U. S. Beef Cattle Situation and 2008 Price Outlook

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Highlights

- As of January 1, 2007, the U.S. cattle and calves inventory increased to a total of 97.0 million head, up about 301,000 head (+0.31 percent) from a year ago. The new cattle cycle, which began January 2004, is exhibiting modest growth. The inventory of cattle and calves for this cattle cycle is tracking slightly below the expansion years of the previous cattle cycle (1990-2004).

- As of January 1, 2007, the number of cows and heifers that have calved decreased to a total of 42.0 million head, down about 33,000 head (-0.30 percent) from a year ago.

- As of January 1, 2007, the inventory of heifers 500 pounds and over increased to a total of 20.1 million head, up about 102,000 head (+0.51%) from a year ago, up about 27,000 head (-0.46 percent) from a year ago. Milk cow replacements increased to a total of 4.3 million head, up about 35,000 head (+0.82 percent) from a year ago. The inventory of other heifers 500 pounds and over increased to a total of 9.9 million head, up about 94,000 head (+1 percent) from a year ago.

- As of January 1, 2007, the 2006 U.S. calf crop was estimated to be 37.6 million head, a decrease of 8,000 head (-0.02 percent) from a year ago.

- As of January 1, 2007, the number of feeder cattle outside of feedlots was estimated to be 28.3 million head, an increase of 237,000 head (+0.84 percent) from a year ago.

- As of July 1, 2007, the U.S. cattle and calves inventory decreased to a total of 105.7 million head, down about 400,000 head (-0.38 percent) from a year ago.

- As of July 1, 2007, the number of cows and heifers that have calved decreased to a total of 42.5 million head, down about 100,000 head (-0.23 percent) from a year ago.
As of July 1, 2007, the inventory of heifers 500 pounds and over was unchanged from a year ago at 16.6 million head. However, the inventory of heifers 500 pounds and over held for beef cow replacements decreased to a total of 4.7 million head, down 300,000 head from last year (-6 percent). The inventory of milk cow replacements increased to a total of 3.9 million head, up about 100,000 head (+2.63 percent) from a year ago. The inventory of other heifers 500 pounds and over increased to a total of 8.0 million head (+2.56 percent) from a year ago.

As of July 1, 2007, the 2007 calf crop was estimated to be approximately 37.4 million head, down 167,000 head (-0.44 percent) from last year.

As of July 1, 2007, the number of feeder cattle outside of feedlots was estimated to be 39.3 million head, an increase of 100,000 head (+0.26 percent) from a year ago.

2007 U.S. beef production is expected to decrease to a total of 26.05 billion pounds, down about 0.10 billion pounds (-0.4 percent) from a year ago. U.S. beef production during 2008 is expected to be similar to 2007 at approximately 26.1 billion pounds (+0.20 percent).

Net beef supply (domestic beef production plus beef imports minus beef exports) during 2007 is expected to decrease to 27.9 billion pounds, down 0.16 billion pounds (-0.57 percent) from last year. The 2007 decrease is the result of a slight decrease in domestic production (-0.10 billion pounds), an increase in beef imports (+0.17 billion pounds), and an increase in beef exports (+0.23 billion pounds). Beef and veal imports are expected to be about 3.09 and 3.26 billion pounds during 2006 and 2007, respectively. Beef and veal exports are expected to be about 1.15 and 1.38 billion pounds during 2006 and 2007, respectively. Thus, a beef trade deficit of about 1.93 and 1.88 billion pounds is expected to be realized during 2006 and 2007, respectively.

Net beef supply during 2008 is expected to decrease to a total of 27.7 billion pounds, down 0.20 billion pounds (-0.72 percent) from 2007. The 2008 decrease is the result of a slight increase in domestic production (+0.10 billion pounds), a slight increase in beef imports (+0.06 billion pounds), and an increase in beef exports (+0.31 billion pounds). Beef and veal imports are expected to be about 3.32 billion pounds, while beef and veal exports are expected to be about 1.7 billion pounds during 2008. Thus, a beef trade deficit of about 1.63 billion pounds is expected to be realized during 2008.

Competing meat production (pork and poultry) during 2007 is expected to show an increase compared with 2006. Pork production during 2007 is expected to show an increase of 0.33 billion pounds (+1.5 percent), while broiler production is expected to decrease by about 0.07 billion pounds (-0.19 percent). Pork and broiler production are expected to total 21.7 and 35.7 billion pounds during 2007, respectively. Total beef, pork, and broiler production is expected to increase to a total of 83.4 billion pounds, up about 0.47 billion pounds (+0.57) from a year ago.

U.S. beef exports are expected to show growth during 2007 and 2008. The opening of beef trade with Japan and South Korea during 2007 offers added opportunity to increase U.S. beef
exports in 2008. Future export growth is expected to be gradual. It may take 3-5 years to reach pre-2003 U.S. beef export levels. However, the increase in U.S. beef export levels should help provide price support to the U.S. beef industry. U.S. export levels of beef and competing meats (pork and poultry) will likely have a significant impact on U.S. beef prices during the next couple of years.

The combination of higher levels of cow slaughter year to date and a decline in both the July 2007 estimates for beef cows that have calves (-0.3 percent) and heifers held for beef replacement (-6.0 percent) from a year ago, suggests that that cow-herd expansion has been halted. Current expectations for the January 1, 2008 cattle and calves inventory estimate will show a decrease in the U.S. cattle and calves inventory. If this occurs, this will equal the shortest expansion period of all recorded cattle cycles. A combination of higher production costs, large levels of competing meats, and dry weather in the Southeast, Southwest, and parts of the Corn Belt are thought to be the major factors responsible for causing cattle liquidation to occur.

**Beef Supply Situation**

Despite high feeder calf and feeder cattle prices and about eight years of cow-calf profits (returns over cash expenses), U.S. cattle farmers are not increasing the inventory of cattle and calves as might be expected. The expected increases in the inventory of cattle and calves have been constrained/negated by higher productions costs (feed, fertilizer, labor, land rents, etc.), very poor pasture and range conditions affecting many cow-calf states as well as large levels of competing meats. In addition, the uncertainties associated with beef export trade, food safety, Animal ID, domestic and foreign consumer demand, alternative uses of land (pasture acreage moving into grain production and/or conservation programs and other non-farm uses such as recreation and rural non-farm development), and numerous other issues have likely also caused many cattle farmers to reduce their cattle inventory. Thus, the current cattle cycle has either stalled or peaked.

In the mid-year July 1, 2007 Cattle report, cattle farmers told USDA they had about 100,000 fewer beef cows that had calved (-0.30 percent) than a year ago and beef cow replacements were down 300,000 head (-6.0 percent) from a year ago at 4.7 million head. Each of the previous two years beef cow replacements were increased by 200,000 head (+4 percent). A decrease in beef cow replacements and beef cows that have calved during 2007 suggests that herd expansion has halted for the reasons mentioned above.

A smaller inventory of cattle and calves and smaller calf crop during 2007 will likely limit the growth in beef production during 2008. USDA projects U.S. beef production during 2008 to be about 26.1 billion pounds. This level of beef production will be influenced by any adjustments in average carcass weights and the level of feeder and live cattle imports (from Canada and Mexico). USDA is expected to lift the age ban on cattle imported from Canada. USDA expects this decision to have a minimal effect on cattle prices, unless of course a food safety issue develops.
Feed and Forage Conditions

The 2007 growing season of the major grain growing regions was mostly good during the spring, but declined during the summer months. However, recent crop progress reports project improvements in corn and soybean yield estimates from earlier reports. USDA’s current corn and soybean production forecasts are 13.3 billion bushels and 2.62 billion bushels, respectively, for 2007. If these production levels are realized corn production will be about 2.8 billion bushels larger than a year ago (+26.3 percent) and soybean production will be about 0.6 billion bushels smaller than a year ago (-17.9 percent). Obviously, this will be the largest corn crop on record.

Corn prices have fallen corresponding to the forecasted larger crop. December 07 corn is currently trading at $3.47 per bushel at the CBOT (Chicago Board of Trade), while November 07 soybeans are at $9.41 per bushel. Furthermore, in years when the September yield projection is higher than the August yield projection it is often followed by further upward revisions in the final yield estimate. If this occurs, look for corn and/or soybean prices to decline further this fall. However, also be aware of improved world export demand for these commodities.

Another factor that can certainly affect feeder calf and feeder cattle prices is the price of corn next year. With continued development and expansion of ethanol plants, we should continue to see strong demand for corn. Corn prices are expected to be higher during 2008 with December 08 corn futures at the CBOT currently trading at $3.97 per bushel. Some analysts question whether the December 2008 CBOT corn price of $3.97 per bushel is sufficient to bring the necessary additional acres into corn production. Especially, with Jul 08 wheat trading at $5.82 per bushel and Nov 08 soybeans trading at $9.18 per bushel. If it doesn’t, corn prices will likely move much higher.

Additionally, pasture and range conditions have not been favorable over many of the cow-calf states this year. Particularly hard hit this year has been the Southeast, Southwest, and parts of the Corn Belt states. These poor and very poor pasture and range conditions have contributed to a higher level of cull cows moving to slaughter this year. Recent modest amounts of rainfall have been received in some of these areas. The pasture and range conditions as of September 9th are rated as poor or very poor on 36 percent of the U.S. acreage in pasture and rangeland. Significant rainfall deficits in many of these areas are the result of two plus years of dry weather. Substantially more rainfall is needed in many of these states to restore water tables and normal forage production.

Total 2007 U.S. hay production is expected to be marginally larger than a year ago. However, recall that 2006 hay production was adversely affected by the drought. Hence, hay supplies will be in tight hands. In the Southeast, several states are expected to harvest about one-half of normal hay production levels. This will result in much higher hay prices in those areas affected by the drought. Both quantity and quality of hay have been adversely affected by the drought. Alternative winter feedstuffs will be in much demand this winter as cattlemen seek to feed their cowherds. Thus, the cost to winter cattle this year will be higher. The drought will no doubt have a significant effect on cattle production costs and the herd reduction in these areas.
Beef Demand and Trade

Beef demand was relatively stable during the first three quarters of 2007. Beef demand felt some challenges the last two years due to less interest in protein diets and some consumers who experienced reduced grocery budgets due to higher energy prices and interest rates. Beef demand is expected to remain stable for the rest of 2007 and 2008. Per capita consumption of beef is expected to remain in the mid 60s (pounds per person) through the rest of the decade, assuming some growth continues in beef exports.

Retail beef prices during 2007 were marginally higher than a year ago. 2007 retail beef prices will average slightly above 2006 prices. Total beef spending is expected to increase slightly in 2007. The average total beef spending per capita during 2007 is expected to approach about $250 per person.

Additionally, it is very important that the U.S. continues to keep open and grow beef export markets. This could be worth $3 to $7 per hundredweight on the value of fed slaughter cattle. Growth in beef export markets will also help to moderate the price impacts of increases in U.S. domestic broiler and pork production that is expected through the end of this decade.

Competing Meats

Both pork and broilers are expected to show increased production next year. Pork production is expected to increase about 0.33 billion pounds (+1.51 percent) during 2008 compared with a year ago, while broilers are expected to increase about 0.84 billion pounds (+2.35 percent). There is a trade surplus for each of these competing meats, which means we export more than we import. Therefore, the net pork supply is expected to increase about 0.25 billion pounds (+1.28 percent) during 2008 compared with a year ago, while the net broiler supply is expected to increase about 0.69 billion pounds (+2.29 percent) compared with a year ago.

![Figure 1. U.S. Beef, Broiler, and Pork Supply, 2004-2008](image)
Any changes in the production levels or export levels of pork and broilers could have a significant effect on U.S. beef prices. A watchful eye on the production and export levels of competing meats will help identify potential changes in beef prices.

2008 Beef Price Outlook

The 2008 cattle market will continue to operate with a great deal of uncertainty. Cattle farmers should monitor several factors: including the length, extent, and severity of the drought, growing supplies of broilers and pork, export and import sales (beef, broilers, and pork), and consumer beef demand. The cattle markets could experience some volatile movements with abrupt changes in any of these factors and/or combinations of factors.

The 2008 U.S. net beef supply is expected to be similar to 2007, as shown in Table 1. Domestic beef production is forecast to increase 0.05 billion pounds (26.10-26.05 or +0.20 percent), beef and veal imports are expected to post a minor increase of 0.06 billion pounds (3.32 – 3.26 or +1.87 percent), beef and veal exports are expected to increase about 0.32 billion pounds (1.70-1.38 or +22.65 percent). Assuming these increases are realized, the U.S. net beef supply during 2008 will likely post a slight decrease of about 0.20 billion pounds (27.73-27.93 or -0.72 percent).

Table 1. U.S. Net Beef Supply (Billion Pounds), 2006-2008.

<table>
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<tr>
<th>Item</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
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<tr>
<td>Domestic Beef Production</td>
<td>26.15</td>
<td>26.05</td>
<td>26.10</td>
</tr>
<tr>
<td>Beef &amp; Veal Imports</td>
<td>3.09</td>
<td>3.26</td>
<td>3.32</td>
</tr>
<tr>
<td>Beef &amp; Veal Exports</td>
<td>1.15</td>
<td>1.38</td>
<td>1.70</td>
</tr>
<tr>
<td>Net Beef Supply</td>
<td>28.09</td>
<td>27.93</td>
<td>27.73</td>
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Assuming stable domestic consumer beef demand, the combination of a slight decrease in the U.S. net beef supply (-0.72 percent) coupled with increases in the net broiler supply (+2.29 percent) and the net pork supply (+1.28 percent) will limit beef price increases during 2008. However, any significant changes in domestic beef demand, domestic beef production, and/or export and import levels of these three competing meats could cause major movements in beef prices. Each industry is very capable of significantly altering production levels and subject to wide changes in export and import levels.

Given the above projections regarding the 2008 U.S. net beef supply, beef cattle price projections were estimated for 2008. Beef cattle price projections were estimated by quarter for choice slaughter steers (Nebraska basis), feeder steers, 750#, (Alabama basis), feeder steer calves, 550#, (Alabama basis), and boning utility cows (Alabama basis), as shown in Table 2. These prices represent the range over which the average price for the particular class of cattle would average for the indicated quarter. For example, Choice slaughter steers in Nebraska during
the first quarter of 2008 are expected to average between $95 and $100 per hundredweight. The highest average prices are expected during the first quarter of 2008 for all classes of cattle. The lowest average prices are expected during the third quarter for choice slaughter steers and the fourth quarter for all other classes of beef cattle.

Table 2. Estimated average beef market prices, Alabama, 2008.

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<tr>
<td>Choice slaughter steers, Neb. $/cwt.</td>
<td>$95-$100</td>
<td>$94-$99</td>
<td>$91-$96</td>
<td>$94-$99</td>
<td>$92-$97</td>
</tr>
<tr>
<td>Feeder steers, 750#, AL, $/cwt.</td>
<td>$106-$112</td>
<td>$104-$110</td>
<td>$105-$111</td>
<td>$104-$110</td>
<td>$104-$110</td>
</tr>
<tr>
<td>Feeder steer calves, 550#, AL, $/cwt.</td>
<td>$113-$121</td>
<td>$112-$120</td>
<td>$110-$118</td>
<td>$108-$115</td>
<td>$110-$118</td>
</tr>
<tr>
<td>Boning utility cows, AL, $/cwt.</td>
<td>$40-$46</td>
<td>$40-$46</td>
<td>$40-$45</td>
<td>$38-$42</td>
<td>$40-$45</td>
</tr>
</tbody>
</table>

For 2008, choice slaughter steers (Nebraska basis) are forecast to post an annual average in the low to mid- $90s per hundredweight. Alabama feeder steers (750#) are expected to average between $104 and $110 per hundredweight, Alabama feeder steer calves (550#) between $110 and $118 per hundredweight, and Alabama boning utility cows in the low to mid $40s per hundredweight. Breeding heifer, cow, and bull prices are expected to show modest increases of between 1-5 percent as the demand for herd replacements gains in importance.

Additionally, a significant factor in the net beef supply during the next several years will be the beef balance of trade (beef exports minus beef imports). In 2008, U.S. beef exports are expected to total about 1.70 billion pounds, while U.S. beef imports are expected to total about 3.32 billion pounds. This results in a beef trade deficit of about -1.62 billion pounds. Thus, if U.S. beef production grows over the next several years, it is extremely important that we realize significant improvements in U.S. beef exports if we want to avoid burdensome levels of net beef supplies. It would be highly advantageous to cattle farmers if we could grow our beef export levels similarly to the expected increases in domestic beef production.

2008 cattle market prices should remain cyclically strong and average higher than a year ago. As should be expected, the 2008 cattle market has the potential for some big price swings. Abrupt changes in the levels of the factors mentioned above could add much volatility to 2008 cattle market prices. Weather and corn prices will likely be the dominant factors affecting beef cattle prices during 2008.