

## Production Costs in 2014 on Selected Wisconsin Organic Dairy Farms

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**Introduction** (Pages two to four contain the actual cost of production report.)

Effective June 17<sup>th</sup>, 2010, the USDA made the pasture rule for organic certification more rigorous to require a minimum of 120 days of grazing a year and that at least 30% of dry matter intake comes from pasture during the grazing season. Consequently, all summarized herds in the 2010 summary and later meet that grazing definition. However, based on communication with participants, about two of the organic herds were less rigorous in their grazing than the typical farm in the non-organic grazing summary in 2014.

### Data Source

Eleven Wisconsin organic dairy farms were summarized by AgFA in the following cost of production report for 2014.<sup>2,3</sup> These farms ranged in size from 31-141 cows with an average herd size of 79 cows averaging 15,652 lbs of milk sold at an average price of \$30.62/CWT sold in 2014. The same six Wisconsin organic dairy farms provided useable data from 1999-2006. Two of the original six farms dropped out after 2006, but fortunately data from additional farms was added after 1999. Because the original sample size was small, this data was not released in the single year format until several years of data was judged to be reasonably consistent from year to year.

### Selected Financial Measures of Studied Farms

In 2014, income per cow averaged \$5,959 with milk sales being \$4,801 of that total. The average income per cow on the 304 Wisconsin dairy farms in AgFA that were NEITHER grazing nor organic was \$7,116 with milk sales accounting for \$5,828 of that total. However, their allocated costs<sup>4</sup> per cow were \$5,999 versus only \$4,697 for the organic farms in this study. This leaves this group of organic farms with a NFIFO/cow of \$1,262 versus a NFIFO/cow of \$1,118 for the other 304 dairy farms, although they had more cows - averaging 204 per farm. For organic farms these values compare with \$4,613 in allocated costs and \$955 in NFIFO in 2013.

NFIFO is not economic profit. Economic profit requires farm income to exceed all costs, including the opportunity costs of unpaid labor, management, and equity. Economic profit was \$665/cow for the Wisconsin organic dairy herds in 2014. On the 304 Wisconsin dairy farms in AgFA that were NEITHER grazing nor organic it was \$672 per cow.

In 2014, the organic farm's average cost per cow was \$47 for breeding fees, \$86 for insurance, \$1,138 for purchased feed, \$121 for utilities, \$163 for supplies, \$64 for property taxes, \$41 for veterinary fees and medicine, \$263 for interest, \$124 for livestock depreciation and \$573 for other depreciation.

In 2014, for every dollar of income, the average organic farm generated: 59.6 cents went to Basic Costs, 29.3 cents went to Non-basic plus Opportunity Costs and 11.2 cents went to economic profit. Looking at it another way, 78.8 cents went to Allocated Costs (Basic plus Non-basic Costs) and 21.2 cents went to NFIFO.

### Wrapping Up

When comparing the relative performance of dairy systems, recognize that managers of each system tended to have a different focus in their pursuit of profitability. The organic system focuses more on obtaining a higher and more consistent milk price. Graziers focus more on reducing all costs and confinement systems focus more on increasing income via high production levels. Yet, costs (in terms of face value dollars) continue to increase over time for all dairy systems.

When comparing organic financial performance relative to other systems, recognize that it is at its relative best in years in which the organic price premium is highest relative to non-organic prices. This price premium was high in 2000, 2002, 2003, 2006, 2009, 2012 and 2013.

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<sup>2</sup> AgFA @ (Agriculture Financial Advisor) – <http://cdp.wisc.edu>

<sup>3</sup> The Center for Dairy Profitability uses an active/real time database AgFA@) for collecting and analyzing data. The number of records may increase throughout the year. Casual users of AgFA may not be able to exactly duplicate this report.

<sup>4</sup> All costs except the opportunity cost of unpaid labor, management and equity are called "allocated costs." Total income minus "allocated costs" equals Net Farm Income from Operations (NFIFO). "Total costs" are divided into two other categories: basic costs and non-basic and opportunity costs, with it having 3 sub-categories (1. paid interest, 2. all labor and management, and 3. non-livestock depreciation plus equity interest).



## Cost of Production

Report Basis: Whole Farm, per Head, per Hundredweight Equivalent

Income	<u>2014</u>	<u>2014</u>	<u>2014</u>
	Cost (tax)	Cost (tax)	Cost (tax)
Milk Income	379,902.00	4,800.60	19.38
<b>Total Income</b>	<b>471,583.12</b>	<b>5,959.12</b>	<b>24.06</b>
<b>Expenses</b>	<b><u>2014</u></b>	<b><u>2014</u></b>	<b><u>2014</u></b>
	Cost (tax)	per Head	per CWT EQ
<b>Basic Cost</b>			
Cost of Items for Resale	0.00	0.00	0.00
Breeding Fees	3,752.22	47.41	0.19
Car and Truck Expenses	1,338.21	16.91	0.07
Chemicals	66.36	0.84	0.00
Conservation Expenses	685.64	8.66	0.03
Custom Heifer Raising Expenses	322.64	4.08	0.02
Custom Hire (Machine Work)	15,255.17	192.77	0.78
Feed Purchase	90,041.88	1,137.81	4.59
Fertilizer and Lime	15,573.83	196.80	0.79
Freight and Trucking	6,440.41	81.38	0.33
Gasoline, Fuel, and Oil	14,386.76	181.80	0.73
Farm Insurance	6,769.00	85.54	0.35
Rent/Lease Equipment	1,178.09	14.89	0.06
Rent/Lease Other	21,863.55	276.28	1.12
Repairs and Maintenance	7,996.58	101.05	0.41
Building and Fence Repairs	1,794.55	22.68	0.09
Machinery Repairs	22,111.07	279.40	1.13
Seeds and Plants Purchased	14,181.90	179.21	0.72
Storage and Warehousing	0.00	0.00	0.00
Supplies Purchased	12,890.28	162.89	0.66
Taxes - Other	5,030.60	63.57	0.26
Taxes - Payroll	454.48	5.74	0.02
Utilities	9,601.06	121.32	0.49
Veterinary Fees and Medicine	3,280.10	41.45	0.17
Other Farm Expenses	6,757.60	85.39	0.34
Marketing & Hedging	4,708.89	59.50	0.24
Other Crop Expenses	3,576.76	45.20	0.18
Other Livestock Expenses	7,126.68	90.06	0.36
- Change in Prepaid Expenses	(5,764.27)	(72.84)	(0.29)
Change in Accounts Payable	(283.09)	(3.58)	(0.01)
Depreciation on Purchased Breeding Livestock	9,850.66	124.48	0.50
<b>Total Basic Cost</b>	<b>280,987.62</b>	<b>3,550.68</b>	<b>14.34</b>

## Interest Cost

Mortgage Interest	15,948.64	201.53	0.81
Other Interest	4,829.97	61.03	0.25
<b>Total Interest Cost</b>	<b>20,778.61</b>	<b>262.57</b>	<b>1.06</b>

## Labor Cost

Employee Benefits - Dependents	0.00	0.00	0.00
Employee Benefits - Non-Dependents	1,017.00	12.85	0.05
Labor Hired - Dependents	0.00	0.00	0.00
Labor Hired - Non-Dependents	23,575.49	297.91	1.20
Pension and Profit-Sharing Plans - Non-Dependents	0.00	0.00	0.00
Pension and Profit-Sharing Plans - Dependents	0.00	0.00	0.00
Value of Unpaid Labor & Management	30,798.45	389.18	1.57
<b>Total Labor Cost</b>	<b>55,390.95</b>	<b>699.94</b>	<b>2.83</b>

## Depreciation & Equity Cost

Machinery, Equipment, Building Depreciation	45,354.33	573.12	2.31
Interest on Equity Capital	16,471.43	208.14	0.84
<b>Total Depreciation &amp; Equity Cost</b>	<b>61,825.76</b>	<b>781.26</b>	<b>3.15</b>

## Total Non-Basic and Opportunity Costs

**137,995.32**      **1,743.77**      **7.04**

**Total Expenses**      **418,982.93**      **5,294.44**      **21.38**

**Total Income - Total Expenses**      **52,600.19**      **664.68**      **2.68**

## Net Farm Income from Operations (NFI) Summary

Total Allocated Costs	371,713.04	4,697.12	18.96
<b>Net Farm Income From Operations (NFI)</b>	<b>99,870.08</b>	<b>1,262.00</b>	<b>5.10</b>
Gain (Loss) on Sale of All Farm Capital Assets	4,114.82	52.00	0.21
<b>Net Farm Income (NFI)</b>	<b>103,984.89</b>	<b>1,314.00</b>	<b>5.31</b>

## Benchmark Criteria

	2014	2014	2014
Number of Cows	79.14	79.14	79.14
Pounds of Milk Sold per Cow	15,652	15,652	15,652
Hundredweight Equivalent (CWT EQ) per Cow	248	248	248
Gross Milk Price	\$30.62	\$30.62	\$30.62
Total Crop Acres per Cow	4.04	4.04	4.04
Pasture Acres per Cow	1.71	1.71	1.71
Owner/Operator/Families	1.00	1.00	1.00

Primary Enterprise: **Dairy**

Report On: **All Data Sets**

2014 Data Sets: **11**

Confidence Level Range: **79 to 100**

States: **Wisconsin**

Organic Producer: **Yes**