

June 6th, 2022

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Progress of The Dairy Farm Report

Selected Financial and Production Factors

Average of All Farms

Less Than 500 Cows

500 to 999 Cows

1,000 to 1,499 Cows

1,500 Cows and Greater

Dairy Farm Business Summary and Analysis

New York State, 2021

136 Farms

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Cornell Dairy Farm Business Summary & Analysis Program
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Progress of the Dairy Farm Report
Selected Financial and Production Factors
Dairy Farm Business Summary
136 New York State Dairy Farms, 2021
June 2022

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 2021 business year.

The Progress of the Dairy Farm Report provides averages of selected financial and production measures from 132 New York State Dairy Farms (pages 2-4) that participated in the program for both 2020 and 2021 that had submitted records by June 6th, 2022. The report is also broken down into four herd size categories to provide additional comparison reports by herd size. The business charts report data for all farms that participated in 2021.

1. Farms with Less Than 500 Cows	Pages 5-7
2. Farms with 500 Cows to 999 Cows	Pages 8-10
3. Farms with 1,000 Cows to 1,499 Cows	Pages 11-13
4. Farms with 1,500 and Greater	Pages 14-16

To utilize these reports, begin by comparing how your farm changed from 2020 to 2021 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 132 New York Dairy Farms, 2020 & 2021, DFBS

SELECTED FACTORS	Average of 132 Farms ¹		Percent Change
	2020	2021	
Size of Business			
Average number of cows	1,158	1,186	2%
Percent heifers to cows, average for year	78%	76%	-2%
Milk sold, pounds	30,618,993	32,137,134	5%
Worker equivalent	22.2	22.2	0.1%
Total tillable acres	2,024	2,092	3%
Rates of Production			
Milk sold per cow, pounds	26,444	27,108	3%
Hay DM per acre, tons	3.1	3.7	19%
Corn silage per acre, tons	18.2	19.2	5%
Labor Efficiency			
Cows per worker	52.2	53.4	2.3%
Milk sold per worker, pounds	1,381,100	1,448,271	4.9%
Cost Control and Milk Price			
Grain & concentrate per cwt. milk	\$6.04	\$6.71	11%
Net milk income over purchased grain & conc. per cow	\$2,864	\$3,080	8%
Dairy feed & crop expense per cwt. milk	\$7.50	\$8.30	11%
Labor and machinery costs per cow	\$1,744	\$1,826	5%
Hired labor costs per cwt. milk	\$3.03	\$3.04	0.4%
Hired labor costs per worker equivalent	\$48,011	\$50,471	5.1%
Total Farm Operating Costs per Cwt.	\$18.06	\$18.96	5%
Operating cost of producing milk per cwt. ²	\$16.04	\$16.11	0.4%
Purchased input cost of producing milk per cwt. ²	\$17.61	\$17.63	0.1%
Total cost of producing milk per cwt. ²	\$19.81	\$19.88	0.4%
Net milk price per cwt.	\$17.24	\$18.43	7%
Government Receipts per cwt.	\$2.49	\$0.13	-95%
Capital Efficiency (average for year)			
Farm capital per cow	\$11,715	\$12,306	5%
Machinery and equipment per cow	\$1,790	\$1,888	5%
Asset turnover ratio	0.53	0.53	0%
Profitability			
Net farm income without appreciation	\$966,741	\$688,805	-29%
Net farm income without appreciation per cow	\$835	\$581	-30%
Net farm income with appreciation	\$1,210,606	\$1,063,763	-12%
Net farm income with appreciation per cow	\$1,046	\$897	-14%
Labor & management income per operator/manager	\$205,460	\$75,949	-63%
Rate return on equity capital with appreciation	10.8%	8.4%	-22%
Rate return on equity capital without appreciation	8.2%	4.7%	-43%
Rate return on all capital with appreciation	8.6%	6.8%	-21%
Rate return on all capital without appreciation	6.8%	4.2%	-38%
Financial Summary (based on market value, excluding deferred taxes)			
Farm net worth, end year	\$9,760,153	\$10,366,015	6%
Debt to asset ratio	0.31	0.31	0%
Farm debt per cow	\$3,676	\$3,931	7%
Debt coverage ratio	2.11	1.5	-29%

¹Farm participating both years

²Due to the pandemic and the government response, the change 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 132 New York Dairy Farms, 2020 & 2021, DFBS

Item	2020		2021		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	1,158		1,186		2%
Cwt. of milk sold		306,190		321,371	5%
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,907	\$18.56	\$5,360	\$19.77	7%
Dairy cattle	\$273	\$1.03	\$273	\$1.01	-2%
Dairy calves	\$40	\$0.15	\$64	\$0.24	60%
Other livestock	\$13	\$0.05	\$25	\$0.09	80%
Crops	\$82	\$0.31	\$254	\$0.94	203%
Miscellaneous receipts	<u>\$729</u>	<u>\$2.76</u>	<u>\$180</u>	<u>\$0.66</u>	-76%
Total Operating Receipts	\$6,044	\$22.86	\$6,156	\$22.71	-1%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$802	\$3.03	\$825	\$3.04	0.3%
Dairy grain & concentrate	\$1,596	\$6.04	\$1,819	\$6.71	11%
Dairy roughage	\$115	\$0.43	\$127	\$0.47	9%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.00	\$1	\$0.00	NA
Machine hire, rent & lease	\$154	\$0.58	\$164	\$0.60	3%
Machine repair & vehicle expense	\$262	\$0.99	\$275	\$1.01	2%
Fuel, oil & grease	\$109	\$0.41	\$144	\$0.53	29%
Replacement livestock	\$33	\$0.13	\$30	\$0.11	-15%
Breeding	\$54	\$0.21	\$56	\$0.21	0%
Veterinary & medicine	\$146	\$0.55	\$150	\$0.55	0%
Milk marketing	\$349	\$1.32	\$365	\$1.35	2%
Bedding	\$91	\$0.34	\$94	\$0.35	3%
Milking supplies	\$94	\$0.36	\$92	\$0.34	-6%
Cattle lease	\$4	\$0.01	\$2	\$0.01	0%
Custom boarding	\$91	\$0.34	\$90	\$0.33	-3%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$19	\$0.07	\$19	\$0.07	0%
Other livestock expense	\$22	\$0.08	\$28	\$0.10	25%
Fertilizer & lime	\$104	\$0.39	\$126	\$0.47	21%
Seeds & plants	\$109	\$0.41	\$112	\$0.41	0%
Spray & other crop expense	\$54	\$0.21	\$60	\$0.22	5%
Crop professional fees	\$6	\$0.02	\$6	\$0.02	0%
Land, building & fence repair	\$85	\$0.32	\$79	\$0.29	-9%
Taxes	\$63	\$0.24	\$65	\$0.24	0%
Real estate rent & lease	\$86	\$0.32	\$90	\$0.33	3%
Insurance	\$47	\$0.18	\$47	\$0.17	-6%
Utilities	\$85	\$0.32	\$99	\$0.36	13%
Interest paid	\$143	\$0.54	\$123	\$0.45	-17%
Other professional fees	\$26	\$0.10	\$24	\$0.09	-10%
Miscellaneous	<u>\$26</u>	<u>\$0.10</u>	<u>\$27</u>	<u>\$0.10</u>	0%
Total Operating Expenses	\$4,777	\$18.06	\$5,139	\$18.96	5%
Expansion livestock	\$17	\$0.06	\$24	\$0.09	50%
Extraordinary expenses	\$1	\$0.00	\$0	\$0.00	NA
Machinery depreciation	\$225	\$0.85	\$222	\$0.82	-4%
Real estate depreciation	<u>\$189</u>	<u>\$0.71</u>	<u>\$189</u>	<u>\$0.70</u>	-1%
Total Expenses	\$5,209	\$19.68	\$5,574	\$20.57	5%
Net Farm Income w/o Appreciation	\$835	\$3.16	\$581	\$2.14	-32%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool that can assist in analyzing your business. The five numbers in each column represent the average of each quintile of farms included in the DFBS. You can compare your farm's data to others in the DFBS by drawing a line through or near the number in each column which most closely represents your current level of performance. Each column is sorted independently. Use this information to identify areas of opportunity in your business.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

136 New York Dairy Farms, 2021, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds of Milk Sold	Pounds of Milk Sold Per Cow	Tons of Hay Crop DM/Acre	Tons of Corn Silage Per Acre	Cows Per Worker	Pounds of Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
50.1	2,777	76,483,396	29,680	5.1	23.7	72.3	1,919,109
26.5	1,410	38,944,459	28,112	4.2	21.2	56.6	1,518,908
19.1	987	26,698,585	26,984	3.7	19.6	50.3	1,345,731
10.9	558	13,959,248	25,504	3.2	17.6	45.0	1,170,442
4.6	193	4,624,533	21,225	1.9	12.0	34.3	841,818

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. Of Milk	Hired Labor Cost Per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$1,299	\$5.44	27	\$633	\$1,388	\$1,695	\$7.07	\$33,440
\$1,644	\$6.31	32	\$833	\$1,745	\$2,039	\$7.94	\$45,122
\$1,786	\$6.73	34	\$950	\$1,929	\$2,201	\$8.36	\$47,922
\$1,923	\$7.14	35	\$1,089	\$2,162	\$2,400	\$8.89	\$51,209
\$2,163	\$7.90	39	\$1,398	\$2,594	\$2,714	\$9.86	\$61,158

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost of Milk Production Per Cwt.	Total Cost of Milk Production Per Cwt.	% 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)
\$5,996	\$21.84	\$13.76	\$18.30	7.7	\$2,072,771	\$457,603	\$2,164,228
\$5,606	\$20.50	\$15.45	\$19.53	5.2	\$869,186	\$138,719	\$811,371
\$5,352	\$20.00	\$16.31	\$20.51	3.5	\$482,000	\$43,208	\$372,179
\$5,088	\$19.56	\$17.09	\$22.02	1.3	\$156,087	-\$11,165	\$136,313
\$4,368	\$18.87	\$19.10	\$25.40	-2.1	-\$66,683	-\$210,463	-\$307,328

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)
\$8,658	\$870	0.76	0.73	7.21	\$55	96	69
\$11,168	\$1,584	0.58	0.79	1.69	\$373	80	33
\$12,639	\$2,140	0.52	0.81	1.33	\$595	68	23
\$14,593	\$2,707	0.44	0.85	0.83	\$755	59	19
\$20,040	\$4,369	0.34	0.91	0.00	\$1,094	42	4

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

PROGRESS OF THE FARM BUSINESS

Same 33 New York Dairy Farms, Less Than 500 Cows, 2020 & 2021, DFBS

SELECTED FACTORS	Average of 33 Farms ¹		Percent Change
	2020	2021	
Size of Business			
Average number of cows	235	234	-0.4%
Percent heifers to cows, average for year	87%	86%	-1%
Milk sold, pounds	5,880,171	5,902,474	0.4%
Worker equivalent	6.1	6.0	-2%
Total tillable acres	586	593	1%
Rates of Production			
Milk sold per cow, pounds	24,999	25,273	1%
Hay DM per acre, tons	2.6	3.3	27%
Corn silage per acre, tons	17.5	18.7	7%
Labor Efficiency			
Cows per worker	38.5	38.9	1.2%
Milk sold per worker, pounds	962,385	982,109	2.0%
Cost Control and Milk Price			
Grain & concentrate per cwt. milk	\$6.29	\$6.94	10%
Net milk income over purchased grain & conc. per cow	\$2,595	\$3,007	16%
Dairy feed & crop expense per cwt. milk	\$7.95	\$8.61	8%
Labor and machinery costs per cow	\$2,159	\$2,275	5%
Hired labor costs per cwt. milk	\$2.67	\$2.73	2%
Hired labor costs per worker equivalent	\$42,792	\$45,208	5.6%
Total Farm Operating Costs per Cwt.	\$18.82	\$20.18	7%
Operating cost of producing milk per cwt. ²	\$15.89	\$16.99	7%
Purchased input cost of producing milk per cwt. ²	\$17.88	\$18.95	6%
Total cost of producing milk per cwt. ²	\$21.88	\$23.20	6%
Net milk price per cwt.	\$17.04	\$19.24	13%
Government Receipts per cwt.	\$2.49	\$0.35	-86%
Capital Efficiency (average for year)			
Farm capital per cow	\$13,858	\$14,936	8%
Machinery and equipment per cow	\$2,911	\$3,114	7%
Asset turnover ratio	0.44	0.43	-2%
Profitability			
Net farm income without appreciation	\$159,794	\$105,743	-34%
Net farm income without appreciation per cow	\$679	\$453	-33%
Net farm income with appreciation	\$222,950	\$194,931	-13%
Net farm income with appreciation per cow	\$948	\$835	-12%
Labor & management income per operator/manager	\$19,574	-\$13,429	-169%
Rate return on equity capital with appreciation	4.5%	2.8%	-38%
Rate return on equity capital without appreciation	1.8%	-0.7%	-138%
Rate return on all capital with appreciation	4.3%	3.1%	-28%
Rate return on all capital without appreciation	2.4%	0.5%	-79%
Financial Summary (based on market value, excluding deferred taxes)			
Farm net worth, end year	\$2,407,910	\$2,641,116	10%
Debt to asset ratio	0.28	0.26	-7%
Farm debt per cow	\$3,921	\$4,056	3%
Debt coverage ratio	1.58	1.38	-13%

¹Farm participating both years

²Due to the pandemic and the government response, the change 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, Less Than 500 Cows, 2020 & 2021, DFBS

Item	2020		2021		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	235		234		-0.4%
Cwt. of milk sold		58,802		59,025	0.4%
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,597	\$18.39	\$5,242	\$20.74	13%
Dairy cattle	\$194	\$0.78	\$210	\$0.83	6%
Dairy calves	\$32	\$0.13	\$58	\$0.23	77%
Other livestock	\$38	\$0.15	\$51	\$0.20	33%
Crops	\$159	\$0.63	\$285	\$1.13	79%
Miscellaneous receipts	<u>\$862</u>	<u>\$3.45</u>	<u>\$208</u>	<u>\$0.82</u>	-76%
Total Operating Receipts	\$5,882	\$23.53	\$6,054	\$23.95	2%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$668	\$2.67	\$690	\$2.73	2%
Dairy grain & concentrate	\$1,573	\$6.29	\$1,754	\$6.94	10%
Dairy roughage	\$87	\$0.35	\$70	\$0.28	-20%
Nondairy feed	\$3	\$0.01	\$3	\$0.01	0%
Professional nutritional services	\$0	\$0.00	\$0	\$0.00	NA
Machine hire, rent & lease	\$162	\$0.65	\$203	\$0.80	23%
Machine repair & vehicle expense	\$321	\$1.29	\$318	\$1.26	-2%
Fuel, oil & grease	\$121	\$0.48	\$164	\$0.65	35%
Replacement livestock	\$8	\$0.03	\$8	\$0.03	0%
Breeding	\$56	\$0.22	\$55	\$0.22	0%
Veterinary & medicine	\$142	\$0.57	\$146	\$0.58	2%
Milk marketing	\$338	\$1.35	\$380	\$1.50	11%
Bedding	\$109	\$0.44	\$115	\$0.45	2%
Milking supplies	\$81	\$0.33	\$89	\$0.35	6%
Cattle lease	\$1	\$0.00	\$0	\$0.00	NA
Custom boarding	\$9	\$0.04	\$11	\$0.04	0%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$25	\$0.10	\$25	\$0.10	0%
Other livestock expense	\$44	\$0.18	\$58	\$0.23	28%
Fertilizer & lime	\$132	\$0.53	\$161	\$0.64	21%
Seeds & plants	\$131	\$0.52	\$121	\$0.48	-8%
Spray & other crop expense	\$60	\$0.24	\$62	\$0.24	0%
Crop professional fees	\$5	\$0.02	\$8	\$0.03	50%
Land, building & fence repair	\$67	\$0.27	\$79	\$0.31	15%
Taxes	\$95	\$0.38	\$94	\$0.37	-3%
Real estate rent & lease	\$81	\$0.32	\$89	\$0.35	9%
Insurance	\$76	\$0.30	\$81	\$0.32	7%
Utilities	\$85	\$0.34	\$99	\$0.39	15%
Interest paid	\$160	\$0.64	\$147	\$0.58	-9%
Other professional fees	\$29	\$0.11	\$36	\$0.14	27%
Miscellaneous	<u>\$36</u>	<u>\$0.14</u>	<u>\$37</u>	<u>\$0.15</u>	7%
Total Operating Expenses	\$4,705	\$18.82	\$5,101	\$20.18	7%
Expansion livestock	\$0	\$0.00	\$6	\$0.02	NA
Extraordinary expenses	\$2	\$0.01	\$0	\$0.00	-100%
Machinery depreciation	\$308	\$1.23	\$291	\$1.15	-7%
Real estate depreciation	<u>\$189</u>	<u>\$0.75</u>	<u>\$203</u>	<u>\$0.80</u>	7%
Total Expenses	\$5,204	\$20.81	\$5,601	\$22.15	6%
Net Farm Income w/o Appreciation	\$679	\$2.72	\$453	\$1.79	-34%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool that can assist in analyzing your business. The five numbers in each column represent the average of each quintile of farms included in the DFBS. You can compare your farm's data to others in the DFBS by drawing a line through or near the number in each column which most closely represents your current level of performance. Each column is sorted independently. Use this information to identify areas of opportunity in your business.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

34 New York Dairy Farms, Less Than 500 Cows, 2021, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds of Milk Sold	Pounds of Milk Sold Per Cow	Tons of Hay Crop DM/Acre	Tons of Corn Silage Per Acre	Cows Per Worker	Pounds of Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
11.7	424	11,557,570	29,466	4.5	22.6	55.8	1,448,289
6.8	284	7,334,256	27,140	3.9	20.0	45.9	1,145,153
5.3	228	5,425,029	25,073	3.5	19.3	38.0	982,865
4.1	165	3,988,717	22,877	2.8	17.5	33.9	834,257
2.7	93	2,138,805	19,414	2.0	12.8	28.3	613,579

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. Of Milk	Hired Labor Cost Per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$1,317	\$5.93	29	\$821	\$1,775	\$1,653	\$7.39	\$12,078
\$1,505	\$6.55	32	\$978	\$2,140	\$1,909	\$8.28	\$37,409
\$1,720	\$7.01	34	\$1,131	\$2,313	\$2,113	\$8.73	\$43,134
\$1,915	\$7.43	35	\$1,275	\$2,455	\$2,422	\$9.52	\$47,529
\$2,217	\$8.19	38	\$1,589	\$2,874	\$2,819	\$10.26	\$68,804

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost of Milk Production Per Cwt.	Total Cost of Milk Production Per Cwt.	% 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)
\$6,232	\$22.45	\$14.76	\$20.74	6.2	\$248,166	\$76,093	\$463,238
\$5,542	\$21.55	\$16.20	\$22.32	2.5	\$149,549	\$15,632	\$201,620
\$5,155	\$20.93	\$16.70	\$23.45	0.4	\$108,282	-\$4,848	\$115,703
\$4,755	\$20.39	\$17.38	\$25.09	-1.0	\$67,377	-\$28,500	\$64,702
\$4,174	\$19.46	\$19.10	\$28.62	-3.8	-\$8,305	-\$75,121	-\$78,552

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)
\$9,657	\$1,366	0.75	0.72	4.20	\$72	99	54
\$12,646	\$2,321	0.54	0.78	1.65	\$411	85	38
\$13,824	\$3,048	0.47	0.82	1.33	\$628	72	25
\$15,937	\$3,815	0.38	0.85	0.95	\$760	65	20
\$27,029	\$6,301	0.26	0.88	-0.11	\$1,088	54	13

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

PROGRESS OF THE FARM BUSINESS

Same 30 New York Dairy Farms, 500 to 999 Cows, 2020 & 2021, DFBS

SELECTED FACTORS	Average of 30 Farms ¹		Percent Change
	2020	2021	
Size of Business			
Average number of cows	671	681	1%
Percent heifers to cows, average for year	74%	74%	-0.5%
Milk sold, pounds	16,324,691	16,945,487	4%
Worker equivalent	13.2	13.1	-0.2%
Total tillable acres	1,421	1,436	1%
Rates of Production			
Milk sold per cow, pounds	24,335	24,892	2%
Hay DM per acre, tons	3	3.5	17%
Corn silage per acre, tons	18.6	19.7	6%
Labor Efficiency			
Cows per worker	51.0	51.9	1.6%
Milk sold per worker, pounds	1,241,421	1,290,593	4.0%
Cost Control and Milk Price			
Grain & concentrate per cwt. milk	\$5.93	\$6.54	10%
Net milk income over purchased grain & conc. per cow	\$2,604	\$3,004	15%
Dairy feed & crop expense per cwt. milk	\$7.61	\$8.26	9%
Labor and machinery costs per cow	\$1,845	\$1,932	5%
Hired labor costs per cwt. milk	\$2.88	\$2.97	3%
Hired labor costs per worker equivalent	\$44,696	\$48,246	7.9%
Total Farm Operating Costs per Cwt.	\$18.79	\$19.63	4%
Operating cost of producing milk per cwt. ²	\$15.82	\$16.38	4%
Purchased input cost of producing milk per cwt. ²	\$17.82	\$18.24	2%
Total cost of producing milk per cwt. ²	\$20.71	\$21.18	2%
Net milk price per cwt.	\$17.13	\$18.71	9%
Government Receipts per cwt.	\$2.49	\$0.20	-92%
Capital Efficiency (average for year)			
Farm capital per cow	\$12,722	\$13,222	4%
Machinery and equipment per cow	\$2,274	\$2,446	8%
Asset turnover ratio	0.47	0.47	0%
Profitability			
Net farm income without appreciation	\$468,219	\$309,216	-34%
Net farm income without appreciation per cow	\$698	\$454	-35%
Net farm income with appreciation	\$645,074	\$568,901	-12%
Net farm income with appreciation per cow	\$962	\$836	-13%
Labor & management income per operator/manager	\$76,063	-\$1,499	-102%
Rate return on equity capital with appreciation	8.0%	6.2%	-23%
Rate return on equity capital without appreciation	4.9%	2.0%	-60%
Rate return on all capital with appreciation	6.7%	5.3%	-21%
Rate return on all capital without appreciation	4.6%	2.4%	-49%
Financial Summary (based on market value, excluding deferred taxes)			
Farm net worth, end year	\$6,082,310	\$6,398,880	5%
Debt to asset ratio	0.31	0.31	0%
Farm debt per cow	\$3,983	\$4,105	3%
Debt coverage ratio	1.71	1.28	-25%

¹Farm participating both years

²Due to the pandemic and the government response, the change 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 30 New York Dairy Farms, 500 to 999 Cows, 2020 & 2021, DFBS

Item	2020		2021		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	671		681		1%
Cwt. of milk sold		163,247		169,455	4%
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,496	\$18.48	\$4,994	\$20.06	9%
Dairy cattle	\$230	\$0.94	\$229	\$0.92	-2%
Dairy calves	\$37	\$0.15	\$55	\$0.22	47%
Other livestock	\$7	\$0.03	\$18	\$0.07	133%
Crops	\$58	\$0.24	\$238	\$0.95	296%
Miscellaneous receipts	<u>\$943</u>	<u>\$3.87</u>	<u>\$273</u>	<u>\$1.10</u>	-72%
Total Operating Receipts	\$5,770	\$23.71	\$5,806	\$23.33	-2%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$700	\$2.88	\$739	\$2.97	3%
Dairy grain & concentrate	\$1,443	\$5.93	\$1,629	\$6.54	10%
Dairy roughage	\$52	\$0.21	\$50	\$0.20	-5%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$0	\$0.00	\$0	\$0.00	NA
Machine hire, rent & lease	\$200	\$0.82	\$204	\$0.82	0%
Machine repair & vehicle expense	\$272	\$1.12	\$279	\$1.12	0%
Fuel, oil & grease	\$107	\$0.44	\$142	\$0.57	30%
Replacement livestock	\$42	\$0.17	\$40	\$0.16	-6%
Breeding	\$61	\$0.25	\$60	\$0.24	-4%
Veterinary & medicine	\$143	\$0.59	\$147	\$0.59	0%
Milk marketing	\$328	\$1.35	\$338	\$1.36	1%
Bedding	\$95	\$0.39	\$98	\$0.40	3%
Milking supplies	\$83	\$0.34	\$83	\$0.34	0%
Cattle lease	\$0	\$0.00	\$0	\$0.00	NA
Custom boarding	\$59	\$0.24	\$58	\$0.23	-4%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$25	\$0.10	\$20	\$0.08	-20%
Other livestock expense	\$24	\$0.10	\$23	\$0.09	-10%
Fertilizer & lime	\$166	\$0.68	\$179	\$0.72	6%
Seeds & plants	\$125	\$0.51	\$127	\$0.51	0%
Spray & other crop expense	\$57	\$0.23	\$65	\$0.26	13%
Crop professional fees	\$9	\$0.04	\$6	\$0.02	-50%
Land, building & fence repair	\$65	\$0.27	\$81	\$0.32	19%
Taxes	\$70	\$0.29	\$72	\$0.29	0%
Real estate rent & lease	\$91	\$0.37	\$93	\$0.37	0%
Insurance	\$59	\$0.24	\$59	\$0.24	0%
Utilities	\$83	\$0.34	\$97	\$0.39	15%
Interest paid	\$155	\$0.64	\$133	\$0.53	-17%
Other professional fees	\$32	\$0.13	\$33	\$0.13	0%
Miscellaneous	<u>\$26</u>	<u>\$0.11</u>	<u>\$27</u>	<u>\$0.11</u>	0%
Total Operating Expenses	\$4,572	\$18.79	\$4,886	\$19.63	4%
Expansion livestock	\$15	\$0.06	\$4	\$0.02	-67%
Extraordinary expenses	\$1	\$0.00	\$0	\$0.00	NA
Machinery depreciation	\$288	\$1.18	\$273	\$1.09	-8%
Real estate depreciation	<u>\$197</u>	<u>\$0.81</u>	<u>\$190</u>	<u>\$0.76</u>	-6%
Total Expenses	\$5,073	\$20.84	\$5,353	\$21.50	3%
Net Farm Income w/o Appreciation	\$698	\$2.87	\$454	\$1.82	-37%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool that can assist in analyzing your business. The five numbers in each column represent the average of each quintile of farms included in the DFBS. You can compare your farm's data to others in the DFBS by drawing a line through or near the number in each column which most closely represents your current level of performance. Each column is sorted independently. Use this information to identify areas of opportunity in your business.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

32 New York Dairy Farms, 500 to 999 Cows, 2021, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds of Milk Sold	Pounds of Milk Sold Per Cow	Tons of Hay Crop DM/Acre	Tons of Corn Silage Per Acre	Cows Per Worker	Pounds of Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
20.0	908	24,277,342	29,321	5.1	24.4	81.7	1,969,650
17.1	776	19,991,974	27,140	4.1	21.6	59.7	1,489,282
13.1	669	17,382,152	26,287	3.7	20.3	52.0	1,304,690
10.5	589	14,677,262	25,040	3.3	18.4	46.9	1,170,699
7.8	520	11,253,199	18,832	2.1	12.1	38.6	940,349

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. Of Milk	Hired Labor Cost Per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$1,052	\$4.82	24	\$601	\$1,289	\$1,549	\$7.29	\$42,358
\$1,582	\$6.05	31	\$860	\$1,755	\$2,029	\$7.95	\$45,261
\$1,706	\$6.58	32	\$1,017	\$1,933	\$2,115	\$8.22	\$47,421
\$1,800	\$6.92	34	\$1,190	\$2,160	\$2,264	\$8.50	\$49,935
\$1,969	\$7.75	38	\$1,554	\$2,696	\$2,425	\$9.52	\$55,302

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost of Milk Production Per Cwt.	Total Cost of Milk Production Per Cwt.	% 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)
\$5,866	\$22.22	\$13.31	\$18.81	6.5	\$858,637	\$206,217	\$1,049,308
\$5,408	\$20.30	\$15.04	\$19.84	4.9	\$595,945	\$102,156	\$587,156
\$5,221	\$20.03	\$16.23	\$20.95	3.4	\$425,947	\$40,661	\$436,539
\$4,947	\$19.70	\$17.86	\$22.31	1.2	\$190,642	-\$13,715	\$183,395
\$3,947	\$18.88	\$20.24	\$25.05	-2.6	-\$197,382	-\$247,147	-\$116,469

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)
\$9,013	\$914	0.64	0.73	5.17	\$64	96	63
\$11,745	\$1,842	0.55	0.78	1.68	\$435	84	35
\$13,342	\$2,393	0.48	0.81	1.18	\$637	71	22
\$15,374	\$2,968	0.41	0.85	0.57	\$736	59	16
\$18,776	\$4,421	0.37	0.94	0.02	\$1,320	46	-12

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

PROGRESS OF THE FARM BUSINESS

Same 37 New York Dairy Farms, 1,000 to 1,499 Cows, 2020 & 2021, DFBS

SELECTED FACTORS	Average of 37 Farms ¹		Percent Change
	2020	2021	
Size of Business			
Average number of cows	1,230	1,234	0.3%
Percent heifers to cows, average for year	76%	75%	-2%
Milk sold, pounds	33,460,325	34,149,591	2%
Worker equivalent	23.8	23.5	-1%
Total tillable acres	2,179	2,272	4%
Rates of Production			
Milk sold per cow, pounds	27,200	27,684	2%
Hay DM per acre, tons	3	3.6	20%
Corn silage per acre, tons	18.7	19.6	5%
Labor Efficiency			
Cows per worker	51.6	52.5	1.8%
Milk sold per worker, pounds	1,404,126	1,453,793	3.5%
Cost Control and Milk Price			
Grain & concentrate per cwt. milk	\$6.07	\$6.84	13%
Net milk income over purchased grain & conc. per cow	\$3,158	\$3,244	3%
Dairy feed & crop expense per cwt. milk	\$7.58	\$8.55	13%
Labor and machinery costs per cow	\$1,778	\$1,836	3%
Hired labor costs per cwt. milk	\$3.07	\$3.08	0.5%
Hired labor costs per worker equivalent	\$48,321	\$50,281	4.1%
Total Farm Operating Costs per Cwt.	\$18.34	\$19.45	6%
Operating cost of producing milk per cwt. ²	\$16.05	\$16.34	2%
Purchased input cost of producing milk per cwt. ²	\$17.55	\$17.84	2%
Total cost of producing milk per cwt. ²	\$19.57	\$19.97	2%
Net milk price per cwt.	\$17.32	\$18.51	7%
Government Receipts per cwt.	\$2.49	\$0.17	-93%
Capital Efficiency (average for year)			
Farm capital per cow	\$11,623	\$12,380	7%
Machinery and equipment per cow	\$1,755	\$1,890	8%
Asset turnover ratio	0.56	0.54	-4%
Profitability			
Net farm income without appreciation	\$1,117,841	\$693,664	-38%
Net farm income without appreciation per cow	\$909	\$562	-38%
Net farm income with appreciation	\$1,418,620	\$1,098,964	-23%
Net farm income with appreciation per cow	\$1,153	\$891	-23%
Labor & management income per operator/manager	\$280,763	\$80,612	-71%
Rate return on equity capital with appreciation	13.1%	8.7%	-34%
Rate return on equity capital without appreciation	9.8%	4.7%	-52%
Rate return on all capital with appreciation	9.8%	6.9%	-30%
Rate return on all capital without appreciation	7.7%	4.3%	-45%
Financial Summary (based on market value, excluding deferred taxes)			
Farm net worth, end year	\$9,925,473	\$10,457,460	5%
Debt to asset ratio	0.33	0.34	3%
Farm debt per cow	\$3,957	\$4,247	7%
Debt coverage ratio	2.04	1.4	-31%

¹Farm participating both years

²Due to the pandemic and the government response, the change 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, 1,000 to 1,499 Cows, 2020 & 2021, DFBS

Item	2020		2021		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	1,230		1,234		0.3%
Cwt. of milk sold		334,603		341,496	2%
ACCRUAL OPERATING RECEIPTS					
Milk	\$5,082	\$18.68	\$5,502	\$19.88	6%
Dairy cattle	\$268	\$0.99	\$266	\$0.96	-3%
Dairy calves	\$37	\$0.14	\$69	\$0.25	79%
Other livestock	\$30	\$0.11	\$42	\$0.15	36%
Crops	\$110	\$0.40	\$302	\$1.09	173%
Miscellaneous receipts	<u>\$791</u>	<u>\$2.91</u>	<u>\$185</u>	<u>\$0.67</u>	-77%
Total Operating Receipts	\$6,318	\$23.23	\$6,367	\$23.00	-1%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$835	\$3.07	\$854	\$3.08	0.3%
Dairy grain & concentrate	\$1,651	\$6.07	\$1,893	\$6.84	13%
Dairy roughage	\$132	\$0.49	\$137	\$0.49	0%
Nondairy feed	\$1	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.01	\$2	\$0.01	0%
Machine hire, rent & lease	\$163	\$0.60	\$154	\$0.56	-7%
Machine repair & vehicle expense	\$266	\$0.98	\$280	\$1.01	3%
Fuel, oil & grease	\$115	\$0.42	\$147	\$0.53	26%
Replacement livestock	\$27	\$0.10	\$32	\$0.12	20%
Breeding	\$48	\$0.18	\$50	\$0.18	0%
Veterinary & medicine	\$152	\$0.56	\$156	\$0.56	0%
Milk marketing	\$371	\$1.37	\$377	\$1.36	-1%
Bedding	\$99	\$0.36	\$100	\$0.36	0%
Milking supplies	\$102	\$0.38	\$103	\$0.37	-3%
Cattle lease	\$9	\$0.03	\$3	\$0.01	-67%
Custom boarding	\$98	\$0.36	\$101	\$0.37	3%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$15	\$0.05	\$19	\$0.07	40%
Other livestock expense	\$16	\$0.06	\$23	\$0.08	33%
Fertilizer & lime	\$102	\$0.38	\$133	\$0.48	26%
Seeds & plants	\$109	\$0.40	\$129	\$0.47	18%
Spray & other crop expense	\$60	\$0.22	\$65	\$0.23	5%
Crop professional fees	\$7	\$0.03	\$11	\$0.04	33%
Land, building & fence repair	\$96	\$0.35	\$85	\$0.31	-11%
Taxes	\$66	\$0.24	\$70	\$0.25	4%
Real estate rent & lease	\$95	\$0.35	\$106	\$0.38	9%
Insurance	\$45	\$0.17	\$53	\$0.19	12%
Utilities	\$93	\$0.34	\$107	\$0.39	15%
Interest paid	\$162	\$0.60	\$144	\$0.52	-13%
Other professional fees	\$24	\$0.09	\$23	\$0.08	-11%
Miscellaneous	<u>\$28</u>	<u>\$0.10</u>	<u>\$29</u>	<u>\$0.11</u>	10%
Total Operating Expenses	\$4,989	\$18.34	\$5,385	\$19.45	6%
Expansion livestock	\$11	\$0.04	\$4	\$0.01	-75%
Extraordinary expenses	\$3	\$0.01	\$1	\$0.00	-100%
Machinery depreciation	\$223	\$0.82	\$217	\$0.78	-5%
Real estate depreciation	<u>\$183</u>	<u>\$0.67</u>	<u>\$198</u>	<u>\$0.71</u>	6%
Total Expenses	\$5,409	\$19.88	\$5,805	\$20.95	5%
Net Farm Income w/o Appreciation	\$909	\$3.34	\$562	\$2.03	-39%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

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FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

37 New York Dairy Farms, 1,000 to 1,499 Cows, 2021, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds of Milk Sold	Pounds of Milk Sold Per Cow	Tons of Hay Crop DM/Acre	Tons of Corn Silage Per Acre	Cows Per Worker	Pounds of Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
30.2	1,455	40,926,563	29,909	5.1	23.6	72.3	2,026,663
26.1	1,362	37,523,561	28,633	4.3	22.0	59.1	1,576,816
23.7	1,233	34,301,527	28,080	3.7	20.4	51.6	1,453,778
21.2	1,133	30,740,776	27,319	3.1	17.3	48.4	1,332,125
17.4	1,029	28,543,386	25,063	1.4	9.4	42.1	1,171,026

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. Of Milk	Hired Labor Cost Per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$1,612	\$5.85	30	\$608	\$1,326	\$1,977	\$7.25	\$43,935
\$1,806	\$6.54	33	\$819	\$1,724	\$2,243	\$8.24	\$46,952
\$1,909	\$6.94	35	\$900	\$1,896	\$2,395	\$8.72	\$49,370
\$2,009	\$7.22	36	\$1,004	\$2,022	\$2,540	\$9.02	\$52,318
\$2,172	\$7.79	39	\$1,185	\$2,335	\$2,753	\$9.73	\$59,697

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost of Milk Production Per Cwt.	Total Cost of Milk Production Per Cwt.	% 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)
\$6,001	\$21.06	\$14.32	\$18.33	8.7	\$1,459,257	\$568,963	\$1,801,530
\$5,741	\$20.17	\$15.60	\$19.40	5.7	\$907,809	\$176,359	\$1,041,195
\$5,540	\$19.92	\$16.41	\$20.00	4.6	\$678,426	\$94,948	\$547,728
\$5,355	\$19.53	\$17.18	\$20.59	3.0	\$512,959	\$17,383	\$267,271
\$5,025	\$19.02	\$18.86	\$22.19	0.2	\$30,431	-\$246,595	-\$257,612

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)
\$8,340	\$691	0.79	0.75	11.32	\$117	94	63
\$11,064	\$1,533	0.62	0.79	1.69	\$427	74	32
\$12,252	\$2,014	0.56	0.82	1.42	\$648	66	22
\$14,365	\$2,388	0.50	0.86	0.91	\$874	58	18
\$17,084	\$3,134	0.42	0.92	0.08	\$1,068	33	7

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

PROGRESS OF THE FARM BUSINESS

Same 32 New York Dairy Farms, 1,500 Cows and Greater, 2020 & 2021, DFBS

SELECTED FACTORS	Average of 32 Farms ¹		Percent Change
	2020	2021	
Size of Business			
Average number of cows	2,482	2,585	4%
Percent heifers to cows, average for year	78%	76%	-3%
Milk sold, pounds	66,246,521	71,106,893	7%
Worker equivalent	45.3	45.9	1%
Total tillable acres	3,891	4,044	4%
Rates of Production			
Milk sold per cow, pounds	26,686	27,508	3%
Hay DM per acre, tons	3.2	3.8	19%
Corn silage per acre, tons	17.9	19.0	6%
Labor Efficiency			
Cows per worker	54.8	56.4	2.8%
Milk sold per worker, pounds	1,463,365	1,550,521	6.0%
Cost Control and Milk Price			
Grain & concentrate per cwt. milk	\$6.02	\$6.66	11%
Net milk income over purchased grain & conc. per cow	\$3,045	\$3,184	5%
Dairy feed & crop expense per cwt. milk	\$7.39	\$8.15	10%
Labor and machinery costs per cow	\$1,659	\$1,753	6%
Hired labor costs per cwt. milk	\$3.08	\$3.06	-1%
Hired labor costs per worker equivalent	\$49,086	\$51,552	5.0%
Total Farm Operating Costs per Cwt.	\$17.66	\$18.43	4%
Operating cost of producing milk per cwt. ²	\$16.10	\$15.85	-2%
Purchased input cost of producing milk per cwt. ²	\$17.57	\$17.26	-2%
Total cost of producing milk per cwt. ²	\$19.56	\$19.26	-2%
Net milk price per cwt.	\$17.23	\$18.25	6%
Government Receipts per cwt.	\$2.49	\$0.08	-97%
Capital Efficiency (average for year)			
Farm capital per cow	\$11,304	\$11,794	4%
Machinery and equipment per cow	\$1,578	\$1,634	4%
Asset turnover ratio	0.54	0.54	0%
Profitability			
Net farm income without appreciation	\$2,091,562	\$1,640,336	-22%
Net farm income without appreciation per cow	\$843	\$635	-25%
Net farm income with appreciation	\$2,518,794	\$2,382,978	-5%
Net farm income with appreciation per cow	\$1,015	\$922	-9%
Labor & management income per operator/manager	\$348,803	\$186,035	-47%
Rate return on equity capital with appreciation	11.1%	9.5%	-14%
Rate return on equity capital without appreciation	8.9%	6.0%	-33%
Rate return on all capital with appreciation	8.9%	7.6%	-15%
Rate return on all capital without appreciation	7.3%	5.1%	-30%
Financial Summary (based on market value, excluding deferred taxes)			
Farm net worth, end year	\$20,598,983	\$21,945,772	7%
Debt to asset ratio	0.3	0.31	3%
Farm debt per cow	\$3,414	\$3,704	8%
Debt coverage ratio	2.36	1.65	-30%

¹Farm participating both years

²Due to the pandemic and the government response, the change 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 32 New York Dairy Farms, 1,500 Cows and Greater, 2020 & 2021, DFBS

Item	2020		2021		% Change Per Cwt.
	Per Cow ¹	Per Cwt. ¹	Per Cow ¹	Per Cwt. ¹	
Average number of cows	2,482		2,585		4%
Cwt. of milk sold		662,465		711,069	7%
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,941	\$18.51	\$5,383	\$19.57	6%
Dairy cattle	\$295	\$1.11	\$294	\$1.07	-4%
Dairy calves	\$43	\$0.16	\$64	\$0.23	44%
Other livestock	\$2	\$0.01	\$14	\$0.05	400%
Crops	\$65	\$0.24	\$228	\$0.83	246%
Miscellaneous receipts	<u>\$626</u>	<u>\$2.35</u>	<u>\$152</u>	<u>\$0.55</u>	-77%
Total Operating Receipts	\$5,972	\$22.38	\$6,135	\$22.30	0%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$822	\$3.08	\$843	\$3.06	-1%
Dairy grain & concentrate	\$1,606	\$6.02	\$1,831	\$6.66	11%
Dairy roughage	\$123	\$0.46	\$147	\$0.53	15%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.00	\$0	\$0.00	NA
Machine hire, rent & lease	\$136	\$0.51	\$156	\$0.57	12%
Machine repair & vehicle expense	\$252	\$0.95	\$266	\$0.97	2%
Fuel, oil & grease	\$105	\$0.39	\$141	\$0.51	31%
Replacement livestock	\$38	\$0.14	\$29	\$0.10	-29%
Breeding	\$57	\$0.21	\$58	\$0.21	0%
Veterinary & medicine	\$144	\$0.54	\$148	\$0.54	0%
Milk marketing	\$342	\$1.28	\$363	\$1.32	3%
Bedding	\$83	\$0.31	\$88	\$0.32	3%
Milking supplies	\$93	\$0.35	\$88	\$0.32	-9%
Cattle lease	\$1	\$0.01	\$2	\$0.01	0%
Custom boarding	\$103	\$0.39	\$99	\$0.36	-8%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$20	\$0.07	\$18	\$0.06	-14%
Other livestock expense	\$22	\$0.08	\$28	\$0.10	25%
Fertilizer & lime	\$87	\$0.33	\$106	\$0.39	18%
Seeds & plants	\$102	\$0.38	\$99	\$0.36	-5%
Spray & other crop expense	\$50	\$0.19	\$55	\$0.20	5%
Crop professional fees	\$5	\$0.02	\$4	\$0.01	-50%
Land, building & fence repair	\$85	\$0.32	\$76	\$0.28	-13%
Taxes	\$57	\$0.21	\$59	\$0.21	0%
Real estate rent & lease	\$80	\$0.30	\$81	\$0.29	-3%
Insurance	\$42	\$0.16	\$38	\$0.14	-13%
Utilities	\$81	\$0.30	\$94	\$0.34	13%
Interest paid	\$127	\$0.48	\$106	\$0.39	-19%
Other professional fees	\$25	\$0.09	\$22	\$0.08	-11%
Miscellaneous	<u>\$25</u>	<u>\$0.09</u>	<u>\$25</u>	<u>\$0.09</u>	0%
Total Operating Expenses	\$4,714	\$17.66	\$5,070	\$18.43	4%
Expansion livestock	\$23	\$0.09	\$41	\$0.15	67%
Extraordinary expenses	\$0	\$0.00	\$0	\$0.00	NA
Machinery depreciation	\$202	\$0.76	\$205	\$0.75	-1%
Real estate depreciation	<u>\$190</u>	<u>\$0.71</u>	<u>\$183</u>	<u>\$0.67</u>	-6%
Total Expenses	\$5,129	\$19.22	\$5,499	\$20.00	4%
Net Farm Income w/o Appreciation	\$843	\$3.16	\$635	\$2.31	-27%

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool that can assist in analyzing your business. The five numbers in each column represent the average of each quintile of farms included in the DFBS. You can compare your farm's data to others in the DFBS by drawing a line through or near the number in each column which most closely represents your current level of performance. Each column is sorted independently. Use this information to identify areas of opportunity in your business.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

33 New York Dairy Farms, 1,500 Cows and Greater, 2021, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds of Milk Sold	Pounds of Milk Sold Per Cow	Tons of Hay Crop DM/Acre	Tons of Corn Silage Per Acre	Cows Per Worker	Pounds of Milk Sold Per Worker
(14) ¹	(12)	(12)	(12)	(11)	(11)	(14)	(14)
77.2	4,288	119,501,511	29,823	5.5	24.3	73.5	2,047,172
51.0	3,039	85,112,872	28,613	4.7	21.5	61.7	1,696,495
43.7	2,318	62,924,663	27,621	3.9	19.6	56.4	1,537,062
34.8	1,874	49,984,474	26,734	3.5	17.8	52.3	1,405,899
26.5	1,629	44,177,182	24,773	2.6	14.8	46.1	1,252,218

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. Of Milk	Hired Labor Cost Per Wkr. Equivalent
(12)	(12)	(12)	(14)	(14)	(12)	(12)	(14)
\$1,415	\$5.43	28	\$616	\$1,413	\$1,734	\$6.75	\$44,589
\$1,657	\$6.16	31	\$764	\$1,635	\$2,025	\$7.47	\$47,970
\$1,811	\$6.56	34	\$869	\$1,770	\$2,213	\$8.01	\$50,745
\$1,991	\$6.99	36	\$968	\$1,900	\$2,430	\$8.61	\$54,885
\$2,241	\$7.95	40	\$1,113	\$2,184	\$2,766	\$9.66	\$61,676

Value of Production			Profitability				
Milk Receipts Per Cow	Milk Receipts Per Cwt.	Opr. Cost of Milk Production Per Cwt.	Total Cost of Milk Production Per Cwt.	% 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)
\$5,905	\$20.79	\$13.40	\$17.81	7.8	\$3,201,218	\$705,572	\$3,378,469
\$5,644	\$20.08	\$14.94	\$18.60	6.3	\$2,222,345	\$363,788	\$2,097,658
\$5,492	\$19.58	\$15.96	\$19.33	5.6	\$1,645,397	\$220,413	\$1,566,867
\$5,242	\$19.18	\$16.75	\$20.13	3.9	\$1,177,341	\$84,608	\$678,422
\$4,714	\$18.66	\$18.11	\$21.38	1.0	\$269,236	-\$228,779	-\$675,600

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)
\$8,249	\$918	0.84	0.71	8.50	\$33	96	108
\$10,651	\$1,281	0.62	0.79	2.64	\$275	85	34
\$11,521	\$1,643	0.57	0.81	1.43	\$540	70	25
\$13,409	\$2,070	0.51	0.85	1.11	\$703	56	21
\$18,149	\$2,738	0.38	0.91	0.16	\$946	42	12

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

OTHER A.E.M. EXTENSION BULLETINS

EB No	Title	Fee (if applicable)	Author(s)
2022-10	Progress of the Dairy Farm Report, Selected Financial and Production Factors, New York, 2021		Karszes, J. and Augello, L.
2022-09	2020 Farm Employee Compensation Benchmark Report		Stup, R., Smith, L., and Karszes, J.
2022-08	The Economic Contributions of Agriculture to the Northern New York Economy: Jefferson, Lewis, Oswego, and St. Lawrence Counties, 2019 & 2020		Schmit, T., and Liu, X.
2022-07	Using Farm Assets for Retirement		Richards, S.
2022-06	Estate Planning for Farm Families		Richards, S.
2022-05	Doing Business Together - A joint Business Agreement Guide		Richards, S.
2022-04	Business Transfer Guide - Juniot Generation		Richards, S.
2022-03	Business Transfer Guide - Senior Generation		Richards, S.
2022-02	Starting an AG-Business? A Pre-Planning Guide		Richards, S.
2022-01	Six Year Trend Analysis 2020		Karszes, J., and Augello, L.
2021-07	Progress of the Dairy Farm Report: DFBS, NYS, 2020, 143 Farms		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	Jored Labor on New York State Dairy Farms: Cost, Efficiency & Change from 2011 through 2020		Karszes, J and Wolf C

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