Dairy Market Update, September 2011
Craig Thomas
Michigan State University Extension

The last Dairy Market Update was on August 30, 2011. At that time (8/30/11) CME cheese traded at $1.7900/lb. (blocks) and $1.7050/lb. (barrels). Since then blocks and barrels are lower (Figure 1), closing Wed (9/28/11) with blocks at $1.7175/lb and barrels at $1.6450/lb. Since late Aug Class III futures are mixed. As of Wed (9/28/11), close-up months (Sep-Dec) were -$1.74 to +$0.27 and more distant months (Jan ’12-Dec ’12) were -$0.74 to +$0.26. In late Aug butter traded at $2.0900/lb (8/30/11) and closed Wed (9/28/11) down to $1.7600/lb.

Summary of Milk Prices

<table>
<thead>
<tr>
<th>Class III</th>
<th>Class IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>$21.67</td>
</tr>
<tr>
<td>August vs. July</td>
<td>$0.28</td>
</tr>
<tr>
<td>July</td>
<td>$21.39</td>
</tr>
<tr>
<td>vs. last August</td>
<td>$6.49</td>
</tr>
<tr>
<td>Last August</td>
<td>$15.18</td>
</tr>
<tr>
<td>vs. August Ave.</td>
<td>$7.42</td>
</tr>
<tr>
<td>August Ave.</td>
<td>$14.25</td>
</tr>
<tr>
<td>Jan-July Michigan</td>
<td>$19.79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class III Futures ($/cwt)</th>
<th>Block/Barrel Ave. ($/lb.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$16.00</td>
<td>$1.60</td>
</tr>
<tr>
<td>$16.25</td>
<td>$1.65</td>
</tr>
<tr>
<td>$16.50</td>
<td>$1.70</td>
</tr>
<tr>
<td>$16.75</td>
<td>$1.75</td>
</tr>
<tr>
<td>$17.00</td>
<td>$1.80</td>
</tr>
<tr>
<td>$17.25</td>
<td>$1.85</td>
</tr>
<tr>
<td>$17.50</td>
<td>$1.90</td>
</tr>
<tr>
<td>$17.75</td>
<td>$1.95</td>
</tr>
<tr>
<td>$18.00</td>
<td>$2.00</td>
</tr>
<tr>
<td>$18.25</td>
<td>$2.05</td>
</tr>
<tr>
<td>$18.50</td>
<td>$2.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class III and IV Milk Prices (2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class III</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Jan</td>
</tr>
<tr>
<td>Feb</td>
</tr>
<tr>
<td>Mar</td>
</tr>
<tr>
<td>Apr</td>
</tr>
<tr>
<td>May</td>
</tr>
<tr>
<td>Jun</td>
</tr>
<tr>
<td>Jul</td>
</tr>
<tr>
<td>Aug</td>
</tr>
<tr>
<td>Sep</td>
</tr>
<tr>
<td>Oct</td>
</tr>
<tr>
<td>Nov</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>$21.67</td>
</tr>
<tr>
<td>Feb</td>
<td>$21.39</td>
</tr>
<tr>
<td>Mar</td>
<td>$20.78</td>
</tr>
<tr>
<td>Apr</td>
<td>$20.53</td>
</tr>
<tr>
<td>May</td>
<td>$20.28</td>
</tr>
<tr>
<td>Jun</td>
<td>$20.05</td>
</tr>
<tr>
<td>Jul</td>
<td>$19.81</td>
</tr>
<tr>
<td>Aug</td>
<td>$19.57</td>
</tr>
<tr>
<td>Sep</td>
<td>$19.34</td>
</tr>
<tr>
<td>Oct</td>
<td>$19.11</td>
</tr>
<tr>
<td>Nov</td>
<td>$18.87</td>
</tr>
<tr>
<td>Dec</td>
<td>$18.63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>$20.14</td>
</tr>
<tr>
<td>Feb</td>
<td>$19.81</td>
</tr>
<tr>
<td>Mar</td>
<td>$19.57</td>
</tr>
<tr>
<td>Apr</td>
<td>$19.34</td>
</tr>
<tr>
<td>May</td>
<td>$19.11</td>
</tr>
<tr>
<td>Jun</td>
<td>$18.87</td>
</tr>
<tr>
<td>Jul</td>
<td>$18.63</td>
</tr>
<tr>
<td>Aug</td>
<td>$18.40</td>
</tr>
<tr>
<td>Sep</td>
<td>$18.16</td>
</tr>
<tr>
<td>Oct</td>
<td>$17.92</td>
</tr>
<tr>
<td>Nov</td>
<td>$17.68</td>
</tr>
<tr>
<td>Dec</td>
<td>$17.45</td>
</tr>
</tbody>
</table>

Summary of Milk Prices

<table>
<thead>
<tr>
<th>Date</th>
<th>III Change</th>
<th>IV Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug</td>
<td>+$0.28</td>
<td>-$0.19</td>
</tr>
<tr>
<td>Sep</td>
<td>-$0.46</td>
<td>+$0.05</td>
</tr>
<tr>
<td>Oct</td>
<td>-$0.28</td>
<td>+$0.05</td>
</tr>
<tr>
<td>Nov</td>
<td>-$0.05</td>
<td>-$0.05</td>
</tr>
<tr>
<td>Dec</td>
<td>-$0.26</td>
<td>+$0.02</td>
</tr>
</tbody>
</table>

SUPPLY, DEMAND, INVENTORIES

Milk Production: Nationally Aug milk production was up 2.1% vs. Aug 2010 (Fig. 3), and up 2.2% in the Top 23 States. August marked the first time since Mar milk production was above trend increase (trend 1995-2010 +1.6%). Production in key western states was up in Aug vs. Aug 2010: CA (+2.9%), AZ (+6.3%), ID (+3.9%), NM (+4.9%), and WA (+6.7%). August milk production in key Midwest/Eastern dairy states was mostly lower vs. Aug 2010: WI (+1.2%), MN (-4.5%) PA (-2.1%), and NY (-0.5%). August production in Michigan was up vs. Aug 2010 (+2.4%).

Figure 1: Chicago Mercantile Exchange Class III Futures and Cash Cheese Prices.

Figure 2: Class III and Class IV Milk Prices (2011).
Nationwide, cow numbers Jul→Aug increased 2,000 hd. Cow numbers have now increased by 96,000 hd Sep→Aug despite round #10 of the CWT herd retirement removing 34,442 cows. Cow numbers in the Top 23 states in Aug were up 102,000 hd vs. Aug 2010 and up 94,000 hd nationally at 9.217 M. Cow numbers are now +206,000 hd vs. the last time cow numbers were below 9.0 million (Feb 2005). In Aug Top 23 States cow numbers were up, or even, in 16 of the states vs. Aug 2010. August cow numbers in Michigan were at 368,000 hd, +9,000 hd vs. Aug 2010. Cow numbers in key western states (AZ, CA, ID, NM, and WA) are +56,000 hd vs. Aug 2010. In Aug cow numbers in the Top 23 States east of the Mississippi River were up (+7,000 hd) vs. Aug 2010.

Figure 3: Total U.S. Milk Production (1999-2011).

Figure 4: Dairy Cows Numbers in the U.S. (1999-2011).

Nationally cull cow prices in Aug rose 22.0% above last year's level ($58.30/cwt, 8/2010 vs. $71.10/cwt, 8/2011). The USDA’s Jul report showed milk cow prices rose over the past year $160/cow vs. Jul 2010 ($1,320/hd, 7/2010 vs. $1,480/hd, 7/2011)(USDA Agricultural Prices, 7/2011). The same USDA report showed a $150/hd increase in Michigan dairy cow prices versus last year ($1,400/hd, 7/2010 vs. $1,550/hd, 7/2011). The most recent (9/26/11) Dairy Profit Weekly reports top prices for springers and/or fresh cows of $1,770-$2,200/hd with the highest top for bred heifers at $1,650/hd. The Jul 2011 USDA Cattle Report indicated milk cow replacements (>500 lb.) were up 3.7% (+150,000 hd) vs. Jul 2010 at 4.200 M head.

August’s USDA dairy cow slaughter figures showed the cull rate above trend for the 18th time in 19 months (Figure 5). Number of cows slaughtered (federally inspected plants) in Aug was +13,700 hd vs. Aug 2010. The cull
rate (monthly dairy cows slaughtered vs. total dairy cows) has been high for the past two years. In 2009 it was above the 1999-2009 annual average of 28.1% at 30.6% and even higher in 2010 (30.8%). The cull rate Jan-Aug 2011 was 31.4% (1999-2011 Jan-Aug average of 27.9%). So far in 2011 (9/03/11) dairy cow slaughter is up 82,100 hd vs. 2010.

In Aug milk per cow in Michigan was unchanged vs. Aug 2010 (+0.0%, +0 lb/cow). The U.S. trend (1999-2010) increase in milk per cow is +1.6%/year (+307 lb/cow). Milk per cow in Aug vs. Aug 2010 was up nationally (+1.1%; +19 lb/cow) and down in the Top 23 States (+1.0%; 18 lb/cow)(Figure 6). August marked the eighth consecutive month milk per cow failed to increase at or above trend, but the first time since Mar it has exceeded +1.0%.

The Aug milk:feed price ratio rose to 1.89 (Jul, 1.92). August’s all-milk price rose vs. Jul (+$0.10/cwt) to $22.00/cwt. Feed price changes (vs. Jul) were: corn, +$0.30/bu ($6.62/bu); soybeans -$0.30/bu ($12.90/bu); and alfalfa hay, +$2.00/ton ($191/ton). The cost of 100 lb. of the USDA’s blended dairy feed rose 64.5% vs. Aug 2010 ($11.66/cwt vs. $7.09/cwt), and rose from Jul (+$0.27/cwt, +2.4%). August’s IOFC was 15.8% (+$1.16/cwt) higher than Aug 2010 ($8.47/cwt vs. $7.31/cwt), but was down 0.9% vs. Jul (-$0.07/cwt). August marked the 45th consecutive month the milk:feed ratio has been below 3.00; and only the 22nd month of the past 41 above 2.0.

Dairy Product Consumption: USDA figures indicate annual trend growth (1995-2010) in total commercial disappearance is +1.6% per year (Figure 7). In 2010 total commercial disappearance was very strong at +3.3% vs. 2009 which is +199% of trend increase. 2011 started fairly strong with Jan-Apr total commercial disappearance up +3.7%, but fell 1.4% in May, 3.2% in Jun and 0.2% in Jul (vs. May, Jun and Jul 2010), decreasing YTD total commercial disappearance below trend to +1.3% vs. Jan-Jul 2010. All-time monthly records for total commercial disappearance were set in Jan, Feb, Mar, and Apr. Annual trend growth (1995-2010) in total cheese commercial disappearance is +2.6% per year. Total cheese disappearance in 2010 was above trend (+3.2% vs. 2009) and 2011 has started even stronger (Jan-Jul +4.0% vs. Jan-Jul 2010). All-time monthly records have been set for each reported month this year except Jul (-2.7% vs. Jul 2010). Cheese production Jan-Jul is mixed vs. 2010 (Am cheese, -0.2%; total cheese, +2.3%). Trend annual increase in butter commercial disappearance since 1995 has averaged +3.3% per year. Butter disappearance was very strong in 2010 (+4.0% vs. 2009) and started 2011 well-above trend at +10.1% (vs. Jan-Jul 2010). New monthly records for butter disappearance were set for Feb Mar, and Apr. Butter production Jan-Jul is up vs. 2010 (+14.4%). Commercial disappearance Jan-Jul vs. Jan-Jul 2010 for other dairy products was: Am cheese +1.6% (2005-2010 trend, +2.4%), other cheese +5.6% (2005-2010 trend, +2.3%), and NFDM -2.3% (2005-2010 trend, +4.5%). Composition adjusted fluid milk sales were down in Jul (-1.6%) vs. Jul 2010 and 2011 YTD (Jan-Jul) was down vs. Jan-Jul 2010 (-1.4%, composition adjusted basis). July marked the 18th consecutive month of declining fluid sales vs. same month last year. The decline of fluid sales in 2010 was the greatest since 1982.
USDEC reported 2008, 2009, and 2010 U.S. dairy exports were equivalent to 11.0%, 9.3%, and 12.8% (respectively) of total U.S. milk production (total solids basis). On a total solids basis 2010 U.S. dairy exports were +40% vs. 2009 and +19% vs. 2008. U.S. dairy imports in 2009 and 2010 were equivalent to 3.4% and 2.9% of U.S. milk production (total solids basis). Dairy imports in 2010 were the lowest since 1997. The value of 2010 U.S. dairy exports totaled $3.71 B, up 63% from 2009. U.S. dairy trade has had trade surpluses for nineteen of the past twenty months. Total 2010 U.S. dairy trade surplus was $1.168 B vs. a $218 M deficit in 2009. U.S. dairy exports for Jan, Feb, Mar, Apr, May, Jun and Jul 2011 totaled $335 M, $348 M, $421 M, $403 M, $401 M, $429 M and $412 M, respectively; up 49%, 55%, 42%, 40%, 40%, 22% and 30% vs. Jan, Feb, Mar, Apr, May, Jun and Jul 2010, respectively. FY-2011 (Oct-Jul) exports are valued at $3.758 B (+36% vs. FY-2010) with a dairy trade surplus over that period of $1.354 B. In the first six months of CY-2011, exports accounted for 48% of NFDM/SMP produced by the U.S., 5.0% of the cheese, and 9.4% of the butter. From Jan-Jul U.S. dairy exports were equivalent to 13.1% of total U.S. milk solids production; while imports were only 2.8%, the lowest since 1996. U.S. cheese prices in Jul moved above Oceania prices for the first time since the fall of 2009 resulting in an eight-month low for U.S. cheese exports.

The change in CPI for dairy products for Jul (vs. Jul, 2010) were: whole milk, +10.2%; cheese, +8.1%; butter, +21.0%, and ice cream, +10.3%. For Jul (vs. Jul 2010) the CPI for meat, poultry, fish and eggs rose +7.4% while “All Food” rose 4.2%. Retail dairy product prices for consumers were mostly higher in Jul (+7.9%). The average Jul prices of the various categories of retail dairy products were up vs. Jul 2010: whole milk (+$0.341/gal), butter (+$0.539/lb), processed cheese (+$0.137/lb), natural cheese (+$0.965/lb), and ice cream (+$0.430/half gal).

**Dairy Product Inventory and Production:** The latest USDA Cold Storage Report (Figure 8) showed inventory **increases** in Aug for Am cheese (+1.3% at 641.8 M lb.) and for total cheese (+0.02% at 1,059.1 M lb.) vs. Aug 2010. Am cheese inventory increased 29.4 M pounds Jun→Jul, the largest one-month increase in seven years. Both cheese inventories set all-time highs for the month of Aug. In terms of raw numbers, we began Sep 2011 with 8.2 million lb. **more** Am cheese and 0.2 million lb. **more** total cheese vs. 9/1/10. Cheese production is mixed Jan-Jul 2011 vs. 2010 (Am -0.2%; total +2.3%). Current cold storage numbers show Aug butter inventory above Aug 2010 (+6.7%, 165.6 M lb.). August broke a string of nineteen consecutive months butter inventory had been below the same month last year. However, butter inventory is still about 25 M pounds below the 2000-2011 Aug average. We began Sep 2011 with 10.4 million lb. **more** butter than 9/1/10. Butter production Jan-Jul 2011 is up vs. 2010 (+14.4%).

USDA Dairy Market News (9/23/11) reported: **Cheese:** “The cheese market is rebounding from recent lows. Cheese interest is steady to improved on natural varieties with process typically steady to lighter seasonally. Some shorting or delayed orders are occurring on selected varieties from preferred suppliers. Class I interest remains at the higher levels that occur when schools are in session. Milk intakes are uneven though steady to higher milk components are improving cheese yields. Estimated August total cheese inventory, at 1.059 billion pounds is down 24.1 million pounds (-2.2%) from July, but up 190,000 pounds (N.C.) from August 2010. American cheese stocks were put at 641.8 million pounds, down 5.3 million pounds (-0.8%) from July, but 8.2 million pounds (1.3%) above last August. Only other natural cheese was below both month and year.
ago levels. August cheese imports (subject to quota) totaled 13.0 million pounds, down 7.5 million pounds (-36.5%) from August 2010. Cumulative 2011 quota cheese imports total 102.2 million pounds, 2.7 million pounds (2.7%) above 2010. High Tier cheese imports thus far in 2011 total 16.0 million pounds up 607,500 pounds (4%) from 2010 with the largest poundage increase in Italian type varieties. The 2011 combined cheese import total is 118.2 million pounds compared to 299.5 million pounds of cheese exports during the same period in 2011.”

Butter: “The cash butter price continues to edge lower and closed the week at $1.7700, $0.1325 lower than a week ago. The current cash price compares to $2.2250 last year at this time and $1.2600 in 2009. Churning is active across the country, although many butter producers are cautious with their additional cream purchases. Pricing additional cream is the most significant factor at this time. Volumes are generally readily available and churning schedules are often reflective of the additional cream availability. Butter demand is seasonally steady for this time of the year. Orders continue to develop for upcoming 4th quarter and yearend holiday needs. According to NASS, the U.S. August 31 cold storage figure for butter totaled 165.6 million pounds. This figure is 11.8% lighter than last month, 6.7% heavier than a year ago, but 36.2% lighter than August 31, 2009.”

**Figure 7: Dairy Total Commercial Disappearance (2000-2011).**

**Figure 8: Total Cheese Held in Cold Storage (2000-2011).**

Where are milk prices headed?

Since my last report cheese prices, Class III futures and butter prices are all. Average spot block/barrel cheese price (vs. 8/30/11) are down -$0.0663/lb and butter price is down -$0.3300/lb. Overall, dairy fundamentals are
weakening. Total commercial disappearance weakened in May, Jun and Jul (-1.4%, -3.2% and -0.2% vs. May, Jun and Jul 2010) and Am cheese inventories grew by 29.4 M pounds Jun→Jul, the largest one-month increase in nine years. July also showed the lowest cheese exports in eight months. The current spot block/barrel cheese price ($1.6813) is only adequate to sustain Class III futures prices at ~$15.40 and the lowest since 5/18/11. Milk volumes and components have mostly recovered from the summer heat increasing cheese yields for processors. The cheese industry is in the seasonal lull awaiting the fall holiday sales season. Class I needs are seasonally higher, but poor cheese sales are allowing cheese prices to weaken further. Butter inventory continues to grow mainly due to strong butter production. Consumer confidence is very low (45.4 in Sep) which is having devastating effects on domestic dairy consumption. Exports remain relatively strong, but high U.S. dairy product prices and weakening foreign currencies may be cutting into U.S. dairy exports. The recent decline in cheese and butter prices may boost exports in the last quarter of 2011. Overall the U.S. dairy export market remains strong at ~40% above 2010 levels and the only real bright spot in the dairy industry. A great deal of concern remains over the Greek debt crisis creating uncertainty in all financial and commodity markets. Recently all commodity markets showed weakness fueled by the concerns over the very real possibility of another worldwide recession.

USDA measured feed prices are increasing significantly, up almost 65% since last Aug. Due to the recession fears there have been major declines in the corn and soy markets over the past week or so. I think this has created some really good feed buying opportunities for dairy producers. One must remember that despite these recent price declines, the 2011 corn crop is still forecast to put in an 8-year low. So prices will surely rise as we move into 2012. Hay prices remain extremely high, especially in the West (>$350/ton for quality alfalfa) and the availability of quality alfalfa hay is increasingly problematic.

Cow numbers increased Jul→Aug despite lower IOFC in Aug (down $0.07/cwt vs. Jul). Cow numbers exceed USDA predictions and there are plenty of replacements to continue growth of the national herd. Hopefully high cull cow and feed prices will slow herd growth, but watch cow numbers closely. U.S. dairy producers are pushing to produce as much milk as possible given the higher margins this year. Many expansion projects are pushing forward so look for cow numbers to continue to outpace 2010. Milk per cow in Aug was above +1.0% vs. last year and I look for milk per cow to continue to move upward. We may be in a serious surplus production situation very soon, especially if the 2011 fall holiday dairy product sales season is as weak as many industry insiders are predicting.

Cheese prices are down since the Aug (8/30/11) report, blocks are down ($0.0725/lb) and barrels are down (-$0.0600/lb). Since my last report the average Class III futures price for 2011 has decreased (-$0.3475/cwt) to $17.91/cwt, the next 12 months average is down (-$0.99/cwt) to $16.88/cwt and the 2012 average is down (-$0.25/cwt) to $16.78/cwt. These Class III prices would produce USDA Michigan mailbox prices for 2011, the next 12 months and 2012 of $18.90/cwt, $17.87/cwt and $17.77/cwt, respectively. Butter price has decreased (-$0.3300/lb) to $1.7600/lb since the last report.

Also, as you consider milk prices remember that producer price differentials (PPD) for 2010 in Michigan averaged $0.88/cwt above normal (2004-2009 average was $0.55/cwt; 2010 average was $1.43) due to Class IV prices being higher than Class III for ten of the twelve months. That situation should continue for most of 2011. The PPD for 2011 (Jan-Jul) has averaged $1.48/cwt, +$0.74/cwt vs. the 2004-2011 average ($0.74).

Producers need to sharpen their pencils, calculate their latest cost of production and market some milk if it fits your risk attitude and financial condition. Watch for cheese and Class III price rallies over the next 6-8 weeks on which to sell, but don't get greedy and hope for prices to rebound to July highs. These rallies will be highly dependent upon the strength of the 2011 fall holiday sales season for cheese. Whether cheese and Class III prices strengthen or not, look for price weakness once dairy wholesalers are satisfied the pipeline is full for this year’s holiday sales season. So there is a great deal of risk into today’s market. And, if there is a hiccup in our export market we could be in big trouble. Take all this into account as you make marketing decisions. Remember: marketing is first about risk management and secondarily about profit enhancement.

The latest USDA Milk Supply and Demand Estimates report (September) increased forecasted 2011 milk output to 195.7 B pounds (+1.5% vs. 2010) “as the dairy herd has been expanding at a more rapid pace than expects.” Forecasted fat basis commercial disappearance for 2011 decreased to 188.2 B pounds (+0.2% vs. 2010). Forecast class and product prices were mixed. Average Class III prices decreased 15¢ to $18.25-$18.45; Class IV remained the same at $19.05-$19.35, and the “All Milk” price down 15¢ to $20.15-$20.35. Forecasted wholesale dairy product prices for 2011 were: cheese down 3¢ at $1.825-$1.845; butter unchanged at $1.955-$1.995; NFDM up 1/2 ¢ at $1.505-$1.525; and dry whey up 2½¢ to $0.505-$0.525.
The latest average CME Class III futures prices (9/28/11) (Figures 1 & 9, Table 3) are $17.91 (2011), $16.88 (next 12 months), and $16.78 (2012). These Class III prices would produce potential average “USDA” mailbox prices (Michigan) of $18.90 (2011), $17.87 (next 12 months), and $17.77 (2012) (Figure 10). Remember, the USDA’s definition of “mailbox price” deducts “all marketing costs” to arrive at their price. To estimate your gross pay price you should use your own farm’s historical basis. Figure 9 is a cumulative probability distribution of all USDA BFP/Class III monthly prices from 1995-present. The figure shows the current (9/28/11) CME Class III futures averages for 2011, the next 12 months, and 2012. The graph shows the percentiles for each of these three prices indicating the percentage of historical monthly BFP/Class III prices that were at or below these levels: 2011, 91st, next 12 months, 87th, and 2012, 86th.

![Figure 9: Cumulative distribution graph of USDA announced monthly BFP/Class III prices and current CME averages. (1995-present).](image)

**TABLE 1. BFP/Class III Milk Price Historical Data**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr</td>
<td>11.16</td>
<td>9.44</td>
<td>12.08</td>
<td>11.81</td>
<td>9.41</td>
<td>10.36</td>
<td>9.91</td>
<td>11.96</td>
<td>14.41</td>
<td>12.45</td>
<td>10.78</td>
<td>16.09</td>
<td>17.46</td>
<td>9.31</td>
<td>17.00</td>
<td>14.32</td>
<td>12.10</td>
<td>2.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>StDev</td>
<td>0.65</td>
<td>1.26</td>
<td>0.92</td>
<td>1.97</td>
<td>2.45</td>
<td>0.61</td>
<td>2.16</td>
<td>0.81</td>
<td>2.09</td>
<td>2.74</td>
<td>0.45</td>
<td>0.99</td>
<td>2.68</td>
<td>1.46</td>
<td>0.79</td>
<td>1.31</td>
<td>1.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Table 2. Class IV Milk Price Historical Data

## Class IV Price

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan '11</td>
<td>$13.48</td>
<td>$13.48</td>
<td>$13.22</td>
<td>$0.66</td>
<td>$0.66</td>
<td>$0.00</td>
<td>$1.59</td>
<td>$15.07</td>
</tr>
<tr>
<td>Feb '11</td>
<td>$17.00</td>
<td>$17.00</td>
<td>$12.48</td>
<td>$4.52</td>
<td>$4.52</td>
<td>$1.00</td>
<td>$1.33</td>
<td>$18.33</td>
</tr>
<tr>
<td>Mar '11</td>
<td>$19.40</td>
<td>$19.40</td>
<td>$12.39</td>
<td>$7.01</td>
<td>$7.01</td>
<td>$0.00</td>
<td>$0.90</td>
<td>$20.30</td>
</tr>
<tr>
<td>Apr '11</td>
<td>$16.87</td>
<td>$16.87</td>
<td>$12.69</td>
<td>$4.18</td>
<td>$4.18</td>
<td>$0.00</td>
<td>$0.75</td>
<td>$17.62</td>
</tr>
<tr>
<td>May '11</td>
<td>$16.52</td>
<td>$16.52</td>
<td>$12.85</td>
<td>$3.67</td>
<td>$3.67</td>
<td>$0.00</td>
<td>$0.69</td>
<td>$17.21</td>
</tr>
<tr>
<td>Jun '11</td>
<td>$19.11</td>
<td>$19.11</td>
<td>$13.24</td>
<td>$5.87</td>
<td>$5.87</td>
<td>$0.00</td>
<td>$0.06</td>
<td>$19.17</td>
</tr>
<tr>
<td>Jul '11</td>
<td>$21.33</td>
<td>$21.39</td>
<td>$13.48</td>
<td>$7.91</td>
<td>$7.85</td>
<td>$0.05</td>
<td>$0.71</td>
<td>$22.10</td>
</tr>
<tr>
<td>Aug '11</td>
<td>$21.55</td>
<td>$21.67</td>
<td>$13.79</td>
<td>$7.78</td>
<td>$7.76</td>
<td>$0.12</td>
<td>$0.85</td>
<td>$22.52</td>
</tr>
<tr>
<td>Sep '11</td>
<td>$18.73</td>
<td>$19.00</td>
<td>$14.28</td>
<td>$4.72</td>
<td>$4.45</td>
<td>$0.27</td>
<td>$1.00</td>
<td>$20.00</td>
</tr>
<tr>
<td>Oct '11</td>
<td>$18.63</td>
<td>$17.21</td>
<td>$13.95</td>
<td>$4.68</td>
<td>$4.68</td>
<td>$1.00</td>
<td>$2.04</td>
<td>$18.47</td>
</tr>
<tr>
<td>Nov '11</td>
<td>$18.38</td>
<td>$16.64</td>
<td>$13.29</td>
<td>$5.09</td>
<td>$5.11</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$18.01</td>
</tr>
<tr>
<td>Dec '11</td>
<td>$17.99</td>
<td>$16.59</td>
<td>$13.44</td>
<td>$4.55</td>
<td>$4.56</td>
<td>$1.00</td>
<td>$2.06</td>
<td>$17.70</td>
</tr>
<tr>
<td>Jan '12</td>
<td>$17.28</td>
<td>$16.54</td>
<td>$12.82</td>
<td>$4.46</td>
<td>$4.46</td>
<td>$1.00</td>
<td>$2.04</td>
<td>$18.13</td>
</tr>
<tr>
<td>Feb '12</td>
<td>$16.99</td>
<td>$16.50</td>
<td>$12.48</td>
<td>$4.51</td>
<td>$4.51</td>
<td>$1.00</td>
<td>$2.02</td>
<td>$17.83</td>
</tr>
<tr>
<td>Mar '12</td>
<td>$17.05</td>
<td>$16.51</td>
<td>$12.39</td>
<td>$4.62</td>
<td>$4.66</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$17.41</td>
</tr>
<tr>
<td>Apr '12</td>
<td>$16.93</td>
<td>$16.35</td>
<td>$12.69</td>
<td>$3.66</td>
<td>$4.24</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$17.10</td>
</tr>
<tr>
<td>May '12</td>
<td>$16.92</td>
<td>$16.46</td>
<td>$12.85</td>
<td>$4.07</td>
<td>$4.07</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$17.15</td>
</tr>
<tr>
<td>Jun '12</td>
<td>$16.99</td>
<td>$16.71</td>
<td>$13.47</td>
<td>$3.75</td>
<td>$3.75</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$16.77</td>
</tr>
<tr>
<td>Jul '12</td>
<td>$17.08</td>
<td>$17.03</td>
<td>$13.48</td>
<td>$3.60</td>
<td>$3.60</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$17.74</td>
</tr>
<tr>
<td>Aug '12</td>
<td>$17.11</td>
<td>$17.06</td>
<td>$13.79</td>
<td>$3.32</td>
<td>$3.32</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$17.91</td>
</tr>
<tr>
<td>Sep '12</td>
<td>$17.13</td>
<td>$17.15</td>
<td>$14.28</td>
<td>$2.87</td>
<td>$2.85</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$18.13</td>
</tr>
<tr>
<td>Oct '12</td>
<td>$17.06</td>
<td>$17.02</td>
<td>$13.95</td>
<td>$3.10</td>
<td>$3.11</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$18.28</td>
</tr>
<tr>
<td>Nov '12</td>
<td>$17.09</td>
<td>$17.04</td>
<td>$13.29</td>
<td>$3.80</td>
<td>$3.80</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$18.68</td>
</tr>
<tr>
<td>Dec '12</td>
<td>$16.74</td>
<td>$17.00</td>
<td>$13.44</td>
<td>$3.35</td>
<td>$3.35</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$18.11</td>
</tr>
<tr>
<td>Jan '13</td>
<td>$16.29</td>
<td>$16.49</td>
<td>$12.82</td>
<td>$3.67</td>
<td>$3.67</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$18.08</td>
</tr>
<tr>
<td>Feb '13</td>
<td>$16.25</td>
<td>$16.30</td>
<td>$12.48</td>
<td>$3.72</td>
<td>$3.72</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$17.63</td>
</tr>
<tr>
<td>Mar '13</td>
<td>$16.15</td>
<td>$16.20</td>
<td>$12.39</td>
<td>$3.71</td>
<td>$3.71</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$17.63</td>
</tr>
<tr>
<td>Apr '13</td>
<td>$16.10</td>
<td>$16.20</td>
<td>$12.69</td>
<td>$3.51</td>
<td>$3.51</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$16.95</td>
</tr>
<tr>
<td>May '13</td>
<td>$16.10</td>
<td>$16.10</td>
<td>$12.85</td>
<td>$3.25</td>
<td>$3.25</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$16.79</td>
</tr>
<tr>
<td>Jun '13</td>
<td>$16.10</td>
<td>$16.15</td>
<td>$13.24</td>
<td>$2.86</td>
<td>$2.86</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$16.21</td>
</tr>
<tr>
<td>Jul '13</td>
<td>$16.00</td>
<td>$16.10</td>
<td>$13.48</td>
<td>$2.52</td>
<td>$2.52</td>
<td>$1.00</td>
<td>$2.00</td>
<td>$16.81</td>
</tr>
<tr>
<td>Aug '13</td>
<td>$16.00</td>
<td>$13.79</td>
<td>$2.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>StDev</td>
<td>$0.79</td>
<td>$0.79</td>
<td>$0.55</td>
<td>$0.25</td>
<td>$1.02</td>
<td>$0.79</td>
<td>$0.55</td>
<td>$0.25</td>
<td>$0.51</td>
<td>$0.79</td>
<td>$0.55</td>
<td>$0.25</td>
<td>$0.51</td>
</tr>
</tbody>
</table>

*Potential mailbox price for MI based on 2005-2011 basis (i.e., basis calculated as USDA MI mailbox price minus Class III price).*
### 2011 Ag Market Update Schedule

<table>
<thead>
<tr>
<th>Month</th>
<th>Location</th>
<th>Day</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>St. Johns(^2)</td>
<td>Thursday</td>
<td>1/20/2011</td>
</tr>
<tr>
<td></td>
<td>Sandusky(^1)</td>
<td>Tuesday</td>
<td>1/25/2011</td>
</tr>
<tr>
<td>February</td>
<td>St. Johns</td>
<td>Thursday</td>
<td>2/17/2011</td>
</tr>
<tr>
<td></td>
<td>Sandusky</td>
<td>Tuesday</td>
<td>2/22/2011</td>
</tr>
<tr>
<td>March</td>
<td>St. Johns</td>
<td>Thursday</td>
<td>3/24/2011</td>
</tr>
<tr>
<td></td>
<td>Sandusky</td>
<td>Tuesday</td>
<td>3/29/2011</td>
</tr>
<tr>
<td>May</td>
<td>St. Johns</td>
<td>Thursday</td>
<td>5/26/2011</td>
</tr>
<tr>
<td></td>
<td>Sandusky</td>
<td>Tuesday</td>
<td>5/31/2011</td>
</tr>
<tr>
<td></td>
<td>Sandusky</td>
<td>Tuesday</td>
<td>6/28/2011</td>
</tr>
<tr>
<td>August</td>
<td>St. Johns</td>
<td>Thursday</td>
<td>8/25/2011</td>
</tr>
<tr>
<td></td>
<td>Sandusky</td>
<td>Tuesday</td>
<td>8/30/2011</td>
</tr>
<tr>
<td>October</td>
<td>St. Johns</td>
<td>Thursday</td>
<td>10/20/2011</td>
</tr>
<tr>
<td></td>
<td>Sandusky</td>
<td>Tuesday</td>
<td>10/25/2011</td>
</tr>
<tr>
<td>December</td>
<td>St. Johns</td>
<td>Thursday</td>
<td>12/8/2011</td>
</tr>
<tr>
<td></td>
<td>Sandusky</td>
<td>Tuesday</td>
<td>12/13/2011</td>
</tr>
</tbody>
</table>

\(^1\)Meets at the Sanilac Co. MSU-Extension Office, 37 Austin St., Sandusky.

\(^2\)Meets at the Clinton Co. MSU-Extension Office, Clinton Co. Courthouse, St. Johns.

---

Craig Thomas, Extension Educator, Dairy  
Phone: 810.648.2515  
Michigan State University Extension  
Web: www.msu.edu/~thomasc  
Sanilac, Huron, Lapeer, Tuscola, St. Clair, Genesee, Macomb, Oakland Counties  
E-mail: thomasc@anr.msu.edu