Wisconsin Calculated Milk Cost of Production

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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 is utilized in calculating COP.

The Class III Futures price on October 20, 2011 closed at $17.93 (down $1.00 from September) yielding a predicted Mailbox Price of $19.42/cwt (- $0.18) compared to the September price of $19.60 with seasonal adjustments. No MILC payment is predicted for October milk. Income is compared to feed prices of; corn (cracked) - $6.94/bu. (-$0.84), SBOM- $351/ton (-$40), TM Salt- $18.08/cwt. (NC) and Dical- $48.38/cwt (NC from September). The national average all hay price reported by USDA for September was $172/ton (NC) and the estimated value of corn silage is $86/ton (-$1.00), both on an as-fed basis.

The value of a purchased replacement heifer $1,375 (up $175 from September), heifer calf at $162.50 ($7.50) and a 1,300 lb. cull cow of $691.60 ($28.60) 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 database 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 $19.42 expected Mailbox Price relative to current feed prices produces negative margins for the dairy enterprise producing below 15,067 lbs/cow/year of 3.5% BF milk given total assumed feed, other variable and fixed costs, including a full return to labor and management. No MILC payment is expected for October. 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.

Corn and SBOM prices both fell while milk price remained fairly steady resulting in an improvement in IOFC for October. IOFC for a dairy herd producing 22,000 lbs milk/cow/year increased $0.47 to $10.84/cwt. Feed cost per dollar of milk revenue fell $0.03 to $0.44. IOFC is evident at production levels above 3,417 lbs milk/cow/year (-). Returns over both feed and other variable costs are positive for production levels from 7,107 lbs/cow/year (-1960 lbs.) and above primarily due to an adjustment to lower variable costs ($1.48/cwt.) reported by dairy producers in the AgFA database.

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

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

For A Mail Box Price of $19.42/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>$ 10.36</td>
<td>$ 7.74</td>
</tr>
<tr>
<td>20,000 lbs.</td>
<td>10.60</td>
<td>8.24</td>
</tr>
<tr>
<td>22,000 lbs.</td>
<td>10.84</td>
<td>8.66</td>
</tr>
<tr>
<td>24,000 lbs.</td>
<td>10.97</td>
<td>9.00</td>
</tr>
<tr>
<td>26,000 lbs.</td>
<td>11.11</td>
<td>9.92</td>
</tr>
<tr>
<td>28,000 lbs.</td>
<td>11.23</td>
<td>9.54</td>
</tr>
<tr>
<td>30,000 lbs.</td>
<td>11.33</td>
<td>9.76</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 2010-11.
Wisconsin Calculated COP for Milk

Income over Feed Cost
And
Feed Cost per Dollar of Milk Income

22,000 lb Production
2010-11 Monthly Trends

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