

2022 VT Organic Dairy Cost of Production by Cost Groups



	Low COP			Medium COP			High COP		
	Average	Min	Max	Average	Min	Max	Average	Min	Max
Farm Information									
Herd Size	100	46	185	75	54	107	78	28	188
Acres	334	95	700	410	303	600	378	114	899
Acres per cow	3.3	1.2	5.2	5.8	3.4	9.3	4.8	3.7	5.9
Fertilizer & seed expenses (\$/acre)	\$16	\$0	\$56	\$3	\$0	\$10	\$9	\$0	\$36
Purchased forage expenses (\$/cow)	\$315	\$0	\$842	\$94	\$0	\$460	\$78	\$0	\$392
Purchased forage expenses (\$/acre)	\$172	\$0	\$687	\$17	\$0	\$96	\$16	\$0	\$82
Milk Information									
Total milk sold (lbs/year)	1,807,310	493,877	4,022,476	1,021,901	633,700	1,907,988	924,111	283,660	1,954,341
Total milk sold (CWTs)	18,073	4,939	40,225	10,219	6,337	19,080	9,241	2,837	19,543
Total milk sold (CWT eq.)	19,759	6,414	41,174	11,389	7,319	21,281	9,533	3,140	19,702
Milk per cow (lbs/cow)	16,581	9,324	21,743	13,340	11,418	17,915	12,322	10,315	14,844
Milk per acre (lbs/acre)	\$5,859	\$2,684	\$8,688	\$2,638	\$1,378	\$5,300	\$2,662	\$2,174	\$3,971
Fat per cow (lbs/cow)	663	383	835	460	-	654	550	503	609
Fat per acre (lbs/acre)	389	106	696	304	-	453	259	91	439
Labor efficiency									
Full Time Equivalents (FTEs)*	2.5	1.5	4.1	3.0	2.0	3.7	2.9	1.3	3.6
Cows per FTE	41	26	71	25	20	34	26	18	53
Milk Sold per FTE (CWT eq.†)	7,400	3,379	15,702	3,103	1,969	3,801	3,528	2,565	6,827
Return to labor	\$33,159	\$23,121	\$48,709	\$2,391	-\$17,835	\$21,568	-\$9,386	-\$36,234	\$13,185
Labor earnings per hour	\$11.05	\$7.71	\$16.24	\$0.80	-\$5.95	\$7.19	-\$3.13	-\$12.08	\$4.39
Unpaid labor cost	\$45,989	\$40,000	\$80,000	\$57,771	\$40,000	\$80,000	\$68,539	\$52,800	\$80,000
Unpaid labor (hours)	\$4,338	\$3,380	\$6,552	\$6,248	\$1,291	\$8,840	\$6,654	\$3,972	\$10,556
Farm Income									
Milk price (\$/CWT)	\$32.99	\$30.67	\$35.65	\$33.28	\$30.00	\$37.61	\$34.04	\$30.87	\$38.08
Gross Milk Income	\$610,103	\$155,906	\$1,434,201	\$338,687	\$212,287	\$606,560	\$321,899	\$102,472	\$744,186
Gross Cull, Calf, & Livestock Sales	\$20,872	\$4,703	\$41,853	\$19,609	\$6,311	\$46,596	\$13,862	\$425	\$41,116
Gross Crop Sales	\$571	\$0	\$4,000	\$1,776	\$0	\$12,435	\$5,151	\$0	\$15,261
Other Income**	\$28,974	\$3,553	\$48,709	\$18,173	\$2,708	\$44,469	\$17,697	\$7,171	\$44,118
Total Gross Income	\$660,520	\$179,669	\$1,499,197	\$378,245	\$228,216	\$697,625	\$358,609	\$112,578	\$844,681
Farm Expenses (\$/CWT eq.)†									
Bedding	\$0.48	\$0.00	\$1.10	\$0.74	\$0.00	\$2.03	\$0.86	\$0.09	\$1.79
Breeding Fees	\$0.36	\$0.00	\$0.85	\$0.24	\$0.19	\$0.32	\$0.54	\$0.24	\$0.79
Custom Hire	\$0.64	\$0.00	\$2.21	\$0.59	\$0.00	\$1.28	\$2.19	\$0.04	\$7.40
Machine Rentals	\$0.01	\$0.00	\$0.04	\$0.83	\$0.00	\$5.66	\$0.04	\$0.00	\$0.15
Land Rentals	\$0.42	\$0.00	\$0.91	\$1.64	\$0.07	\$6.54	\$0.98	\$0.00	\$3.03
Supplies	\$2.46	\$0.84	\$3.87	\$2.05	\$1.06	\$4.78	\$1.67	\$1.19	\$2.44
Farm Insurance	\$0.89	\$0.61	\$1.47	\$1.05	\$0.00	\$2.12	\$1.28	\$0.55	\$1.74
Fuel, Gas and Oil	\$1.38	\$0.82	\$1.90	\$1.71	\$0.91	\$2.78	\$1.41	\$0.86	\$1.84
Hired Labor	\$3.08	\$1.67	\$4.46	\$2.08	\$0.55	\$5.39	\$3.36	\$0.00	\$8.31
Property Taxes	\$0.48	\$0.00	\$1.19	\$0.59	\$0.00	\$0.96	\$0.76	\$0.00	\$1.22
Purchased Forages	\$2.21	\$0.00	\$9.02	\$0.68	\$0.00	\$3.26	\$0.75	\$0.00	\$3.74
Purchased Grain	\$9.66	\$4.64	\$15.57	\$10.26	\$7.18	\$15.27	\$11.93	\$7.70	\$15.76
Purchased Minerals	\$2.01	\$0.91	\$2.95	\$2.54	\$0.89	\$3.76	\$3.57	\$2.02	\$4.95
Repairs	\$0.33	\$0.00	\$1.46	\$0.11	\$0.00	\$0.43	\$0.37	\$0.00	\$1.47
Seed & Fertilizer	\$1.34	\$0.90	\$1.68	\$1.65	\$0.27	\$3.55	\$1.27	\$0.26	\$2.05
Utilities	\$0.34	\$0.10	\$0.47	\$0.43	\$0.15	\$1.30	\$0.46	\$0.17	\$1.12
Veterinary & Medicine	\$0.42	\$0.14	\$0.98	\$0.46	\$0.09	\$0.71	\$0.79	\$0.46	\$1.17
Stop & Hauling	\$0.65	\$0.24	\$1.10	\$0.83	\$0.38	\$1.52	\$1.02	\$0.60	\$1.57
Other***	\$27.15	\$24.76	\$29.89	\$28.49	\$22.91	\$34.45	\$33.25	\$24.22	\$41.91
Total Cash Expense (\$/CWT eq.)	\$34.32	\$31.08	\$35.72	\$39.80	\$36.16	\$41.98	\$48.75	\$44.61	\$51.56
Farm Expenses (\$/cow)									
Bedding/cow	\$80	\$0	\$223	\$111	\$0	\$286	\$105	\$13	\$218
Breeding Fees/cow	\$65	\$0	\$174	\$35	\$25	\$42	\$71	\$25	\$114
Custom Hire/cow	\$127	\$0	\$506	\$89	\$0	\$181	\$260	\$5	\$776
Machine Rental/cow	\$1	\$0	\$6	\$126	\$0	\$855	\$6	\$0	\$24
Land Rental/cow	\$73	\$0	\$209	\$238	\$9	\$862	\$116	\$0	\$369
Dairy Supplies/cow	\$479	\$78	\$886	\$295	\$149	\$623	\$218	\$135	\$353
Farm Insurance/cow	\$157	\$116	\$230	\$148	\$0	\$276	\$172	\$57	\$269
Fuel, Gas and Oil/cow	\$256	\$128	\$391	\$250	\$133	\$420	\$183	\$98	\$267
Hired Labor/cow	\$574	\$284	\$917	\$295	\$81	\$703	\$493	\$0	\$1,344
Property Taxes/cow	\$94	\$0	\$265	\$89	\$0	\$145	\$102	\$0	\$197
Purchased Forages/cow	\$315	\$0	\$842	\$94	\$0	\$460	\$78	\$0	\$392
Purchased Grain/cow	\$1,916	\$433	\$3,569	\$1,575	\$935	\$3,052	\$1,538	\$879	\$2,124

2022 VT Organic Dairy Cost of Production by Cost Groups



	Low COP			Medium COP			High COP		
	Average	Min	Max	Average	Min	Max	Average	Min	Max
Repairs/cow	\$394	\$85	\$606	\$380	\$116	\$529	\$459	\$233	\$703
Seed, Chem and Fert/cow	\$63	\$0	\$269	\$16	\$0	\$57	\$52	\$0	\$213
Utilities/cow	\$246	\$141	\$345	\$238	\$55	\$536	\$160	\$37	\$250
Veterinary & Medicine/cow	\$60	\$23	\$105	\$71	\$19	\$261	\$59	\$20	\$127
Milk Hauling/Stop Charges/cow	\$72	\$31	\$148	\$70	\$14	\$121	\$101	\$48	\$143
Other ***	\$293	\$178	\$391	\$307	\$150	\$448	\$347	\$257	\$446
Total Cash Expense (\$/cow)	\$5,148	\$2,553	\$6,339	\$4,269	\$3,229	\$5,719	\$4,314	\$2,765	\$5,690
Farm Expenses (\$/farm)									
Veterinary, Medicine	\$5,265	\$2,638	\$8,156	\$6,238	\$1,429	\$27,752	\$3,297	\$1,400	\$5,307
Dairy Supplies	\$48,062	\$6,057	\$119,044	\$22,871	\$7,972	\$52,948	\$15,265	\$4,319	\$25,306
Breeding Fees	\$6,328	\$0	\$18,776	\$2,681	\$1,403	\$4,145	\$4,184	\$2,333	\$6,092
Feed Purchased	\$256,272	\$57,105	\$580,729	\$133,755	\$71,306	\$325,054	\$141,882	\$24,163	\$384,206
Repairs	\$41,002	\$6,578	\$74,449	\$28,058	\$9,861	\$54,118	\$29,320	\$15,545	\$43,779
Seed, Chem, Fert	\$7,367	\$0	\$25,061	\$1,001	\$0	\$3,181	\$3,418	\$0	\$11,411
Fuel, Gas, and Oil	\$28,419	\$9,888	\$59,155	\$18,302	\$9,464	\$27,073	\$14,239	\$2,707	\$30,041
Utilities	\$27,174	\$8,919	\$62,551	\$16,525	\$5,810	\$34,578	\$11,748	\$1,982	\$23,270
Interest Paid -- not included									
Labor Hired	\$57,315	\$14,036	\$99,048	\$23,840	\$4,620	\$59,715	\$34,478	\$0	\$71,923
Rent, Lease and Hire	\$14,504	\$0	\$41,094	\$31,957	\$1,800	\$83,154	\$46,006	\$2,696	\$174,271
Property Taxes	\$12,486	\$0	\$49,117	\$6,960	\$0	\$12,694	\$6,940	\$0	\$14,593
Farm Insurance	\$16,354	\$5,257	\$31,071	\$11,006	\$0	\$23,488	\$10,791	\$3,285	\$14,647
Other Cash Expense***	\$29,532	\$16,512	\$72,346	\$23,970	\$9,704	\$47,697	\$25,073	\$9,323	\$48,331
Total Cash Expense (\$/farm)	\$550,081	\$162,097	\$1,163,103	\$327,164	\$172,746	\$609,049	\$346,639	\$76,028	\$825,716
Net									
Net Cash Income	\$110,439	\$11,271	\$336,094	\$51,081	-\$26,581	\$101,008	\$11,970	-\$35,987	\$36,551
Inventory change	-\$25,429	-\$133,627	\$37,079	-\$22,031	-\$70,702	\$6,466	-\$49,344	-\$138,511	-\$5,091
Inventory adjustments- Feed	-\$979	-\$31,150	\$37,740	-\$2,961	-\$36,500	\$22,750	-\$20,591	-\$68,950	-\$963
Supplies and other	\$0	\$0	\$0	-\$242	-\$1,694	\$0	-\$1,500	-\$7,500	\$0
Breeding livestock	\$5,600	-\$10,050	\$24,300	\$2,890	-\$12,300	\$20,000	-\$5,020	-\$18,000	\$1,800
Income change	\$4,622	-\$31,150	\$27,690	-\$313	-\$21,100	\$22,750	-\$27,111	-\$94,450	\$837
Machinery & Equipment	\$375	-\$65,351	\$105,803	\$18,324	-\$17,048	\$139,631	-\$15,060	-\$34,688	\$1,472
Land and Buildings	-\$6,907	-\$48,348	\$0	-\$3,643	-\$13,996	\$0	-\$3,337	-\$16,683	\$0
Other Adjustments	\$2,829	\$0	\$14,752	\$104	\$0	\$726	\$148	-\$820	\$1,561
Expense change	\$3,703	-\$57,455	\$64,228	-\$14,785	-\$139,631	\$23,270	\$18,248	-\$1,472	\$35,935
Capital Purchases Minus Sales Adjustment	\$26,347	-\$1,000	\$159,932	\$36,502	-\$22,095	\$167,561	\$3,985	\$0	\$8,126
4% Equity	\$55,713	\$10,946	\$125,324	\$44,041	\$14,222	\$79,891	\$35,715	\$14,056	\$66,128
Unpaid labor cost	\$45,989	\$40,000	\$80,000	\$57,771	\$40,000	\$80,000	\$68,539	\$52,800	\$80,000
Total Cost	\$681,832	\$218,423	\$1,470,904	\$450,695	\$299,452	\$812,941	\$473,127	\$148,812	\$1,015,905
Total Cost (\$/cow)	\$5,148	\$2,553	\$6,339	\$4,269	\$3,229	\$5,719	\$4,314	\$2,765	\$5,690
Total Cost (\$/CWT eq.)	\$34.32	\$31.08	\$35.72	\$39.80	\$36.16	\$41.98	\$48.75	\$44.61	\$51.56
Depreciation FM value	\$37,166	\$5,363	\$120,477	\$26,407	\$10,929	\$59,602	\$22,382	\$5,928	\$44,061
Capital Costs (\$/cow)	\$774	\$266	\$1,329	\$908	\$505	\$1,310	\$799	\$441	\$1,155
Capital Invested (\$/cow)	\$11,009	\$4,245	\$19,197	\$13,095	\$5,838	\$15,743	\$11,675	\$5,824	\$19,140
Net farm income from operations (NFIFO) †	\$85,011	\$31,132	\$202,467	\$29,049	-\$20,115	\$95,713	-\$37,374	-\$119,546	\$31,460
Rate of Return on Assets (ROA)	1%	-2%	4%	-3%	-11%	5%	-12%	-22%	-6%
Operating Profit Margin (OPM)	4%	-4%	8%	-9%	-20%	14%	-32%	-45%	-19%
Asset Turnover Ratio (ATR)	61%	30%	118%	38%	25%	70%	39%	25%	67%

* Full time equivalent is 3000 hours per year of labor hours. Includes both paid and unpaid labor

** Other income includes government payments, co-op distributions, crop insurance proceeds, and small amounts of income from participation in workshops and events

† CWT eq. represents a hundredweight equivalent to adjust for dairy income other than milk. It is calculated by taking the income from sales of crops, calves, and other dairy income and dividing

*** Other expenses include milk testing, accounting and legal fees, certification fees, and hoof trimming. In 2018 this category also included stop and hauling charges

‡ NFIFO is gross cash income - total farm expense + inventory change + depreciation and other capital adjustments