

Wisconsin Calculated Milk Cost of Production

October 2009

Ken Bolton

UW-Extension

Center for Dairy Profitability

The monthly predicted Cost of Production (COP) of milk in Wisconsin is intended for use by dairy producers making production and financial 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>. Shelled corn, 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 alfalfa average quote for the week of this report. Corn silage is valued from the "Pricer.exe" spreadsheet by Howard (as fed + \$15). 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 is utilized in calculating COP.

The Class III Futures price on **October** 16, 2009 settled at \$12.71 (up \$0.66 from September) yielding a predicted Mailbox Price of \$14.46/cwt (+ \$1.30) with seasonal adjustments. An expected MILC payment of \$0.60/cwt is available in **October** for those who have enrolled for and who's production qualifies. Income is compared to feed prices of; corn (ground) - \$4.78/bu. (+\$0.57), SBOM-\$400/ton (+\$2.00), Salt- \$14.27/cwt. (NC) and Dical- \$40.25/cwt (NC from September). The national average alfalfa price reported by USDA for October is \$110/ton (-\$1.00) and the estimated value of corn silage is \$32/ton (+7.00), both on an as-fed basis.

The value of a purchased replacement cow (\$925, down \$250 from September), heifer calf (\$175, no change) and a 1,300 lb. cull cow (\$627.25, down \$16.25) 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 heifer at freshening, the calculated 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 \$14.46 expected Mailbox Price relative to current feed prices produces negative margins for the dairy enterprise producing below 23,200 lbs/cow/year given total assumed feed, other variable and fixed costs, including a full return to labor and management. A \$0.60/cwt MILC payment increases Net Returns over all, Over Feed and Over Total Variable Costs/CWT accordingly for those who qualify.

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 Returns Over Feed and Variable Costs per CWT is offered in the table below instead of expected revenue per cow and Net Return. Although corn and corn silage prices increased, the improvement in milk price more than offset these increases significantly improving Income Over Feed Cost on a per CWT of milk produced basis. Returns Over Feed Costs are evident at production levels over 4,495 lbs milk/cow/year. Returns over both feed and other variable costs are positive for all production levels from 12,560 lbs/cow/year and above. Below 12,560 lb milk/cow/year there is no return over variable costs.

The follow table summarizes calculated Returns Over Feed and Variable Costs for **October**.

Returns Over Feed and Total Variable Costs per CWT

For A Mail Box Price of \$14.46/CWT

For **October** 2009 Milk

| Production per Year | Returns Over Feed Costs/CWT | Returns Over Total Variable Costs/CWT |
|---------------------|-----------------------------|---------------------------------------|
| 18,000 lbs. | \$6.49 | \$2.61 |
| 20,000 lbs. | 6.70 | 3.21 |
| 22,000 lbs. | 6.88 | 3.71 |
| 24,000 lbs. | 7.03 | 4.12 |
| 26,000 lbs. | 7.15 | 4.47 |
| 28,000 lbs. | 7.26 | 4.77 |
| 30,000 lbs. | 7.35 | 5.03 |

Dairy producers may receive an additional \$0.60 per CWT (predicted) to apply towards feed, variable and fixed costs if they qualify for a payment under the Milk Income Loss Contract (MILC) Program.

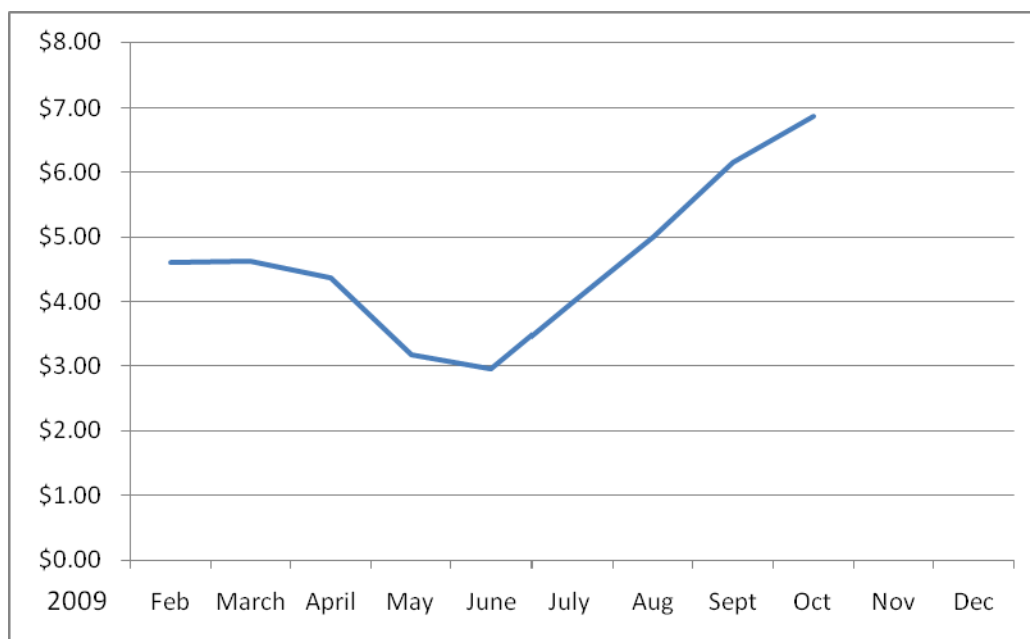
See the chart below for the developing trend line of monthly Return Over Feed Cost per CWT for 2009.

Wisconsin Calculated COP for Milk

Return Over Feed Cost

22,000 lb Production

2009 Monthly Trend



Ken Bolton, kenneth.bolton@ces.uwex.edu, University of Wisconsin-Madison