Midyear Cattle Inventory Report

Overview...

USDA released two reports estimating July 1, 2006 cattle inventories; the midyear Cattle report and the July Cattle on Feed report. The estimates indicate a continuation of a slow expansion of cattle numbers. The total cattle inventory is 1% higher than July 2005. However, the significant numbers were that the beef cow inventory is only 100,000 head (0.4%) larger and the number of beef heifer replacements is unchanged from last year. In spite of record high calf prices in 2005 and an 8 year string of beef cow profits, dry pasture and range conditions are postponing wide scale expansion of the beef breeding herd.

The total cattle on feed inventory is estimated at 12.5 million head, 4.2% higher than a year ago. The number in feedlots with 1000 head capacity or larger is estimated to be 10.872 million head, 4.6% higher than July 1, 2005. This total is 478,000 more cattle than the year before and 740,000 (7%) more July 2004. The lack of growth in the beef breeding herd is showing up as more heifers in feedlots. The number of heifers on feed was 5.2% above year earlier levels, or 183,000 head. The inventory of steers on feed is 4.3% higher.

The dairy herd is showing modest growth. Milk cow numbers were approximately 1% higher than a year ago and dairy replacement numbers are 3% higher than July 2005.

Inventory Trends...

The dry range and pasture conditions, discussed in the July 15 Iowa Farm Outlook, are a particular problem in the major beef cow regions of the Great Plains and Southern Plains. Cow slaughter through the first 27 weeks of 2006 is up 5.9%, due entirely to beef cow slaughter that is up 11.2% while dairy cow slaughter is unchanged from the same time in 2005. Like replacement numbers, heifer slaughter has been near 2005 levels, up only 0.7% compared to a 6.2% increase in steer slaughter. However, the short term increase of heifer feeding and slaughter will add to the supply of beef and may limit upper ward price potential this fall.

The poor feed conditions are slowing the breeding herd expansion and are expected to prolonging the current stretch of profitable feeder cattle prices for beef cowherds. In spite of the slow expansion, still appears that 2005 will be the high price year of this cattle cycle.
Figure 1 shows beef cow and replacement heifer inventories since 1990, the lowest July beef cow numbers since USDA started the mid year report in 1973. The beef replacement number has increased from its low in 2001 and 2002. Also, note that the heifer inventory does lead the cow inventory suggesting slow to steady growth for beef cow numbers and the US calf crop next year.

The feeder cattle supply outside feedlots is slightly larger than a year ago. Figure 2 shows the cattle on feed and feeder cattle over 500 pounds available for placement on July 1. The feedlot inventory has been slowly increasing since 2004 and equals its second highest level at 12.5 million head. The number of steers and heifers weighing over 500 pounds and not a beef replacement heifer is 10.1 million head, its highest level since 1999.
Implications…

Long term, the slow-down in heifer retention indicates a prolonged cattle cycle. There is no indication that the expansion is over, but supplies will not grow as fast as they did in previous cycle. In the 1990-1995 expansion July heifer inventory increased almost 2 million head with four consecutive years of growth. Beef cow numbers increased over 3 million head and expanded for 5 years.

Two key factors make this cattle cycle different from the previous one. First, carcasses are heavier and a small increase in inventory could result in a big increase in beef tonnage. Second, beef demand is increasing after declining from 1980 to a low in 1998. The previous cycle was increasing supply in the face of weaker demand, but this time demand is increasing as supplies increase. While beef and cattle prices are still expected to decline, the pace of decline may be slower and the low prices not as low as the previous cycle.

The heifers retained for breeding were bred this summer, will drop a calf in spring 2007, and add it to the beef supply in 2008 and beyond. It is unlikely that the expansion is over with only two years of growth in cow numbers, but it does suggest that the price decline for fed cattle and feeder cattle expected from larger supplies will be less severe that may have been expected.

Feeder cattle prices this fall and longer term maybe more impacted by cost of gain than supply of feeders. Increased demand for corn from expanding ethanol production is driving demand for corn. The 2006 crop price has been volatile, but Dec 2006 corn is near $2.56/bu at this writing. However, the Dec 2007 and Dec 2008 are at $3.00 and $3.25, respectively. If these prices hold, they may pressure feeder cattle prices.

Fed cattle prices face a challenge in the near term. The July report indicated over a 4% increase in the number of cattle on feed and number of cattle on feed 120 days or more is 18% higher than July 2005. In addition, steer carcass weights are increasing seasonally and are 16 pounds (1.9%) heavier than the same week last year and within 6 pounds of the record weight. Thus, feedlots are not as current as they would like to be. Beef cutout prices have fallen sharply since July 4 and cattle prices are expected to weaken seasonally into late summer. The higher June placements reported in the Cattle on Feed report will also limit late fall price potential, but may support prices after the first of the year if the higher placements were cattle pulled ahead due to drought conditions.

John Lawrence
Crop Conditions Deteriorate in Dakotas, Minnesota, Nebraska, Kansas, Missouri & Iowa

Weather, weekly new-crop export sales and the August 11 USDA crop report will be dominant influences on corn prices for the next several weeks. Old-crop supplies are large and farmer marketings to make room for the new crop have the potential to weaken prices and the basis moderately if the U.S. average corn yield forecast is in the 148 to 150 bushel per acre range or higher. A yield forecast below 146 bushels per acre would likely strengthen prices some and make the market quite volatile in late August and September. With a 34% increase projected in corn processing for ethanol and large livestock numbers, domestic demand prospects look quite positive for the year ahead. Corn export demand through fall and early winter should be strengthened by a very sharp decline in Southern Hemisphere supplies from this past spring’s harvest. Early indications also point to some reduction in European grain yields and exports because of this summer’s extreme heat.

Old-crop soybean supplies are expected to be record large this fall. Crop conditions in late July looked good but not outstanding for the Midwest as a whole, but were well below normal for the Mid-South because of dry weather. A forecast U.S. average yield of 42 bushels per acre or higher likely would bring lower old and new-crop soybean prices from late August to early October. Down-side potential would be tempered some by a substantial number of biodiesel plants planned and under construction. Also, Brazil’s soybean plantings this fall are expected to be down five to six percent from a year earlier, due to a buildup of farm debt, an unfavorable exchange rate and high costs of multiple sprayings for Asian rust.

Early indicators show a strong likelihood that cash corn prices will show a larger than normal seasonal increase into the spring and summer of 2007 in response to expanding ethanol demand. Potential cash market storage returns for soybeans are less certain and will be influenced by the actual level of South American soybean plantings this fall and early winter, as well as South American weather.

Crop Condition Ratings
Western Corn Belt crop condition ratings have fallen sharply in the last three weeks, with the declines occurring in Minnesota, South Dakota, Nebraska, Kansas, North Dakota, Missouri, and Iowa. These seven states together produced 6.05 billion bushels or 54% of the U.S. corn crop in 2005. Last year’s drought was concentrated in central and southern Illinois, Missouri, and extreme east central and southeastern Iowa. Illinois and Missouri together in 2004 produced 22% of the nation’s corn crop. Much of the corn in Nebraska and Kansas is irrigated, and that will reduce drought impacts some. However, with temperatures throughout that region reaching 101-109 degrees Fahrenheit for several days, some loss of yield potential likely occurred on irrigated crops. Substantial damage is expected on the dry-land crops in those two states. Crops in a large part of Iowa look good, but there are areas of the state that have suffered from heat and lack of rain. Changes in crop condition ratings in these states from July 9 to July 30 are shown below. However, as Figures 1 and 2 indicate, crop ratings for the major states as a group are still slightly above year earlier levels.
Figure 1. Percent of 18 Major-States Corn in Good-to-Excellent Condition

Figure 2. Percent of 18 Major-States Soybeans in Good-to-Excellent Condition
Table 1. Changes in Good-To-Excellent Crop Ratings, July 9 to July 30, 2007

<table>
<thead>
<tr>
<th></th>
<th>Corn, % Good + Excellent, 7/30</th>
<th>Corn, percentage point change</th>
<th>Soybeans, % Good + Excellent, 7/30</th>
<th>Soybeans, percentage point change</th>
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</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>57</td>
<td>-11</td>
<td>55</td>
<td>-12</td>
</tr>
<tr>
<td>Minnesota</td>
<td>48</td>
<td>-4</td>
<td>49</td>
<td>-3</td>
</tr>
<tr>
<td>North Dakota</td>
<td>34</td>
<td>-2</td>
<td>45</td>
<td>-5</td>
</tr>
<tr>
<td>South Dakota</td>
<td>22</td>
<td>-20</td>
<td>25</td>
<td>-20</td>
</tr>
<tr>
<td>Nebraska</td>
<td>54</td>
<td>-7</td>
<td>38</td>
<td>-15</td>
</tr>
<tr>
<td>Kansas</td>
<td>41</td>
<td>-13</td>
<td>45</td>
<td>-11</td>
</tr>
<tr>
<td>Missouri</td>
<td>54</td>
<td>-12</td>
<td>48</td>
<td>-5</td>
</tr>
</tbody>
</table>

The July 30 crop condition ratings suggest the August 11 crop report could forecast the U.S. average corn yield somewhat below the current official projection of 149 bushels per acre. Recent price behavior suggests the market is expecting a U.S. yield in the 149-151 bushel range.

Figure 3 below shows July 11 to 20 satellite imagery of the change in U.S. crop conditions when compared to a year ago. Green areas are better than last year. Yellow and brown areas are in worse condition than a year earlier. The worst crop conditions at the time this image was taken were in the Dakotas, although parts of Iowa and neighboring states were not as good as a year earlier. Sizeable areas of Wisconsin also showed worse conditions than a year earlier. Since July 20, it is likely that parts of Minnesota and non-irrigated areas of Nebraska worsened.

Figure 3. Satellite Imagery of U.S. crop conditions, July 11-20, 2006 vs. a Year earlier

Source: USDA, Pecad: http://www.pecad.fas.usda.gov/cropexplorer/imageview2.cfm?ftypeid=4&fattributeid=1&stypeid=4&sattributeid=15&startdate=2006%2D07%2D11%2000%3A00%2E0&imenddate=2006%2D07%2D20%2000%3A00%3A00%2E0&regionid=us

Soybean yield prospects will remain quite uncertain until at least mid-August. In much of Iowa, soybean stands look good and have the potential for good yields with moderate August rains. Eastern Corn Belt soybean yield potential also should be good – for both corn and soybeans, except for parts of Wisconsin. Most of the region has had more consistent rainfall than in the western Corn Belt and temperatures have not been as hot. Areas with greater chances for below normal soybean yields are the Great Plains states from the Dakotas to Kansas, parts of Minnesota, and the Mid-South.
Foreign Crop Conditions to Watch

Temperatures have been well above normal this summer in a large part of Europe. In 2003, a similar pattern sharply reduced European Union grain production and carryover stocks. If the recent pattern continues through August, EU production may be lower than currently indicated. That would be a positive influence on U.S. corn export prospects for the year ahead.

China is another key area to watch. It usually is the second or third largest corn exporter in the world. Rainfall this summer in China’s Corn-Soy Belt has been above normal and above the levels of the past two years.

Figure 4 below shows recent trends and current USDA projections of combined wheat and feed grain (coarse grain) carryover stocks by major geographic regions. Most of the decline in world stocks has occurred in China, although U.S. stocks are projected to drop sharply in the year ahead. Keep in mind that the actual level of Chinese grain stocks remains highly uncertain, partly because of several huge upward revisions in their stocks that have been made since early 2001. Figure 5 shows the trend in global feed grain exports and wheat feeding, and USDA’s latest projections for the year ahead. Much of the increase projected for global corn exports is expected to come from better Southern Hemisphere crops next spring, after a disappointing 2006 harvest.

Figures 4 and 5 together suggest that U.S. corn export demand may be relatively strong into at least mid-winter.
Milk Supply & Demand Closer

Milk production in the 23 major dairy states rose only 1.86% for June 06. Production per cow rose only 5 pounds for the month. Milk cow numbers continued to increase, 9000 more than May 06 and 128,000 more than June 05. Second quarter 06 milk production was up only 2.3% with the average number of cows 93,000 more than one year ago for all of the states.

Iowa June 06 milk production increased only 1.2% coming from a 40 pound per cow drop in milk production. Iowa’s dairy herd was 7000 cows larger than one year ago and the same as the previous month. Total cheese production in May 06 was up 5.1% from the previous month and 1.2% more than one year ago.

<table>
<thead>
<tr>
<th>State</th>
<th>2005 cow numbers</th>
<th>2006 cow numbers</th>
<th>% change</th>
<th>2005 milk per cow</th>
<th>2006 milk per cow</th>
<th>% change</th>
<th>2005 total milk</th>
<th>2006 total milk</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>193</td>
<td>200</td>
<td>3.63%</td>
<td>1725</td>
<td>1685</td>
<td>-2.32%</td>
<td>333</td>
<td>337</td>
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</tr>
<tr>
<td>MN</td>
<td>455</td>
<td>450</td>
<td>-1.10%</td>
<td>1540</td>
<td>1555</td>
<td>0.97%</td>
<td>701</td>
<td>698</td>
<td>-0.43%</td>
</tr>
<tr>
<td>WI</td>
<td>1235</td>
<td>1243</td>
<td>0.65%</td>
<td>1590</td>
<td>1595</td>
<td>0.31%</td>
<td>1964</td>
<td>1983</td>
<td>0.97%</td>
</tr>
<tr>
<td>IL</td>
<td>104</td>
<td>103</td>
<td>-0.96%</td>
<td>1600</td>
<td>1590</td>
<td>-0.63%</td>
<td>166</td>
<td>164</td>
<td>-1.20%</td>
</tr>
<tr>
<td>CA</td>
<td>1753</td>
<td>1783</td>
<td>1.71%</td>
<td>1815</td>
<td>1795</td>
<td>-1.10%</td>
<td>3182</td>
<td>3200</td>
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<tr>
<td>ID</td>
<td>451</td>
<td>486</td>
<td>7.76%</td>
<td>1900</td>
<td>1900</td>
<td>0.00%</td>
<td>857</td>
<td>923</td>
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<tr>
<td>NM</td>
<td>325</td>
<td>360</td>
<td>10.77%</td>
<td>1840</td>
<td>1875</td>
<td>1.90%</td>
<td>598</td>
<td>675</td>
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<tr>
<td>PA</td>
<td>563</td>
<td>555</td>
<td>-1.42%</td>
<td>1595</td>
<td>1620</td>
<td>1.57%</td>
<td>898</td>
<td>899</td>
<td>0.11%</td>
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<tr>
<td>TX</td>
<td>320</td>
<td>333</td>
<td>4.06%</td>
<td>1720</td>
<td>1820</td>
<td>5.81%</td>
<td>550</td>
<td>606</td>
<td>10.18%</td>
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<tr>
<td>23-State</td>
<td>8138</td>
<td>8266</td>
<td>1.57%</td>
<td>1690</td>
<td>1695</td>
<td>0.30%</td>
<td>13755</td>
<td>14011</td>
<td>1.86%</td>
</tr>
</tbody>
</table>

During 2006 Wyoming has been the fastest growing state for percentage milk increase. Second quarter production rose 80.1% and first quarter production was up 63.3%. WY averaged 6700 cows for the second quarter; an increase of 2200 cows. Alaska had the largest percentage decline, -33.3% for the second quarter, due to 400 fewer cows. Alaska only has 800 dairy cows now. The top ten states for milk increase included MI, IN and several Great Plains states. The top ten states for milk production decline included many SE US stated, NJ, RI, HI and of course Alaska

States around Iowa that make quarterly production reports are ND, SD, NE and KS. ND had a 3% drop in milk production and 1000 fewer cows. SD cow numbers are flat, 81,000, but milk rose by 3%. NE cow numbers rose by 1000 and production was up 3.6% KS had 1000 more cows also and 3.4% more milk.

Monthly Milk per Cow
23 States

Source: Dairy Market News
Demand
The May 31 cheese stocks report showed a 2.5% increase compared to last year and 6.8% more than the 5-year average. May cheddar cheese production 3.4% greater than one year ago while total cheese production was 3% higher.

Butter production was 7.3 more than one year ago. June butter stocks are reported down 1.3 million pounds with a usual 6-year average increase of 9 million pounds. It appears that ice cream manufacturers are trying to make additional ice cream and are bidding cream away from butter churns. Butter production was up Jan-May by 13% with most of it coming from a 22% increase in CA. Fortunately, butter consumption is up 11% for the year.

Fluid milk sales are still up for the year. March-May was 13.89 billion pounds, an increase of 1.11%.
Analysis

The US dairy market appears to be in a nearby bear market with bullish future prices. With cheese inventories as large as they have been for several years this makes some sense. And with the recent heat in CA as well as the NW US, future milk production, 2007, milk prices for the first half of 2007 are showing strength. The immediate effect of CA heat has been to kill cows under heat stress. How many is not yet known but 1-2% is reported. The larger effect of heat won’t show until later this year and much of next. Some cows will have aborted or not settled. Those that calved during this period won’t produce as much milk as if the weather had been cooler during their first few weeks of lactation. The poor reproductive performance that will take place over the next several weeks will extend calving intervals and reduce potential 2007 milk production.

The dairy herd has increased by 150,000 head since April 2004. Dairy farmers are now starting to cull more dairy cows than this time 2005, +9.8% from one year ago. The milk-feed ratio of 2.33 relays why. Lower milk prices and higher feed prices lead dairy producers to cull unprofitable cows at a higher rate. The dairy heifer inventory is quite large according to the July 1 Cattle Inventory from USDA. The highest since 1994 at 41.4 per 100 cows. This report tends to under-report dairy heifer numbers due to its lower response number compared to the January count.

With large cheese stocks, nearby milk prices are unlikely to move much based on supply. Some upward rise is likely to take place if the CA cow death reports are true. Milk production will continue to be weaker for the rest of this year leading to improving milk prices for 2007. If the US economy continues to be relatively strong, dairy producers should see better prospects for profits in 2007.

Robert Tigner