Wisconsin Calculated Milk Cost of Production

April 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 April 19, 2012 closed at $15.77 (+$0.15 from March) yielding a predicted Mailbox Price of $16.79/cwt (- $0.35) compared to the March price of $17.14 with seasonal adjustments. A MILC payment of $0.8008/cwt is predicted for April milk. Income is compared to feed prices of; corn (cracked) - $6.47/bu. (-$0.31), SBOM- $411/ton (+$40), TM Salt- $18.10/cwt. ($0.06) and Dical- $48.38/cwt (NC from November). The national average all hay price reported by USDA for January was $181/ton ($9.00) and the estimated value of corn silage is $75/ton (-$4), both on an as-fed basis.

The value of a purchased replacement heifer $1,550 (NC), heifer calf at $165.00 ($25.00) and a 1,300 lb. cull cow of $712.40 (-$110.50) 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 $16.79 expected Mailbox Price relative to a 22,000 lb. milk average marketed per cow and current prices allocates a total of 20,602 lbs/cow/year of 3.5% BF milk to pay for all costs including feed, other variable and fixed costs, and a full return to labor and management. Total production required to cover all variable costs at 22,000 lb herd average is 14,000 lbs; 11,188 lbs of which is to pay for feed. A $0.8008/cwt MILC payment is expected for April 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 fell again this month by $0.41/cwt to $8.25 continuing a four-month downward trend after peaking at $12.56 in December 2011. Milk price declined $0.35/cwt as did corn by $0.31/bu. Price increases include SBOM, hay and salt. Total ration forage price increased overall to $108.80/blended ton of corn silage/hay (as fed) from $106.68 in March. Feed cost per dollar of milk revenue increased once again from $0.49 to $0.51, another two cent rise.

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

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

For A Mail Box Price of $16.79/CWT

<table>
<thead>
<tr>
<th>Production per Year</th>
<th>Incomes Over Feed Costs/CWT</th>
<th>Incomes Over Total Variable Costs/CWT</th>
</tr>
</thead>
<tbody>
<tr>
<td>18,000 lbs.</td>
<td>$7.87</td>
<td>$5.25</td>
</tr>
<tr>
<td>20,000 lbs.</td>
<td>8.08</td>
<td>5.72</td>
</tr>
<tr>
<td>22,000 lbs.</td>
<td>8.25</td>
<td>6.11</td>
</tr>
<tr>
<td>24,000 lbs.</td>
<td>8.39</td>
<td>6.43</td>
</tr>
<tr>
<td>26,000 lbs.</td>
<td>8.51</td>
<td>6.70</td>
</tr>
<tr>
<td>28,000 lbs.</td>
<td>8.61</td>
<td>6.93</td>
</tr>
<tr>
<td>30,000 lbs.</td>
<td>8.70</td>
<td>7.13</td>
</tr>
</tbody>
</table>

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.
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

Ken Bolton, kenneth.bolton@ces.uwex.edu, UW-Extension, Center for Dairy Profitability