruals	0.60	(0.96)	(1.33)	(0.75)	(1.75)	(0.84)
Principal Payments	(1.33)	(1.43)	(1.42)	(1.44)	(1.46)	(1.42)
Net Residual Income	(0.55)	0.55	1.36	0.88	3.09	1.07
Breakeven Milk Price	17.86	19.36	17.89	18.43	24.47	19.60
Class III Actual	14.61	16.96	18.16	17.08	21.96	17.75
Class III Basis	2.70	2.58	0.87	2.42	5.30	2.77
Class IV Actual	14.23	16.30	13.49	16.09	24.47	16.92
Class IV Basis	3.08	3.24	5.54	3.41	2.79	3.61

2022 Dairy Success and Profitability Review

8 - Dairy SPR 300+ Cows

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2022 Dairy Success and Profitability Review

8 - Dairy SPR 300+ Cows

Definitions

My Farm Review

Financial Statement – (Balance Sheet, Net Worth Statement)

Individual farm data includes a snapshot on herd size & output, farm assets, liabilities and net worth. Key liquidity and profitability ratios show the financial health of the operations. These statements are focused on how the assets are generating revenue. Financial statements are provided in thousands and a per cow basis.

Current Ratio – Current assets divided by current liabilities.

% Equity - Owner's equity divided by total assets.

Return on Assets (ROA) – Total interest expense added to net income divided by average total assets.

Return on Equity (ROE) - Net income divided by average net worth.

Working Capital - Current assets less current liabilities.

Income Statement

Revenue, costs and profitability are provided on an actual dollar amount (in thousands), per cow, and per cwt. Accrual adjustments were made to reflect cost of production including changes in inventories, accounts receivable, cow numbers and accounts payable.

Variable costs – expenses used to generate farm revenue are included here. These costs will vary depending on herd size, feeding programs & efficiency. These expenses are more in management's control and often areas to focus on control measures to increase profitability.

Fixed costs – these constant expenses do not typically fluctuate based on the amount of milk produced or number of cows.

Gross milk income – tabulated through analysis of actual milk check data for the whole year, this figure provides consistency for all farms in the benchmark by adjusting farms that report net milk income for reporting purposes.

Crop expense – total seed and plant expenses plus fertilizer, lime and chemical expenses.

Gross margin – calculated reducing gross milk income by total variable costs.

Net cost of production – the total of the farm's variable and fixed costs.

Depreciation – the dairy benchmark uses an economic depreciation versus tax depreciation to provide more consistency. Tax depreciation can vary greatly per farm based on the use of Section 179 or more aggressive depreciation schedules.

- Machinery and equipment was depreciated by using year-end balance sheet values divided by 8 years.
- Buildings and improvements depreciation equals \$127 times the average number of cows.
 - AgChoice dairy farm appraisals determine building & improvements have a contributory value of approximately \$1,900 per cow.
 - \$1,900 divided by the expected useful life of 15 years = \$127 annual depreciation per cow
- Both of these figures added together equal the depreciation listed on the reports.

Net Margin – Gross milk income less net cost of production

Component Corrected Cwt. Costs

Total pounds of milk shipped has been adjusted to a 3.5% butterfat and 3.2% protein, and then the actual costs are recalculated on the component corrected pounds. This allows you to look at how your components affect costs and is needed for different breeds to compare to each other.

2022 Dairy Success and Profitability Review

8 - Dairy SPR 300+ Cows

Definitions

Key Performance Indicators

There are five areas that each farm is measured and compared to within the benchmark. Volume, efficiency, capacity, industry skills and cost control are all vital to the long-term viability of any operation. Your farm report will show year over year progress on these areas and can help identify trends to help improve the net margin of the operation.

Volume – this measurement simply looks at the gross amount of milk pounds and income generated by the operation.

Efficiency – two of the highest costs on a dairy farm are feed and labor costs. Efficiency is measuring how well those variable cost inputs are generating profit for the farm. Looking at full-time worker equivalents (FTWE) tells us how good the work force is at getting production from cows. Feed and crop expenses are combined to see how much it takes to generate milk income. FTWE is calculated accounting for all the paid and unpaid hours worked on the farm to generate the crops and milk income divided by 2,907 hours which is a standard full time worker equivalent.

Capacity – this indicator shows how well the fixed overhead costs are working for the operation. Generally, these costs will not increase dramatically with a moderate increase in production.

Industry skills – farms that struggle with industry skills often have difficulty maintaining profitability. They often have to spend more on replacement cows, have lower milk component and quantity output and spend more time on a less healthy herd lowering their efficiencies.

Cost control – managing costs will certainly improve profitability. During periods of low milk prices, producers are forced to evaluate every purchase and try and reduce costs to manage positive cash flow for the operation. (**NOTE:** (Other Income in the KPIs includes Non-Milk Income, Non-Farm Income, and Accrual Adjustments.)

Internal Herd Growth – measures the farms ability to grow or maintain cow numbers from within. Formula: (Ending Cow Numbers - Beginning Cow Numbers + Number Cows Sold for Dairy Purposes + Number Heifers >1 Year old Sold for Dairy Purposes - Number of Cows Purchased - Number Springers or Bred Heifers Purchased and Calved during year)/Beginning Cow numbers

EBITDA - Earnings Before Interest, Taxes, Depreciation, and Amortization

Full Time Worker Equivalents (FTWE) – (Total Hired Labor + Total Owner Hours)/2,907

Comparative Statements

The comparative statements take your farms data and compare it to all the farms in the benchmark and by peer group.

Dairy SPR Average Farm – compares your farm to all the farms in the benchmark

Peer Group Farm – Broken down by number of cows

Dairy SPR Top 25% - this is based on net margin per cwt

End Notes

(1) Other Income here includes Non-Milk Income, Non-Farm Income, and Accrual Adjustments.

(2) If Debt to EBITDA is 9999, this indicates negative EBITDA. Please look at the Key Performance Indicators by Year page to see actual results.