

## Wisconsin Calculated Milk Cost of Production

July 2012

Ken Bolton  
UW-Extension  
Center for Dairy Profitability

The monthly predicted Cost of Production (COP) for milk in Wisconsin is intended for use by dairy producers making production, financial and risk management decisions. It is a calculated cost as it predicts the Mailbox Price (net hauling charges) of milk from the Class III Futures using the regression formula of Gould. An estimated MILC Program payment amount is made, also predicted by Gould <http://future.aae.wisc.edu/milc.html>. Cracked shelled corn, Hi pro soybean meal (SBOM), TM salt and Dicalcium phosphate prices used in this analysis are Southern Wisconsin quotes which include delivery to the farm. The hay price is the monthly USDA, NASS national all hay average quote prior to this report. Corn silage is valued from the "Pricer.exe" spreadsheet by Howard and Shaver. An assumed blended forage ration of 50:50 (Dry Matter basis) haylage: corn silage value is calculated based on the above determined prices. The "*Wisconsin Dairy Enterprise Planning Budget (2008)*" by Jones and Barnett <http://cdp.wisc.edu/Decision%20Making%20Tools.htm> is utilized in calculating COP.

The Class III Futures price on July 17, 2012 was \$16.69 (\$1.07 from June) yielding a predicted Mailbox Price of \$17.35/cwt (\$0.70) compared to the June price of \$16.65, with seasonal adjustments. A MILC payment of \$1.6442/cwt is predicted for **July** milk. Income is compared to feed prices of; corn (cracked) - \$8.48/bu. (\$2.16), SBOM- \$552/ton (\$92), TM Salt- \$18.10/cwt. (NC) and Dical- \$48.38/cwt (NC from November). The national average all hay price reported by USDA for June was \$183/ton (-\$16.00) and the estimated value of corn silage is \$76/ton (\$2.00), both on an as-fed basis.

The value of a purchased replacement heifer \$1,173 (-202.50), heifer calf at \$142.50 (-\$32.50) and a 1,300 lb. cull cow of \$698.10 (-\$93.60) are averages reported by Wisconsin markets for the week of this report. Assumed production factors are common to the industry. Because the "*Wisconsin Dairy Enterprise Budget 2008*" assumes the sale of the heifer calf and purchase of a replacement at freshening, the calculated Income over Feed Cost (IOFC) is for a lactating cow only. Variable costs beyond feed are typical of those reported by dairy producers submitting financial records to the AgFA data base with the cost of developing a replacement heifer factored out. Fixed costs are those calculated by the "*Wisconsin Dairy Enterprise Budget (2008)*" for the purpose of reporting a calculated COP for a 200 cow herd based on a Double-8 milking parlor. Fixed costs include depreciation, repairs, taxes, insurance and a return to labor and management. All spreadsheet inputs may be changed to fit your particular herd description.

All values used in the Wisconsin Calculated Milk COP are for demonstration purposes only. **Your actual prices will vary.** Those using this information are advised to access the University of Wisconsin - Center for Dairy Profitability website at <http://cdp.wisc.edu/Welcome.htm> to calculate your COP utilizing your farm specific financial and production data as well as to review and use the other Decision Making Aids, budgets and tools available on the site.

A COP analysis using the "whole farm" approach will yield results different from those obtained via enterprise analysis. Those who intend to utilize the results in identifying a "good price" for marketing or production input decisions may want to use the (this) enterprise analysis derived price while those intending to make long term production decisions and for comparisons to other farms may choose the "whole farm" cost per CWT EQ. or, Per Dollar or Percent of Gross Revenue analysis methods.

A \$17.35 expected Mailbox Price relative to a 22,000 lb. milk average marketed per cow and current costs allocates a total of 21,305 lbs/cow/year of 3.5% BF milk to pay for all expenses including feed, other variable and fixed costs, including a full return to labor and management. Total production required to cover all variable costs at 22,000 lb herd average is 15,505 lbs; 12,785 lbs of which is to pay for feed. A \$1.6442/cwt MILC payment is expected for **July** for qualifying production. Because of wide variability in fixed costs, labor and management charges from farm to farm and to present a size-neutral perspective, *a detailed reporting of Incomes Over Feed and Variable Costs per CWT is offered in the table below* instead of expected revenue per cow and Net Return.

IOFC dropped this month by \$0.68/cwt to \$7.27, declining six of the last seven months. Milk price increased a healthy \$0.70/cwt but was more than offset by rising feed costs. Price increases were lead by corn followed by SBOM and corn silage. The price of hay declined. Total ration forage price fell overall to \$107.21/blended ton of corn silage/hay (as fed) from \$110.46 in June. Feed cost per dollar of milk revenue increased six cents from \$0.52 to \$0.58. Income from the sale of a typical 1,300 lb cull cow dropped by \$93.60/head to \$698.10 with prices paid for replacement springers and the price received from selling a heifer calf also declining.

**July** marks the third month during 2012 with IOFC below \$8.00/ cwt. at the 22,000 lb production level, exceeding the total number months (one) this occurred in 2011 and 2010. A total of eight months (of eleven evaluated) below \$8.00/cwt IOFC were recorded during 2009.

The follow table summarizes calculated Incomes over Feed and Variable Costs for **July**.

**Incomes Over Feed and Total Variable Costs per CWT**

For A Mail Box Price of \$17.35/CWT

For **July** 2012 Milk

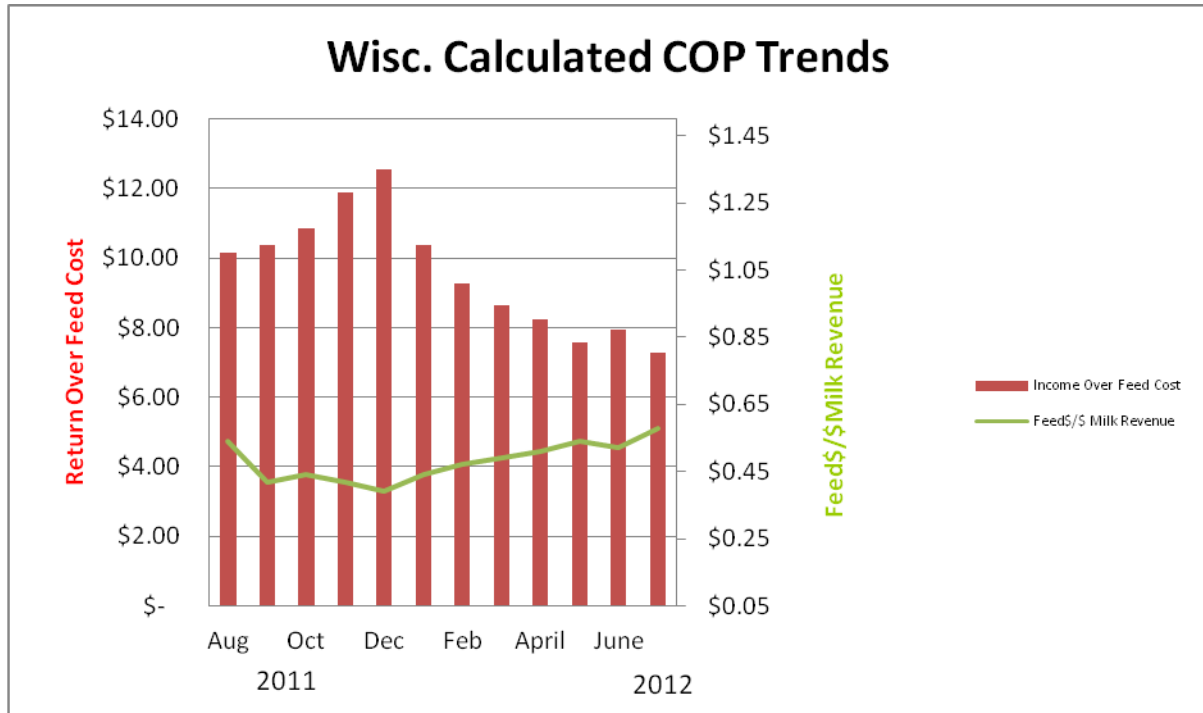
| Production per Year | Incomes Over Feed Costs/CWT | Incomes Over Total Variable Costs/CWT |
|---------------------|-----------------------------|---------------------------------------|
| 18,000 lbs.         | \$ 7.01                     | \$ 4.39                               |
| 20,000 lbs.         | 7.15                        | 4.79                                  |
| 22,000 lbs.         | 7.27                        | 5.12                                  |
| 24,000 lbs.         | 7.37                        | 5.40                                  |
| 26,000 lbs.         | 7.45                        | 5.63                                  |
| 28,000 lbs.         | 7.52                        | 5.83                                  |
| 30,000 lbs.         | 7.58                        | 6.01                                  |

*See the chart below for the developing trend line of monthly Return over Feed Cost per CWT and Feed Cost per Dollar of Gross Revenue for 2011-12.*

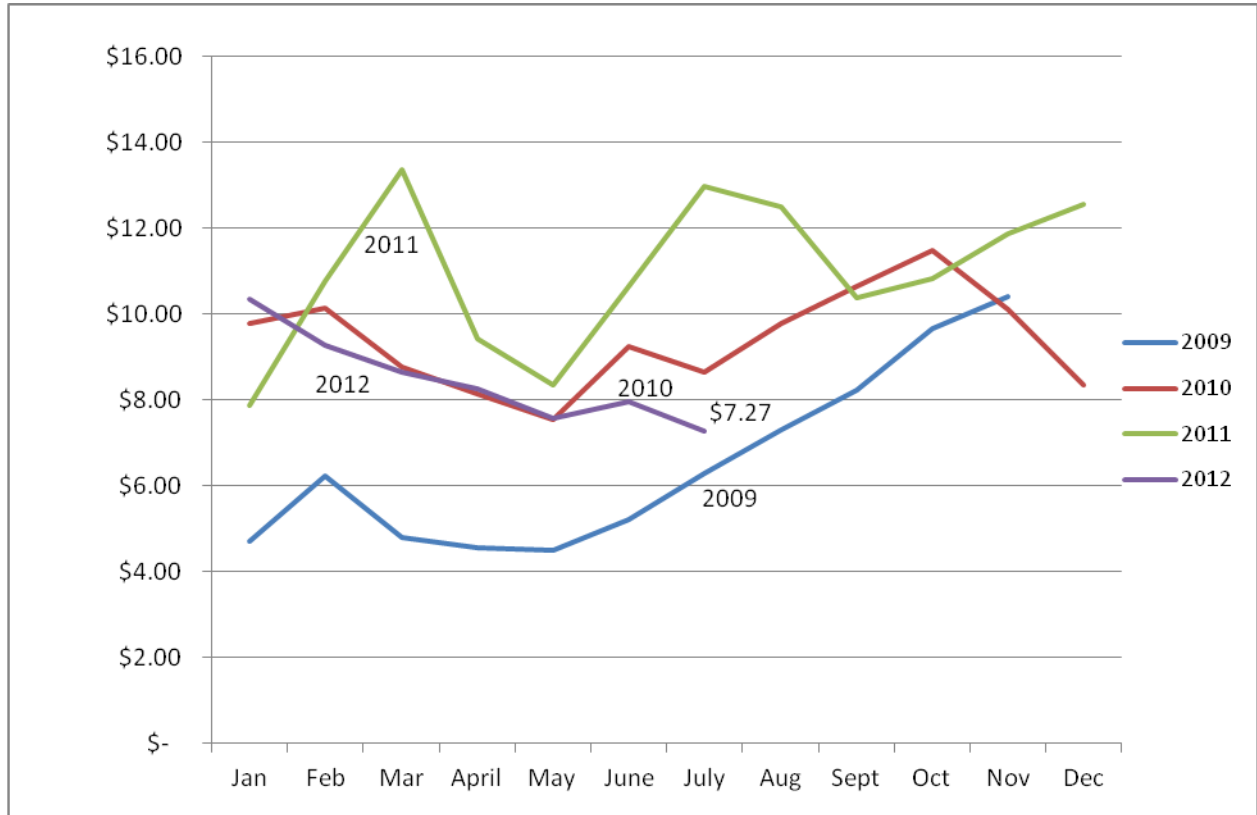
*Following is an IOFC 42 month comparison from February 2009 to the present. See the second chart below.*

**Wisconsin Calculated COP for Milk  
Income over Feed Cost  
And  
Feed Cost per Dollar of Milk Income**

**22,000 lb Production  
2011- 2012 Monthly Trends**



**Wisconsin Calculated IOFC  
@22,000 lb. milk/cow/year marketed**



**February 2009- Present**

Ken Bolton, [kenneth.bolton@ces.uwex.edu](mailto:kenneth.bolton@ces.uwex.edu), UW-Extension, Center for Dairy Profitability