

November 24th, 2021

E.B. 2021-07



Progress of the Dairy Farm Report

Selected Financial and Production Factors

Average of All Farms

Less Than 450 Cows

450 to 949 Cows

950 to 1,450 Cows

Greater Than 1,450 Cows

Dairy Farm Business Summary

New York State, 2020

143 Farms

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Progress of the Dairy Farm Report
Selected Financial and Production Factors
Dairy Farm Business Summary
143 New York State Dairy Farms, 2019 & 2020
November 2021

Jason Karszes and Lauren Augello¹

The objective of the Dairy Farm Business Summary & Analysis Program (DFBS) is to help farm managers improve the financial management of their dairy farm through appropriate use of historical farm data and the application of modern farm business analysis techniques. This information can also be used to track changes within the business, establish goals that will enable the business to better meet its objectives, compare the performance of the farm to other dairy producers, and establish a basis for financial projection and planned changes within the business. This is the final Progress of the Dairy Farm Report for the 2020 business year.

The Progress of the Dairy Farm Report provides averages of selected financial and production measures from 139 New York State Dairy Farms (pages 4-6) that participated in the program for both 2019 and 2020 that had submitted records by November 24th, 2021. The report is also broken down into four herd size categories to provide additional comparison reports for across different herd sizes.

- | | |
|---|-------------|
| 1. Farms with Less Than 450 Cows | Pages 7-9 |
| 2. Farms with Greater Than 450 Cows, Less Than 949 Cows | Pages 10-12 |
| 3. Farms with Greater Than 950 Cows, Less Than 1,450 Cows | Pages 13-15 |
| 4. Farms with Greater Than 1,450 Cows | Pages 16-18 |

To utilize these reports, begin by comparing how your farm changed from 2019 to 2020 to the change in the average of all farms report. Then, determine which herd size group most closely represents your farm and compare your financial and production parameters and change to the averages of that group. This benchmarking tool can be helpful for farm owners and managers to find areas of opportunity and strengths within their businesses. If you are a DFBS participant, you can work with your extension educator to look at these comparisons for all farms and your farm business.

These benchmarks and comparisons are provided for comparison purposes only and represent the performance of those farms participating in the Dairy Farm Business Summary and Analysis Program in New York State. These numbers do not represent the average for all dairy farms across New York, and are from farms that are generally considered above average dairy farms in New York. No analysis or interpretation of these benchmarks and ratios is provided.

¹ PRO-DAIRY Program, Department of Animal Science, Cornell University, Ithaca, NY

PROGRESS OF THE FARM BUSINESS
Same 139 New York Dairy Farms, 2019 & 2020, DFBS

SELECTED FACTORS	Average of 139 Farms ¹		Percent Change
	2019	2020	
<i>Size of Business</i>			
Average number of cows	1,060	1,100	4%
Average number of heifers	858	864	1%
Milk sold, pounds	27,889,262	28,997,609	4%
Worker equivalent	21.0	21.3	2%
Total tillable acres	1,895	1,972	4%
<i>Rates of Production</i>			
Milk sold per cow, pounds	26,302	26,371	0%
Hay DM per acre, tons	3.2	3.0	-6%
Corn silage per acre, tons	18.5	18.3	-1%
<i>Labor Efficiency</i>			
Cows per worker	50.6	51.6	2%
Milk sold per worker, pounds	1,331,230	1,360,751	2%
<i>Cost Control and Milk Price</i>			
Grain & concentrate per cwt. milk	\$5.66	\$6.02	6%
Net milk income over purchased grain & conc. per cow	\$3,154	\$2,781	-12%
Dairy feed & crop expense per cwt. milk	\$7.00	\$7.49	7%
Labor and machinery costs per cow	\$1,725	\$1,759	2%
Hired labor costs per cwt. milk	\$2.95	\$3.06	4%
Hired labor costs per worker equivalent	\$45,404	\$47,942	6%
Total Farm Operating Costs per Cwt.	\$17.43	\$18.08	4%
Operating cost of producing milk per cwt. ²	\$15.39	\$15.85	3%
Purchased input cost of producing milk per cwt. ²	\$16.97	\$17.45	3%
Total cost of producing milk per cwt. ²	\$19.10	\$19.68	3%
Net milk price per cwt.	\$18.25	\$17.22	-6%
Government Receipts per cwt.	\$0.23	\$2.26	878%
<i>Capital Efficiency (average for year)</i>			
Farm capital per cow	\$11,426	\$11,815	3%
Machinery and equipment per cow	\$1,731	\$1,803	4%
Asset turnover ratio	0.52	0.53	2%
<i>Profitability</i>			
Net farm income without appreciation	\$681,363	\$907,502	33%
Net farm income without appreciation per cow	\$643	\$825	28%
Net farm income with appreciation	\$999,488	\$1,143,834	14%
Net farm income with appreciation per cow	\$943	\$1,040	10%
Labor & management income per operator/manager	\$117,002	\$192,602	65%
Rate return on equity capital with appreciation	10.1%	10.6%	5%
Rate return on equity capital without appreciation	6.1%	7.9%	30%
Rate return on all capital with appreciation	8.4%	8.4%	0%
Rate return on all capital without appreciation	5.7%	6.6%	16%
<i>Financial Summary (based on market value, excluding deferred taxes)</i>			
Farm net worth, end year	\$8,269,812	\$9,321,244	13%
Debt to asset ratio	0.34	0.31	-9%
Farm debt per cow	\$3,845	\$3,734	-3%
Debt coverage ratio	1.75	2.08	19%

¹Farm participating both years

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 139 New York Dairy Farms, 2019 & 2020, DFBS

Item	2019		2020		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	1,060		1,100		4%
Cwt. of milk sold		278,893		289,976	4%
ACCRUAL OPERATING RECEIPTS					
Milk	\$5,105	\$19.41	\$4,891	\$18.55	-4%
Dairy cattle	\$293	\$1.11	\$267	\$1.01	-9%
Dairy calves	\$20	\$0.08	\$39	\$0.15	88%
Other livestock	\$11	\$0.04	\$13	\$0.05	25%
Crops	\$49	\$0.19	\$80	\$0.30	58%
Miscellaneous receipts	<u>\$193</u>	<u>\$0.73</u>	<u>\$738</u>	<u>\$2.80</u>	284%
Total Operating Receipts	\$5,671	\$21.56	\$6,028	\$22.86	6%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$777	\$2.95	\$808	\$3.06	4%
Dairy grain & concentrate	\$1,489	\$5.66	\$1,587	\$6.02	6%
Dairy roughage	\$95	\$0.36	\$109	\$0.41	14%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.00	\$1	\$0.00	NA
Machine hire, rent & lease	\$146	\$0.56	\$149	\$0.56	0%
Machine repair & vehicle expense	\$244	\$0.93	\$269	\$1.02	10%
Fuel, oil & grease	\$144	\$0.55	\$109	\$0.42	-24%
Replacement livestock	\$19	\$0.07	\$27	\$0.10	43%
Breeding	\$47	\$0.18	\$53	\$0.20	11%
Veterinary & medicine	\$152	\$0.58	\$146	\$0.55	-5%
Milk marketing	\$304	\$1.16	\$349	\$1.32	14%
Bedding	\$92	\$0.35	\$91	\$0.35	0%
Milking supplies	\$90	\$0.34	\$93	\$0.35	3%
Cattle lease	\$4	\$0.02	\$4	\$0.01	-50%
Custom boarding	\$82	\$0.31	\$83	\$0.31	0%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$16	\$0.06	\$18	\$0.07	17%
Other livestock expense	\$24	\$0.09	\$21	\$0.08	-11%
Fertilizer & lime	\$95	\$0.36	\$105	\$0.40	11%
Seeds & plants	\$105	\$0.40	\$113	\$0.43	7%
Spray & other crop expense	\$53	\$0.20	\$56	\$0.21	5%
Crop professional fees	\$5	\$0.02	\$6	\$0.02	0%
Land, building & fence repair	\$75	\$0.29	\$87	\$0.33	14%
Taxes	\$63	\$0.24	\$65	\$0.25	4%
Real estate rent & lease	\$80	\$0.31	\$88	\$0.33	6%
Insurance	\$45	\$0.17	\$47	\$0.18	6%
Utilities	\$85	\$0.32	\$85	\$0.32	0%
Interest paid	\$198	\$0.75	\$146	\$0.55	-27%
Other professional fees	\$28	\$0.11	-\$1	\$0.10	-9%
Miscellaneous	<u>\$28</u>	<u>\$0.10</u>	<u>\$26</u>	<u>\$0.10</u>	0%
Total Operating Expenses	\$4,585	\$17.43	\$4,768	\$18.08	4%
Expansion livestock	\$28	\$0.11	\$15	\$0.06	-45%
Extraordinary expenses	\$2	\$0.01	\$1	\$0.00	-100%
Machinery depreciation	\$224	\$0.85	\$228	\$0.86	1%
Real estate depreciation	<u>\$190</u>	<u>\$0.72</u>	<u>\$191</u>	<u>\$0.72</u>	0%
Total Expenses	\$5,029	\$19.12	\$5,203	\$19.72	3%
Net Farm Income w/o Appreciation	\$643	\$2.44	\$825	\$3.13	28%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

143 New York Dairy Farms, 2020, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
48.4	2,580	68,667,143	28,863	4.3	22.2	68.8	1,795,478
25.8	1,351	36,842,381	27,331	3.5	19.6	54.7	1,447,052
18.9	959	25,101,168	26,268	3.0	18.2	49.3	1,278,346
10.7	536	13,128,599	24,820	2.4	17.0	43.6	1,084,618
4.3	169	3,912,277	20,404	1.5	11.2	32.8	777,158

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/Cow	Feed & Crop Expenses per Cow	Feed & Crop Expenses per Cwt. Milk	Hired Labor Cost per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$1,091	\$4.76	26	\$601	\$1,345	\$1,448	\$6.25	\$28,159
\$1,415	\$5.62	30	\$773	\$1,683	\$1,770	\$7.01	\$42,197
\$1,578	\$6.09	33	\$891	\$1,889	\$1,948	\$7.56	\$45,783
\$1,719	\$6.46	35	\$1,024	\$2,050	\$2,119	\$8.13	\$49,123
\$1,908	\$7.29	39	\$1,361	\$2,536	\$2,408	\$9.19	\$55,688

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost Milk Production per Cwt. ²	Total Cost Milk Production Per Cwt. ²	% Rate of Return on All Capital w/o Apprec.	Net Farm Income Without Apprec.	Labor & Management Income per Operator	Change in Net Worth with Apprec.
(12)	(12)	(12)	(12)	(4)	(4)	(4)	(8)
\$5,487	\$20.25	\$12.97	\$17.76	12.5	\$2,495,070	\$722,155	\$2,854,377
\$5,081	\$18.97	\$14.72	\$19.08	7.9	\$1,251,070	\$295,129	\$1,335,802
\$4,842	\$18.31	\$15.92	\$19.94	5.7	\$669,137	\$130,141	\$763,652
\$4,518	\$17.85	\$16.95	\$21.44	3.1	\$242,547	\$19,999	\$306,432
\$3,717	\$17.29	\$19.00	\$25.89	-2.4	-\$44,323	-\$115,947	-\$131,100

Financial Efficiency							
Investment per Cow	Machinery Investment per Cow	Asset Turnover Ratio	Operating Expense Ratio	Debt Coverage Ratio	Planned Debt Payments per Cow	Percent Equity	Working Capital as % of Opr. Expense
(14)	(14)	(14)	(14)	(10)	(10)	(7)	(7)
\$8,137	\$871	0.81	0.67	10.65	\$82	95	66
\$10,558	\$1,504	0.60	0.73	2.32	\$401	79	35
\$12,063	\$2,012	0.51	0.77	1.66	\$610	67	24
\$13,952	\$2,579	0.44	0.81	1.14	\$776	60	17
\$18,469	\$4,032	0.33	0.90	0.29	\$1,027	42	1

¹Page number of the participant's DFBS where the factor is located.

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.

PROGRESS OF THE FARM BUSINESS

Same 34 New York Dairy Farms, Less Than 450 Cows, 2019 & 2020, DFBS

SELECTED FACTORS	Average of 34 Farms ¹		Percent Change
	2019	2020	
<i>Size of Business</i>			
Average number of cows	196	199	2%
Average number of heifers	167	171	2%
Milk sold, pounds	4,773,795	4,871,158	2%
Worker equivalent	5.1	5.2	2%
Total tillable acres	492	507	3%
<i>Rates of Production</i>			
Milk sold per cow, pounds	24,418	24,500	0%
Hay DM per acre, tons	2.9	2.6	-10%
Corn silage per acre, tons	18.5	17.8	-4%
<i>Labor Efficiency</i>			
Cows per worker	38.7	38.4	-1%
Milk sold per worker, pounds	941,577	940,378	0%
<i>Cost Control and Milk Price</i>			
Grain & concentrate per cwt. milk	\$5.95	\$6.01	1%
Net milk income over purchased grain & conc. per cow	\$2,825	\$2,490	-12%
Dairy feed & crop expense per cwt. milk	\$7.52	\$7.69	2%
Labor and machinery costs per cow	\$2,059	\$2,138	4%
Hired labor costs per cwt. milk	\$2.17	\$2.35	8%
Hired labor costs per worker equivalent	\$38,767	\$41,368	7%
Total Farm Operating Costs per Cwt.	\$17.77	\$18.43	4%
Operating cost of producing milk per cwt. ²	\$15.61	\$16.10	3%
Purchased input cost of producing milk per cwt. ²	\$17.67	\$18.09	2%
Total cost of producing milk per cwt. ²	\$21.86	\$22.47	3%
Net milk price per cwt.	\$18.22	\$16.92	-7%
Government Receipts per cwt.	\$0.32	\$2.96	825%
<i>Capital Efficiency (average for year)</i>			
Farm capital per cow	\$14,075	\$14,285	1%
Machinery and equipment per cow	\$2,808	\$2,826	1%
Asset turnover ratio	0.39	0.42	8%
<i>Profitability</i>			
Net farm income without appreciation	\$83,242	\$137,344	65%
Net farm income without appreciation per cow	\$426	\$691	62%
Net farm income with appreciation	\$121,239	\$194,491	60%
Net farm income with appreciation per cow	\$620	\$978	58%
Labor & management income per operator/manager	-\$9,974	\$14,973	250%
Rate return on equity capital with appreciation	1.0%	4.1%	310%
Rate return on equity capital without appreciation	-1.0%	1.3%	226%
Rate return on all capital with appreciation	2.2%	4.0%	82%
Rate return on all capital without appreciation	0.8%	2.0%	156%
<i>Financial Summary (based on market value, excluding deferred taxes)</i>			
Farm net worth, end year	\$1,971,531	\$2,115,915	7%
Debt to asset ratio	0.29	0.27	-7%
Farm debt per cow	\$4,040	\$3,874	-4%
Debt coverage ratio	1.49	1.69	13%

¹Farm participating both years

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 34 New York Dairy Farms, Less Than 450 Cows, 2019 & 2020, DFBS

Item	2019		2020		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	196		199		2%
Cwt. of milk sold		47,738		48,712	2%
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,741	\$19.41	\$4,475	\$18.27	-6%
Dairy cattle	\$236	\$0.97	\$216	\$0.88	-9%
Dairy calves	\$22	\$0.09	\$39	\$0.16	78%
Other livestock	\$18	\$0.07	\$36	\$0.15	114%
Crops	\$85	\$0.35	\$112	\$0.46	31%
Miscellaneous receipts	<u>\$174</u>	<u>\$0.71</u>	<u>\$852</u>	<u>\$3.48</u>	390%
Total Operating Receipts	\$5,276	\$21.61	\$5,731	\$23.39	8%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$530	\$2.17	\$576	\$2.35	8%
Dairy grain & concentrate	\$1,453	\$5.95	\$1,473	\$6.01	1%
Dairy roughage	\$50	\$0.21	\$70	\$0.28	33%
Nondairy feed	\$3	\$0.01	\$4	\$0.02	100%
Professional nutritional services	\$0	\$0.00	\$0	\$0.00	NA
Machine hire, rent & lease	\$142	\$0.58	\$153	\$0.63	9%
Machine repair & vehicle expense	\$276	\$1.13	\$330	\$1.35	19%
Fuel, oil & grease	\$155	\$0.63	\$117	\$0.48	-24%
Replacement livestock	\$10	\$0.04	\$7	\$0.03	-25%
Breeding	\$55	\$0.22	\$55	\$0.22	0%
Veterinary & medicine	\$139	\$0.57	\$142	\$0.58	2%
Milk marketing	\$291	\$1.19	\$329	\$1.34	13%
Bedding	\$107	\$0.44	\$108	\$0.44	0%
Milking supplies	\$78	\$0.32	\$84	\$0.34	6%
Cattle lease	\$1	\$0.00	\$1	\$0.00	NA
Custom boarding	\$10	\$0.04	\$15	\$0.06	50%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$25	\$0.10	\$28	\$0.11	10%
Other livestock expense	\$44	\$0.18	\$45	\$0.18	0%
Fertilizer & lime	\$144	\$0.59	\$148	\$0.60	2%
Seeds & plants	\$116	\$0.48	\$122	\$0.50	4%
Spray & other crop expense	\$57	\$0.23	\$59	\$0.24	4%
Crop professional fees	\$16	\$0.06	\$12	\$0.05	-17%
Land, building & fence repair	\$56	\$0.23	\$74	\$0.30	30%
Taxes	\$102	\$0.42	\$102	\$0.42	0%
Real estate rent & lease	\$60	\$0.24	\$85	\$0.34	42%
Insurance	\$70	\$0.29	\$80	\$0.32	10%
Utilities	\$90	\$0.37	\$86	\$0.35	-5%
Interest paid	\$212	\$0.87	\$159	\$0.65	-25%
Other professional fees	\$22	\$0.09	-\$1	\$0.09	0%
Miscellaneous	<u>\$25</u>	<u>\$0.10</u>	<u>\$31</u>	<u>\$0.13</u>	30%
Total Operating Expenses	\$4,340	\$17.77	\$4,516	\$18.43	4%
Expansion livestock	\$8	\$0.03	\$37	\$0.15	400%
Extraordinary expenses	\$0	\$0.00	\$2	\$0.01	NA
Machinery depreciation	\$332	\$1.36	\$315	\$1.29	-5%
Real estate depreciation	<u>\$171</u>	<u>\$0.70</u>	<u>\$170</u>	<u>\$0.69</u>	-1%
Total Expenses	\$4,851	\$19.86	\$5,040	\$20.57	4%
Net Farm Income w/o Appreciation	\$426	\$1.74	\$691	\$2.82	62%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

35 New York Dairy Farms, Less Than 450 Cows, 2020, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
9.1	346	9,299,288	28,973	3.7	21.6	52.0	1,287,873
6.1	259	6,104,512	25,866	3.1	18.9	44.3	1,076,588
4.8	197	4,615,479	23,572	2.6	18.2	36.7	917,601
3.6	138	3,293,204	21,988	2.1	16.4	33.0	759,386
2.3	64	1,248,562	16,881	1.4	8.8	25.0	484,813

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/Cow	Feed & Crop Expenses per Cow	Feed & Crop Expenses per Cwt. Milk	Hired Labor Cost per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$959	\$4.58	26	\$702	\$1,637	\$1,270	\$6.33	\$1,478
\$1,183	\$5.71	30	\$905	\$2,006	\$1,545	\$6.94	\$31,132
\$1,452	\$6.29	34	\$1,085	\$2,206	\$1,798	\$7.78	\$40,132
\$1,720	\$6.72	37	\$1,290	\$2,460	\$2,090	\$8.49	\$44,253
\$1,926	\$7.68	42	\$1,534	\$2,949	\$2,468	\$9.70	\$53,767

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost Milk Production per Cwt. ²	Total Cost Milk Production Per Cwt. ²	% Rate of Return on All Capital w/o Apprec.	Net Farm Income Without Apprec.	Labor & Management Income per Operator	Change in Net Worth with Apprec.
(12)	(12)	(12)	(12)	(4)	(4)	(4)	(8)
\$5,375	\$19.77	\$13.98	\$19.87	7.1	\$337,611	\$106,075	\$357,519
\$4,744	\$18.86	\$15.64	\$21.49	3.4	\$191,497	\$37,077	\$184,229
\$4,329	\$18.11	\$16.29	\$23.42	1.2	\$98,262	\$342	\$107,209
\$4,022	\$17.73	\$17.31	\$25.85	-1.8	\$41,507	-\$31,630	\$42,348
\$3,035	\$17.10	\$20.53	\$32.06	-7.0	-\$22,610	-\$73,272	-\$36,587

Financial Efficiency							
Investment per Cow	Machinery Investment per Cow	Asset Turnover Ratio	Operating Expense Ratio	Debt Coverage Ratio	Planned Debt Payments per Cow	Percent Equity	Working Capital as % of Opr. Expense
(14)	(14)	(14)	(14)	(10)	(10)	(7)	(7)
\$9,797	\$1,484	0.62	0.68	3.45	\$92	98	44
\$11,545	\$2,113	0.49	0.74	1.67	\$416	82	35
\$13,503	\$2,718	0.43	0.77	1.28	\$662	71	26
\$15,430	\$3,542	0.34	0.82	1.00	\$809	63	17
\$23,756	\$5,644	0.23	0.93	0.03	\$1,047	54	8

¹Page number of the participant's DFBS where the factor is located.

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.



PROGRESS OF THE FARM BUSINESS

Same 35 New York Dairy Farms, 450 to 949 Cows, 2019 & 2020, DFBS

SELECTED FACTORS	Average of 35 Farms ¹		Percent Change
	2019	2020	
<i>Size of Business</i>			
Average number of cows	654	670	2%
Average number of heifers	512	517	1%
Milk sold, pounds	15,974,530	16,522,102	3%
Worker equivalent	13.3	13.6	2%
Total tillable acres	1,376	1,460	6%
<i>Rates of Production</i>			
Milk sold per cow, pounds	24,433	24,675	1%
Hay DM per acre, tons	3.1	2.9	-6%
Corn silage per acre, tons	18.6	18.3	-2%
<i>Labor Efficiency</i>			
Cows per worker	49.1	49.3	0%
Milk sold per worker, pounds	1,199,289	1,214,860	1%
<i>Cost Control and Milk Price</i>			
Grain & concentrate per cwt. milk	\$5.59	\$6.12	9%
Net milk income over purchased grain & conc. per cow	\$3,139	\$2,716	-13%
Dairy feed & crop expense per cwt. milk	\$6.99	\$7.77	11%
Labor and machinery costs per cow	\$1,807	\$1,877	4%
Hired labor costs per cwt. milk	\$2.85	\$3.01	6%
Hired labor costs per worker equivalent	\$42,944	\$45,392	6%
Total Farm Operating Costs per Cwt.	\$18.02	\$19.09	6%
Operating cost of producing milk per cwt. ²	\$15.67	\$16.37	4%
Purchased input cost of producing milk per cwt. ²	\$17.50	\$18.31	5%
Total cost of producing milk per cwt. ²	\$20.28	\$21.21	5%
Net milk price per cwt.	\$18.44	\$17.13	-7%
Government Receipts per cwt.	\$0.30	\$2.98	891%
<i>Capital Efficiency (average for year)</i>			
Farm capital per cow	\$12,121	\$12,725	5%
Machinery and equipment per cow	\$2,163	\$2,297	6%
Asset turnover ratio	0.48	0.49	2%
<i>Profitability</i>			
Net farm income without appreciation	\$342,849	\$479,155	40%
Net farm income without appreciation per cow	\$524	\$716	37%
Net farm income with appreciation	\$662,578	\$691,367	4%
Net farm income with appreciation per cow	\$1,013	\$1,033	2%
Labor & management income per operator/manager	\$30,463	\$77,535	155%
Rate return on equity capital with appreciation	9.1%	8.6%	-5%
Rate return on equity capital without appreciation	3.1%	5.0%	61%
Rate return on all capital with appreciation	7.7%	7.2%	-6%
Rate return on all capital without appreciation	3.7%	4.7%	27%
<i>Financial Summary (based on market value, excluding deferred taxes)</i>			
Farm net worth, end year	\$5,573,060	\$6,138,105	10%
Debt to asset ratio	0.32	0.31	-3%
Farm debt per cow	\$3,903	\$3,999	2%
Debt coverage ratio	1.62	1.8	11%

¹Farm participating both years

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 35 New York Dairy Farms, 450 to 949 Cows, 2019 & 2020, DFBS

Item	2019		2020		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	654		670		2%
Cwt. of milk sold		159,745		165,221	3%
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,799	\$19.64	\$4,572	\$18.53	-6%
Dairy cattle	\$260	\$1.06	\$243	\$0.98	-8%
Dairy calves	\$15	\$0.06	\$35	\$0.14	133%
Other livestock	\$14	\$0.06	\$10	\$0.04	-33%
Crops	\$48	\$0.20	\$109	\$0.44	120%
Miscellaneous receipts	<u>\$251</u>	<u>\$1.03</u>	<u>\$942</u>	<u>\$3.82</u>	271%
Total Operating Receipts	\$5,386	\$22.04	\$5,910	\$23.95	9%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$697	\$2.85	\$743	\$3.01	6%
Dairy grain & concentrate	\$1,366	\$5.59	\$1,511	\$6.12	9%
Dairy roughage	\$42	\$0.17	\$57	\$0.23	35%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$0	\$0.00	\$1	\$0.00	NA
Machine hire, rent & lease	\$185	\$0.76	\$184	\$0.75	-1%
Machine repair & vehicle expense	\$255	\$1.05	\$281	\$1.14	9%
Fuel, oil & grease	\$145	\$0.59	\$111	\$0.45	-24%
Replacement livestock	\$36	\$0.15	\$37	\$0.15	0%
Breeding	\$46	\$0.19	\$58	\$0.23	21%
Veterinary & medicine	\$141	\$0.58	\$139	\$0.57	-2%
Milk marketing	\$294	\$1.20	\$344	\$1.39	16%
Bedding	\$95	\$0.39	\$94	\$0.38	-3%
Milking supplies	\$89	\$0.36	\$87	\$0.35	-3%
Cattle lease	\$0	\$0.00	\$0	\$0.00	NA
Custom boarding	\$65	\$0.27	\$64	\$0.26	-4%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$18	\$0.07	\$22	\$0.09	29%
Other livestock expense	\$22	\$0.09	\$21	\$0.08	-11%
Fertilizer & lime	\$117	\$0.48	\$153	\$0.62	29%
Seeds & plants	\$122	\$0.50	\$126	\$0.51	2%
Spray & other crop expense	\$54	\$0.22	\$62	\$0.25	14%
Crop professional fees	\$5	\$0.02	\$8	\$0.03	50%
Land, building & fence repair	\$67	\$0.27	\$81	\$0.33	22%
Taxes	\$73	\$0.30	\$74	\$0.30	0%
Real estate rent & lease	\$78	\$0.32	\$87	\$0.35	9%
Insurance	\$53	\$0.22	\$58	\$0.24	9%
Utilities	\$83	\$0.34	\$83	\$0.34	0%
Interest paid	\$195	\$0.80	\$160	\$0.65	-19%
Other professional fees	\$32	\$0.13	-\$1	\$0.15	15%
Miscellaneous	<u>\$25</u>	<u>\$0.10</u>	<u>\$28</u>	<u>\$0.11</u>	10%
Total Operating Expenses	\$4,403	\$18.02	\$4,711	\$19.09	6%
Expansion livestock	\$13	\$0.05	\$6	\$0.02	-60%
Extraordinary expenses	\$0	\$0.00	\$1	\$0.00	NA
Machinery depreciation	\$252	\$1.03	\$278	\$1.12	9%
Real estate depreciation	<u>\$194</u>	<u>\$0.79</u>	<u>\$200</u>	<u>\$0.81</u>	3%
Total Expenses	\$4,862	\$19.89	\$5,196	\$21.04	6%
Net Farm Income w/o Appreciation	\$524	\$2.15	\$716	\$2.90	35%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

35 New York Dairy Farms, 450 to 949 Cows, 2020, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
20.3	888	22,778,650	27,857	4.9	22.3	75.9	1,812,373
15.9	749	18,857,943	26,606	3.5	19.7	56.6	1,401,634
13.0	649	16,119,944	25,684	2.9	18.1	50.0	1,193,606
10.8	563	13,943,861	24,378	2.3	16.5	43.6	1,038,006
8.0	500	10,910,111	18,859	1.8	12.0	36.4	921,380

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/Cow	Feed & Crop Expenses per Cow	Feed & Crop Expenses per Cwt. Milk	Hired Labor Cost per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$1,040	\$4.88	26	\$557	\$1,247	\$1,489	\$6.81	\$38,279
\$1,418	\$5.69	31	\$811	\$1,720	\$1,800	\$7.31	\$41,909
\$1,563	\$6.14	33	\$917	\$1,911	\$1,941	\$7.58	\$44,851
\$1,669	\$6.47	35	\$1,061	\$2,037	\$2,051	\$8.14	\$47,614
\$1,843	\$7.16	38	\$1,427	\$2,391	\$2,271	\$9.17	\$52,976

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost Milk Production per Cwt. ²	Total Cost Milk Production Per Cwt. ²	% Rate of Return on All Capital w/o Apprec.	Net Farm Income Without Apprec.	Labor & Management Income per Operator	Change in Net Worth with Apprec.
(12)	(12)	(12)	(12)	(4)	(4)	(4)	(8)
\$5,298	\$21.10	\$12.89	\$18.56	10.3	\$1,064,694	\$337,608	\$1,338,300
\$4,852	\$18.63	\$15.08	\$19.87	7.0	\$726,550	\$154,738	\$741,587
\$4,669	\$18.17	\$16.51	\$21.38	4.7	\$462,939	\$71,927	\$504,171
\$4,431	\$17.85	\$17.74	\$22.47	2.4	\$211,183	-\$16,173	\$312,433
\$3,607	\$17.27	\$20.35	\$24.35	-0.7	-\$69,592	-\$165,509	-\$51,813

Financial Efficiency							
Investment per Cow	Machinery Investment per Cow	Asset Turnover Ratio	Operating Expense Ratio	Debt Coverage Ratio	Planned Debt Payments per Cow	Percent Equity	Working Capital as % of Opr. Expense
(14)	(14)	(14)	(14)	(10)	(10)	(7)	(7)
\$8,686	\$858	0.69	0.66	7.41	\$107	93	57
\$10,991	\$1,464	0.56	0.73	2.49	\$337	80	38
\$12,767	\$2,341	0.49	0.78	1.55	\$564	69	23
\$13,986	\$2,826	0.44	0.82	0.83	\$803	58	16
\$16,789	\$3,904	0.37	0.89	0.30	\$1,048	45	-14

¹Page number of the participant's DFBS where the factor is located.

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.



PROGRESS OF THE FARM BUSINESS

Same 37 New York Dairy Farms, 950 to 1,450 Cows, 2019 & 2020, DFBS

SELECTED FACTORS	Average of 37 Farms ¹		Percent Change
	2019	2020	
<i>Size of Business</i>			
Average number of cows	1,144	1,187	4%
Average number of heifers	950	920	-3%
Milk sold, pounds	30,679,508	32,232,453	5%
Worker equivalent	23.3	23.4	0%
Total tillable acres	1,972	2,076	5%
<i>Rates of Production</i>			
Milk sold per cow, pounds	26,822	27,159	1%
Hay DM per acre, tons	3.3	3.0	-9%
Corn silage per acre, tons	18.6	18.9	2%
<i>Labor Efficiency</i>			
Cows per worker	49.1	50.8	4%
Milk sold per worker, pounds	1,316,152	1,380,405	5%
<i>Cost Control and Milk Price</i>			
Grain & concentrate per cwt. milk	\$5.83	\$5.96	2%
Net milk income over purchased grain & conc. per cow	\$3,344	\$3,067	-8%
Dairy feed & crop expense per cwt. milk	\$7.19	\$7.43	3%
Labor and machinery costs per cow	\$1,739	\$1,775	2%
Hired labor costs per cwt. milk	\$3.07	\$3.12	2%
Hired labor costs per worker equivalent	\$45,217	\$48,259	7%
Total Farm Operating Costs per Cwt.	\$17.88	\$18.14	1%
Operating cost of producing milk per cwt. ²	\$15.93	\$16.01	0%
Purchased input cost of producing milk per cwt. ²	\$17.46	\$17.49	0%
Total cost of producing milk per cwt. ²	\$19.32	\$19.45	1%
Net milk price per cwt.	\$18.31	\$17.28	-6%
Government Receipts per cwt.	\$0.26	\$2.56	882%
<i>Capital Efficiency (average for year)</i>			
Farm capital per cow	\$11,089	\$11,410	3%
Machinery and equipment per cow	\$1,709	\$1,746	2%
Asset turnover ratio	0.54	0.57	6%
<i>Profitability</i>			
Net farm income without appreciation	\$609,453	\$1,103,948	81%
Net farm income without appreciation per cow	\$533	\$930	74%
Net farm income with appreciation	\$933,210	\$1,339,360	44%
Net farm income with appreciation per cow	\$816	\$1,129	38%
Labor & management income per operator/manager	\$102,644	\$304,901	197%
Rate return on equity capital with appreciation	9.7%	13.2%	36%
Rate return on equity capital without appreciation	5.5%	10.4%	90%
Rate return on all capital with appreciation	7.8%	9.9%	27%
Rate return on all capital without appreciation	5.3%	8.1%	54%
<i>Financial Summary (based on market value, excluding deferred taxes)</i>			
Farm net worth, end year	\$8,022,169	\$9,334,617	16%
Debt to asset ratio	0.38	0.34	-11%
Farm debt per cow	\$4,237	\$3,915	-8%
Debt coverage ratio	1.4	2.02	44%

¹Farm participating both years

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 37 New York Dairy Farms, 950 to 1,450 Cows, 2019 & 2020, DFBS

Item	2019		2020		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	1,144		1,187		4%
Cwt. of milk sold		306,795		322,325	5%
ACCRUAL OPERATING RECEIPTS					
Milk	\$5,215	\$19.44	\$5,057	\$18.62	-4%
Dairy cattle	\$264	\$0.99	\$264	\$0.97	-2%
Dairy calves	\$26	\$0.10	\$35	\$0.13	30%
Other livestock	\$20	\$0.07	\$24	\$0.09	29%
Crops	\$47	\$0.18	\$75	\$0.28	56%
Miscellaneous receipts	<u>\$174</u>	<u>\$0.65</u>	<u>\$810</u>	<u>\$2.98</u>	358%
Total Operating Receipts	\$5,746	\$21.42	\$6,265	\$23.07	8%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$824	\$3.07	\$848	\$3.12	2%
Dairy grain & concentrate	\$1,563	\$5.83	\$1,618	\$5.96	2%
Dairy roughage	\$114	\$0.43	\$123	\$0.45	5%
Nondairy feed	\$0	\$0.00	\$1	\$0.00	NA
Professional nutritional services	\$2	\$0.01	\$2	\$0.01	0%
Machine hire, rent & lease	\$147	\$0.55	\$152	\$0.56	2%
Machine repair & vehicle expense	\$227	\$0.85	\$266	\$0.98	15%
Fuel, oil & grease	\$151	\$0.56	\$116	\$0.43	-23%
Replacement livestock	\$11	\$0.04	\$11	\$0.04	0%
Breeding	\$44	\$0.16	\$49	\$0.18	13%
Veterinary & medicine	\$162	\$0.60	\$152	\$0.56	-7%
Milk marketing	\$304	\$1.13	\$363	\$1.34	19%
Bedding	\$101	\$0.38	\$101	\$0.37	-3%
Milking supplies	\$93	\$0.35	\$101	\$0.37	6%
Cattle lease	\$1	\$0.00	\$7	\$0.03	NA
Custom boarding	\$104	\$0.39	\$98	\$0.36	-8%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$14	\$0.05	\$16	\$0.06	20%
Other livestock expense	\$28	\$0.10	\$20	\$0.07	-30%
Fertilizer & lime	\$85	\$0.32	\$94	\$0.35	9%
Seeds & plants	\$107	\$0.40	\$114	\$0.42	5%
Spray & other crop expense	\$55	\$0.20	\$64	\$0.23	15%
Crop professional fees	\$6	\$0.02	\$6	\$0.02	0%
Land, building & fence repair	\$81	\$0.30	\$93	\$0.34	13%
Taxes	\$58	\$0.22	\$64	\$0.23	5%
Real estate rent & lease	\$107	\$0.40	\$106	\$0.39	-3%
Insurance	\$43	\$0.16	\$41	\$0.15	-6%
Utilities	\$90	\$0.34	\$91	\$0.33	-3%
Interest paid	\$212	\$0.79	\$159	\$0.59	-25%
Other professional fees	\$30	\$0.11	-\$1	\$0.10	-9%
Miscellaneous	<u>\$31</u>	<u>\$0.12</u>	<u>\$27</u>	<u>\$0.10</u>	-17%
Total Operating Expenses	\$4,795	\$17.88	\$4,928	\$18.14	1%
Expansion livestock	\$8	\$0.03	\$5	\$0.02	-33%
Extraordinary expenses	\$5	\$0.02	\$3	\$0.01	-50%
Machinery depreciation	\$218	\$0.81	\$218	\$0.80	-1%
Real estate depreciation	<u>\$187</u>	<u>\$0.70</u>	<u>\$181</u>	<u>\$0.67</u>	-4%
Total Expenses	\$5,213	\$19.44	\$5,335	\$19.64	1%
Net Farm Income w/o Appreciation	\$533	\$1.99	\$930	\$3.42	72%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

38 New York Dairy Farms, 950 to 1,450 Cows, 2020, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
30.8	1,410	38,701,639	29,234	4.4	22.4	69.7	1,909,439
25.8	1,307	35,837,233	28,205	3.5	20.4	55.0	1,538,497
23.1	1,170	32,338,798	27,240	3.0	18.4	50.9	1,382,414
21.0	1,097	29,298,095	26,201	2.5	17.5	48.0	1,264,961
17.4	985	25,907,683	25,120	1.1	9.9	40.0	1,076,326

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/Cow	Feed & Crop Expenses per Cow	Feed & Crop Expenses per Cwt. Milk	Hired Labor Cost per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$1,303	\$4.90	26	\$588	\$1,314	\$1,659	\$6.22	\$42,082
\$1,513	\$5.58	30	\$750	\$1,648	\$1,865	\$6.85	\$45,470
\$1,646	\$5.98	33	\$834	\$1,819	\$2,030	\$7.42	\$48,261
\$1,734	\$6.29	35	\$960	\$1,950	\$2,147	\$7.97	\$50,136
\$1,928	\$7.22	38	\$1,103	\$2,230	\$2,441	\$8.96	\$55,822

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost Milk Production per Cwt. ²	Total Cost Milk Production Per Cwt. ²	% Rate of Return on All Capital w/o Apprec.	Net Farm Income Without Apprec.	Labor & Management Income per Operator	Change in Net Worth with Apprec.
(12)	(12)	(12)	(12)	(4)	(4)	(4)	(8)
\$5,640	\$20.05	\$13.88	\$17.61	14.2	\$1,947,064	\$965,638	\$2,302,026
\$5,210	\$19.05	\$14.74	\$18.82	10.8	\$1,532,556	\$554,345	\$1,492,384
\$5,036	\$18.55	\$16.12	\$19.47	8.1	\$1,093,234	\$270,026	\$1,156,293
\$4,895	\$17.98	\$17.42	\$20.11	5.5	\$697,165	\$146,723	\$931,389
\$4,514	\$17.51	\$18.43	\$21.75	3.2	\$333,332	-\$4,635	\$552,383

Financial Efficiency							
Investment per Cow	Machinery Investment per Cow	Asset Turnover Ratio	Operating Expense Ratio	Debt Coverage Ratio	Planned Debt Payments per Cow	Percent Equity	Working Capital as % of Opr. Expense
(14)	(14)	(14)	(14)	(10)	(10)	(7)	(7)
\$7,262	\$640	0.94	0.68	11.78	\$129	91	60
\$10,357	\$1,515	0.65	0.73	2.87	\$483	76	35
\$11,428	\$1,829	0.57	0.76	2.07	\$693	67	26
\$13,123	\$2,167	0.51	0.82	1.45	\$800	59	17
\$15,514	\$2,805	0.43	0.87	0.56	\$1,052	35	0

¹Page number of the participant's DFBS where the factor is located.

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.

PROGRESS OF THE FARM BUSINESS

Same 33 New York Dairy Farms, Greater Than 1,450 Cows, 2019 & 2020, DFBS

SELECTED FACTORS	Average of 33 Farms ¹		Percent Change
	2019	2020	
<i>Size of Business</i>			
Average number of cows	2,289	2,386	4%
Average number of heifers	1,834	1,885	3%
Milk sold, pounds	61,213,578	63,459,816	4%
Worker equivalent	42.7	43.8	3%
Total tillable acres	3,802	3,909	3%
<i>Rates of Production</i>			
Milk sold per cow, pounds	26,744	26,597	-1%
Hay DM per acre, tons	3.3	3.2	-3%
Corn silage per acre, tons	18.5	18.0	-3%
<i>Labor Efficiency</i>			
Cows per worker	53.6	54.4	2%
Milk sold per worker, pounds	1,432,232	1,447,863	1%
<i>Cost Control and Milk Price</i>			
Grain & concentrate per cwt. milk	\$5.56	\$6.02	8%
Net milk income over purchased grain & conc. per cow	\$3,378	\$2,977	-12%
Dairy feed & crop expense per cwt. milk	\$6.85	\$7.43	8%
Labor and machinery costs per cow	\$1,664	\$1,683	1%
Hired labor costs per cwt. milk	\$2.98	\$3.10	4%
Hired labor costs per worker equivalent	\$46,690	\$48,961	5%
Total Farm Operating Costs per Cwt.	\$16.99	\$17.74	4%
Operating cost of producing milk per cwt. ²	\$14.99	\$15.59	4%
Purchased input cost of producing milk per cwt. ²	\$16.49	\$17.12	4%
Total cost of producing milk per cwt. ²	\$18.43	\$19.17	4%
Net milk price per cwt.	\$18.17	\$17.23	-5%
Government Receipts per cwt.	\$0.19	\$1.83	877%
<i>Capital Efficiency (average for year)</i>			
Farm capital per cow	\$11,171	\$11,558	3%
Machinery and equipment per cow	\$1,517	\$1,601	6%
Asset turnover ratio	0.54	0.53	-2%
<i>Profitability</i>			
Net farm income without appreciation	\$1,737,263	\$1,935,047	11%
Net farm income without appreciation per cow	\$759	\$811	7%
Net farm income with appreciation	\$2,335,990	\$2,382,610	2%
Net farm income with appreciation per cow	\$1,021	\$999	-2%
Labor & management income per operator/manager	\$276,086	\$309,459	12%
Rate return on equity capital with appreciation	11.7%	10.7%	-9%
Rate return on equity capital without appreciation	8.2%	8.3%	2%
Rate return on all capital with appreciation	9.5%	8.5%	-11%
Rate return on all capital without appreciation	7.2%	6.9%	-4%
<i>Financial Summary (based on market value, excluding deferred taxes)</i>			
Farm net worth, end year	\$17,896,803	\$20,105,979	12%
Debt to asset ratio	0.32	0.30	-6%
Farm debt per cow	\$3,592	\$3,542	-1%
Debt coverage ratio	2.04	2.25	10%

¹Farm participating both years

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 33 New York Dairy Farms, Greater Than 1,450 Cows, 2019 & 2020, DFBS

Item	2019		2020		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	2,289		2,386		4%
Cwt. of milk sold		612,136		634,598	4%
ACCRUAL OPERATING RECEIPTS					
Milk	\$5,169	\$19.33	\$4,928	\$18.53	-4%
Dairy cattle	\$324	\$1.21	\$281	\$1.06	-12%
Dairy calves	\$19	\$0.07	\$43	\$0.16	129%
Other livestock	\$4	\$0.01	\$5	\$0.02	100%
Crops	\$47	\$0.18	\$72	\$0.27	50%
Miscellaneous receipts	<u>\$187</u>	<u>\$0.70</u>	<u>\$628</u>	<u>\$2.36</u>	237%
Total Operating Receipts	\$5,750	\$21.50	\$5,957	\$22.40	4%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$797	\$2.98	\$824	\$3.10	4%
Dairy grain & concentrate	\$1,487	\$5.56	\$1,601	\$6.02	8%
Dairy roughage	\$105	\$0.39	\$119	\$0.45	15%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.00	\$1	\$0.00	NA
Machine hire, rent & lease	\$135	\$0.50	\$137	\$0.51	2%
Machine repair & vehicle expense	\$246	\$0.92	\$262	\$0.98	7%
Fuel, oil & grease	\$138	\$0.52	\$105	\$0.39	-25%
Replacement livestock	\$20	\$0.07	\$34	\$0.13	86%
Breeding	\$48	\$0.18	\$54	\$0.20	11%
Veterinary & medicine	\$151	\$0.57	\$145	\$0.55	-4%
Milk marketing	\$309	\$1.16	\$345	\$1.30	12%
Bedding	\$84	\$0.31	\$83	\$0.31	0%
Milking supplies	\$89	\$0.33	\$92	\$0.34	3%
Cattle lease	\$7	\$0.03	\$3	\$0.01	-67%
Custom boarding	\$82	\$0.31	\$86	\$0.32	3%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$15	\$0.06	\$17	\$0.06	0%
Other livestock expense	\$20	\$0.08	\$19	\$0.07	-13%
Fertilizer & lime	\$89	\$0.33	\$92	\$0.35	6%
Seeds & plants	\$97	\$0.36	\$109	\$0.41	14%
Spray & other crop expense	\$50	\$0.19	\$50	\$0.19	0%
Crop professional fees	\$4	\$0.01	\$5	\$0.02	100%
Land, building & fence repair	\$76	\$0.28	\$87	\$0.33	18%
Taxes	\$59	\$0.22	\$60	\$0.22	0%
Real estate rent & lease	\$68	\$0.25	\$79	\$0.30	20%
Insurance	\$41	\$0.15	\$44	\$0.16	7%
Utilities	\$83	\$0.31	\$83	\$0.31	0%
Interest paid	\$191	\$0.71	\$133	\$0.50	-30%
Other professional fees	\$26	\$0.10	-\$1	\$0.09	-10%
Miscellaneous	<u>\$26</u>	<u>\$0.10</u>	<u>\$25</u>	<u>\$0.09</u>	-10%
Total Operating Expenses	\$4,544	\$16.99	\$4,718	\$17.74	4%
Expansion livestock	\$45	\$0.17	\$22	\$0.08	-53%
Extraordinary expenses	\$0	\$0.00	\$0	\$0.00	NA
Machinery depreciation	\$208	\$0.78	\$211	\$0.79	1%
Real estate depreciation	<u>\$193</u>	<u>\$0.72</u>	<u>\$195</u>	<u>\$0.73</u>	1%
Total Expenses	\$4,990	\$18.66	\$5,146	\$19.34	4%
Net Farm Income w/o Appreciation	\$759	\$2.84	\$811	\$3.05	7%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

35 New York Dairy Farms, Greater Than 1,450 Cows, 2020, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
72.9	3,950	105,683,989	28,779	4.2	22.4	69.4	1,836,796
47.6	2,750	73,908,908	27,487	3.7	19.4	59.0	1,595,886
39.2	1,926	50,317,812	26,676	3.3	18.3	54.3	1,443,654
31.8	1,694	44,757,862	25,963	2.9	17.1	50.0	1,326,979
24.9	1,511	40,196,622	24,162	2.2	14.5	45.1	1,179,024

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/Cow	Feed & Crop Expenses per Cow	Feed & Crop Expenses per Cwt. Milk	Hired Labor Cost per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$1,202	\$4.72	26	\$620	\$1,350	\$1,532	\$5.94	\$41,206
\$1,460	\$5.55	29	\$699	\$1,566	\$1,766	\$6.76	\$44,108
\$1,564	\$5.95	32	\$808	\$1,689	\$1,943	\$7.46	\$48,519
\$1,741	\$6.34	34	\$900	\$1,864	\$2,207	\$8.05	\$51,672
\$1,922	\$7.03	38	\$1,061	\$2,036	\$2,404	\$8.73	\$57,321

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost Milk Production per Cwt. ²	Total Cost Milk Production Per Cwt. ²	% Rate of Return on All Capital w/o Apprec.	Net Farm Income Without Apprec.	Labor & Management Income per Operator	Change in Net Worth with Apprec.
(12)	(12)	(12)	(12)	(4)	(4)	(4)	(8)
\$5,509	\$20.09	\$12.28	\$17.13	13.4	\$3,679,699	\$855,852	\$4,314,394
\$5,200	\$19.10	\$14.83	\$18.42	8.8	\$2,494,346	\$502,362	\$2,747,101
\$4,979	\$18.48	\$15.72	\$19.09	7.7	\$1,843,870	\$336,895	\$1,919,579
\$4,761	\$17.89	\$16.46	\$19.59	6.0	\$1,275,695	\$228,575	\$1,421,604
\$4,279	\$17.28	\$17.77	\$21.13	1.6	\$335,516	-\$125,045	-\$62,905

Financial Efficiency							
Investment per Cow	Machinery Investment per Cow	Asset Turnover Ratio	Operating Expense Ratio	Debt Coverage Ratio	Planned Debt Payments per Cow	Percent Equity	Working Capital as % of Opr. Expense
(14)	(14)	(14)	(14)	(10)	(10)	(7)	(7)
\$7,441	\$899	0.90	0.65	19.39	\$28	96	102
\$9,798	\$1,253	0.65	0.73	2.33	\$350	79	34
\$10,904	\$1,519	0.56	0.77	1.84	\$555	64	23
\$12,970	\$1,953	0.47	0.80	1.33	\$669	56	18
\$16,912	\$2,574	0.37	0.89	0.43	\$908	40	10

¹Page number of the participant's DFBS where the factor is located.

²Due to the pandemic and the government response, the increase in government receipts from 2019 to 2020 was unusually large. Therefore, this change isn't included in the calculation as an offset to the cost of milk production measures for 2020 in this report.

OTHER A.E.M. EXTENSION BULLETINS

EB No	Title	Fee (if applicable)	Author(s)
2021-07	Progress of the Dairy Farm Report, Selected Financial and Production Factors, Dairy Farm Business Summary, New York State, 2020		Karszes, J. and Augello, L.
2021-06	Effects of NY Overtime Laws on Agricultural Production Costs and Competitiveness		Wolf, C, Stup, R, And Karszes, J.
2021-05	Hired Labor on New York State Dairy Farms: Cost, Efficiency & Change from 2011 through 2020		Karszes, J. and Wolf, C.
2021-04	The Economic Contributions of Agriculture to the New York State Economy: 2019		Schmit, T.
2021-03	2020 New York Berry Price Information		Yang, Z., Park, K.S., and Gómez, M.I.
2021-02	Central NY Farmland Cash Rental Rate Survey Findings		Ifft, J., and Tommell, N.
2021-01	“Six Year Trend Analysis 2019, New York State Dairy Farms, Selected Financial and Production Factors”, Dairy Farm Business Summary		Karszes, J. and Augello, L.
2020-17	Potential Economic Benefits of Using Certified Clean Hop Plants vs. Hop Stunt Viroid Disease		Davis, T. J., Gómez, M.I., and Twomey, M.
2020-16	The Covid-19 Shopper: Food Preparation Changes		Park, K., Brumberg, A., and Yonezawa, K.
2020-15	The Covid-19 Shopper: Shopping Habits during Covid-19		Park, K., Brumberg, A., and Yonezawa, K.
2020-14	The Covid-19 Shopper: Online Shopping		Park, K., Brumberg, A., and Yonezawa, K.
2020-13	Enterprise Tool for Eastern United States Small Vineyard Management		Davis, T. J., and Gómez, M. I.

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