

# Market Outlook for 2003 and Beyond

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U.S. cattle producers begin 2003 with a much brighter outlook. Declining cattle inventories, lower beef production, possible improvements in beef export markets, and improvements in domestic beef demand should contribute to higher beef cattle market prices during 2003. Improving cattle market prices suggest profits will be realized by all segments of the beef cattle industry during 2003.

The brighter cattle outlook is no doubt a welcome change from 2002. Record level beef production of 27.1 billion pounds was realized during 2002. The large numbers of cattle on feed and record carcass weights resulted in the record level of U.S. beef production. This record level of beef production exceeded the expectations of most analysts and caused beef prices to plummet. In addition, a widespread drought and the forced liquidation of cattle added much frustration for many cattle producers attempting to expand their operations. These conditions coupled with large levels of pork and poultry production and a poultry trade dispute pressured cattle prices lower during most of the year and resulted in substantial losses in the stocker and fed cattle sectors and only marginal profits for many cow-calf producers.

## **Declining Meat Production in 2003**

The expectation of improving beef cattle market prices during 2003 is based on a number of variables, but particularly the level of meat production. Beef production is expected to decline between 700-900 million pounds (about 2.5%) to approximately 26.2 billion pounds. Pork production is projected to

decline about 2%. Poultry production is forecast to remain about level. Thus, total meat supplies should decline resulting in an improvement in meat prices.

2002 was not all bad. 2002 total per capita meat consumption of all red meat and poultry by U.S. consumers is expected to set a new record of approximately 218 pounds (retail weight). This would amount to a 2.5% increase in U.S. per capita meat consumption over 2001 and was achieved with increased consumption levels of all three major meats (beef, pork, and poultry).

In addition, the demand for beef has shown much improvement since its low in 1998. Changes in consumers' perceptions of beef coupled with the introduction of more consumer-friendly beef products have contributed to the improvement in beef demand. Further increases in beef demand are expected as companies add new beef products and the U.S. economy strengthens. Also, beef exports are poised for a potential increase during 2003 as Japanese consumers begin to return to beef following food safety concerns with Japanese beef.

## **Cattle Cycle Disrupted**

The cattle cycle, which is normally about 10-11 years in length, has been disrupted. A cattle cycle is measured from the lowest inventory of cattle and calves to the next lowest over time (trough to trough). We are now in the 14th year of this cattle cycle. Weather will be the wild card this year as cattle producers determine if there will be adequate moisture for grass production and herd expansion. However, if widespread dry

weather continues, the inventory of cattle and calves could post another decline in 2004. If this happens, the level of beef production could decline further and probably result in higher cattle market prices during 2004.

The inventory of cattle and calves reported by USDA as of January 1, 2003 totaled 96.1 million head of cattle and calves. This estimate was down almost 1% (about 600,000 head) from a year ago. Cattle on feed were down 7% (about 944,000 head) from a year ago. However, calves and other heifers and steers grazing small grain pastures in Kansas, Oklahoma, and Texas were substantially higher (about 900,000 head) at 3.7 million head. Thus, feeder cattle coming off wheat pastures during February, March, and April will be much larger than normal. Beef and dairy cow replacements were each up 1% (about 47,000 and 44,000 head, respectively) from a year ago.

The current cattle cycle is the longest cycle in the past 65 years. This cycle is evenly split between seven years of expansion and seven years of liquidation. It is believed that the expected expansion in cattle and calves inventory during the last two years did not develop due to lower cattle prices and widespread drought conditions. If widespread drought conditions continue during 2003, more cows are likely to be sold for slaughter or to new owners in states with adequate feed supplies.

The number of cattle operations in the United States has plummeted during the last 27 years. Since 1975, the number of U.S. cattle operations has decreased from 1.9 to 1.1 million operations, representing a decrease of approximately 816,000 operations (44%). The largest decline, 353,000 operations, was during the 1979-90 cattle cycle. Since 1990, the United States has lost about 252,000 cattle operations. Significant declines have been realized in both beef and dairy operations. As a result, the average size of a cattle operation is increasing. A continued modest decline in

the number of cattle operations is expected for the future due to rising production costs, lack of profitability, and risk.

## **Weather Conditions Affect Cattle Markets**

Typically in March it is the cold, wet weather that impacts cattle performance, weights, and market prices. Recent reports about severe weather conditions in the Plains could adversely affect cattle performance and reduce slaughter weights, thereby affecting slaughter cattle prices. Also, cold weather in Oklahoma and Texas has added some uncertainty about when feeder cattle will move off of wheat pasture. If large areas of wheat pastures have been frost damaged, it could cause more wheat grazeout and delay the placement of feeder cattle in feedlots. This scenario would likely result in feeder cattle being placed in feedlots over a longer time period than if wheat producers pulled cattle off of wheat pastures under normal conditions (first hollow stem, Feb/Mar) to harvest wheat for grain. Thus, cattle placements and expected market levels during second and third quarters are still uncertain due to the weather at the time this paper is being written.

Additionally, dry conditions in a large area of the country may further impact cattle markets. Continued drought has affected water supplies (wells, reservoirs, streams, ponds, etc.) in many western areas. Likewise, tight forage supplies and limited stored feedstuffs are beginning to affect cow slaughter in some areas. The higher cow slaughter during the first quarter of this year and the ongoing drought could push any opportunity for herd rebuilding into 2004. Weather conditions during the next several months will be a major factor that helps determine if herd rebuilding will take place during 2003. Depending on the location of the drought, this could be another year where continued liquidation occurs in the West and expansion in the South.

Furthermore, a portion of the major corn production region is also being affected by dry weather conditions. Weather analysts have documented that the drought has expanded into the western Corn Belt during this winter. A less than large corn crop coupled with a small corn carry over could result in a significant rise in corn prices. Presently, corn planting expectations suggest there should be more acres planted to corn this year. However, if weather is a factor, the size of the corn crop is still uncertain. For every \$0.50/bushel increase in corn price, feeder cattle prices are expected to decline \$6 to \$8/hundredweight. Whether you are selling feeder cattle or feeding feeder cattle, a watchful eye on the corn market this year could pay significant dividends.

### **Cattle Prices**

2003 beef cattle prices at all levels are expected to average higher than last year. Fed cattle prices are expected to average in the mid \$70s. Seven-weight feeder cattle are projected to average close to \$80. And five-weight feeder calves are forecast to average in the low to mid \$90s. Cull cow and bull prices are also expected to increase 2-4% this year due to lower levels of beef production. However, beef cattle prices will likely fluctuate widely during 2003. These fluctuations will result primarily due to smaller numbers of fed cattle marketed during the first quarter and a very large number of fed cattle marketed during the third quarter of 2003.

The larger numbers of fed cattle marketed during the summer of 2003 are expected from large early spring feedlot placements of feeder cattle coming off of wheat pastures during February, March, and April. Thus, we are likely to see a wider spread in beef cattle prices from the spring highs to the summer lows in 2003. Fed prices should follow the seasonal decline in the spring and summer, but the magnitude of the price decline will depend on the feeder cattle

placement pattern during the late winter and early spring. The fourth quarter of 2003 should support improving beef cattle prices if adequate widespread moisture is realized and beef exports are not interrupted due to war, food safety, trade disputes, etc. Overall, 2003 should provide profits for all sectors of the beef cattle industry.

The impact of the war in Iraq on the cattle market is difficult to predict. No one has any idea of how long or how substantial this war could become. We did have similar beef supply conditions during Desert Storm and we saw beef prices increase. This war did not significantly affect beef demand or supply. However, at present, the two primary areas to watch are domestic beef demand and export beef demand. If the war is long and substantial and causes domestic beef demand and/or export beef demand to weaken, it could have a very negative impact on cattle market prices. Alternatively, should the war with Iraq be short and of minimal interaction, it will likely have little impact on either domestic or export beef demand.

### **Summary Remarks**

There are two sets of factors to consider when looking at the 2003 U.S. cattle market – the bearish factors and the bullish factors. The bearish factors to consider include adverse weather conditions, higher input prices, large beef imports, trade agreements and disputes, and slow economic growth. The bullish factors to consider include a declining cattle and calves inventory, lower levels of beef production, declining levels of competing meats, improving beef demand, and growth in beef exports. The outcome of these factors will determine 2003 cattle market prices.

As we look ahead to the next cattle cycle, we as cattle producers need to stay focused on the level of beef production, food quality, and food safety. There are numerous issues affecting the beef cattle industry today. Without trying to be exhaustive in the listing,

a few of these include vertical integration, packer concentration, captive supplies, feedlot concentration, NAFTA, irradiation, alliances, grid marketing, beef checkoff, country of origin labeling, national animal identification system, monetary exchange rates, and others. The resolution of these issues will ultimately affect the beef producer and consumer. However, in my opinion, the level of beef production, food quality, and food safety are the most important.

Consumers vote with their dollars for the type of beef product they want (price and quantity associated with a given quality) and beef producers respond to their price signal with a level of supply that will pay the producer for his factors of production. In the recent past, many cattle producers have not been paid for their full factors of production. Thus, we have witnessed a significant decline in the number of U.S. cattle operations and the inventory of cattle and calves.

The current supply-side of the cattle cycle is still experiencing herd liquidation. Holding other things constant, lower beef supplies should boost cattle prices in all sectors. This improves the chances for profits in all sectors as well. However, this temporary improvement in beef prices and profits will not last long enough for most cattle producers to earn a reasonable return on their

investment. Thus, cattle producers should be prepared to evaluate how much it cost them to deliver beef of a given quantity and quality and compare it with the price the consumer is willing to pay. If consumers really want a high quality, safe beef product, then higher cattle market prices are apparently needed. Herein possibly lies the rub.

Are consumers willing to pay a market price for a high quality, safe beef product that will cover the full factors of production for cattle producers? The recent improvements in domestic beef demand that have reversed a nearly 20-year decline in beef demand suggest that consumers may be willing to pay. If this is the case the next question is, will the various segments of the cattle industry agree to deliver this beef product and will they share enough of the retail market price with the cattle producer to pay his full factors of production? Only time will determine the answer to this question.

The next cattle cycle will no doubt have many challenges and opportunities. Identifying these opportunities and carefully evaluating them to determine what will pay the cattle producer is paramount. A watchful eye on the level of beef production, food quality and safety, and cattle market prices will alert cattle producers about these future potential profits.

Figure 1. Inventory of U.S. cattle and calves, 96.1 million head, January 1, 2003.

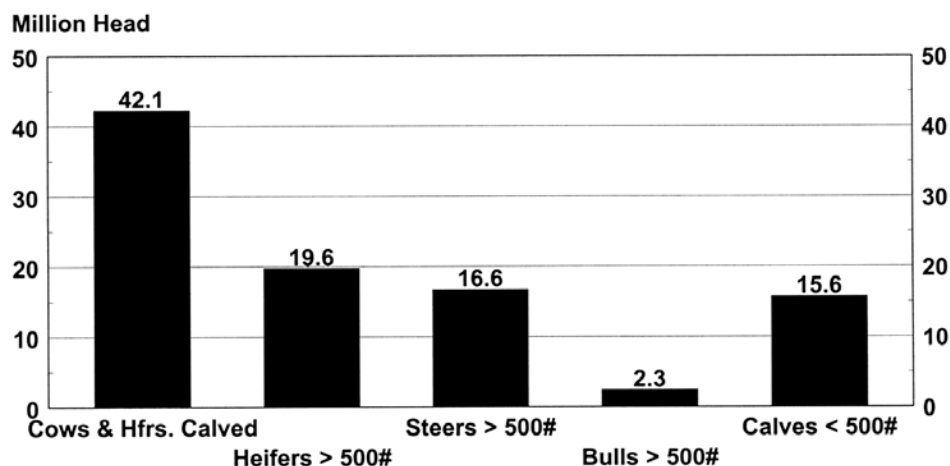


Figure 2. Inventory of U.S. cattle and calves, January 1, 2002 and 2003.

<u>Class</u>	<u>2002</u>	<u>2003</u>	<u>Percent Change</u> <u>From 2002</u>
	<u>Million Head</u>		
Cattle and Calves	96.7	96.1	- 1 %
Cows and Heifers That Have Calved	42.2	42.1	0 %
Beef Cows	33.1	33.0	1 %
Milk Cows	9.1	9.2	0 %
Heifers 500 Pounds and Over	19.7	19.6	0 %
For Beef Cow Replacement	5.6	5.6	1 %
For Milk Cow Replacement	4.1	4.1	1 %
Other Heifers	10.1	9.9	- 2 %
Steers 500 Pounds and Over	16.8	16.6	-1 %
Bulls 500 Pounds and Over	2.2	2.3	0 %
Calves Under 500 Pounds	15.8	15.6	-1 %
Cattle on Feed	13.9	12.9	- 7 %
FC Outside Feedlots	28.8	29.1	1 %

Figure 3. Inventory of U.S. cattle and calves, January 1, 1990 and 2003.

<u>Class</u>	<u>1990</u>	<u>2003</u>	<u>2003 as a</u> <u>% of 1990</u>
	<u>Million Head</u>		
Cattle and Calves	95.8	96.1	100 %
Cows and Heifers That Have Calved	42.5	42.1	99 %
Beef Cows	32.5	33.0	102 %
Milk Cows	10.0	9.2	91 %
Heifers 500 Pounds and Over	17.3	19.6	114 %
For Beef Cow Replacement	5.3	5.6	106 %
For Milk Cow Replacement	4.2	4.1	98 %
Other Heifers	7.8	9.9	127 %
Steers 500 Pounds and Over	15.5	16.6	107 %
Bulls 500 Pounds and Over	2.2	2.3	104 %
Calves Under 500 Pounds	18.4	15.6	84 %
Cattle on Feed	11.6	12.9	111 %
FC Outside Feedlots	30.1	29.1	97 %

Figure 4. Inventory of U.S. cattle and calves and average calf price, 1949-2003.

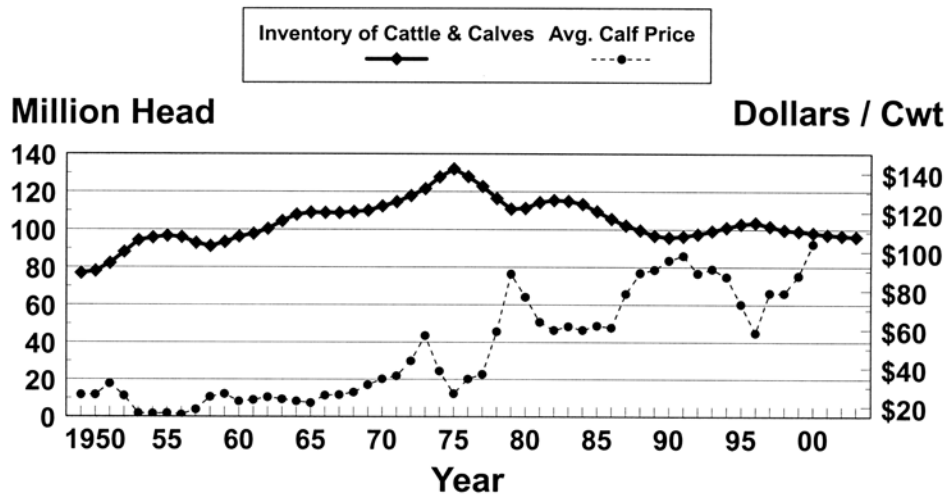


Figure 5. U.S. Drought Monitor.

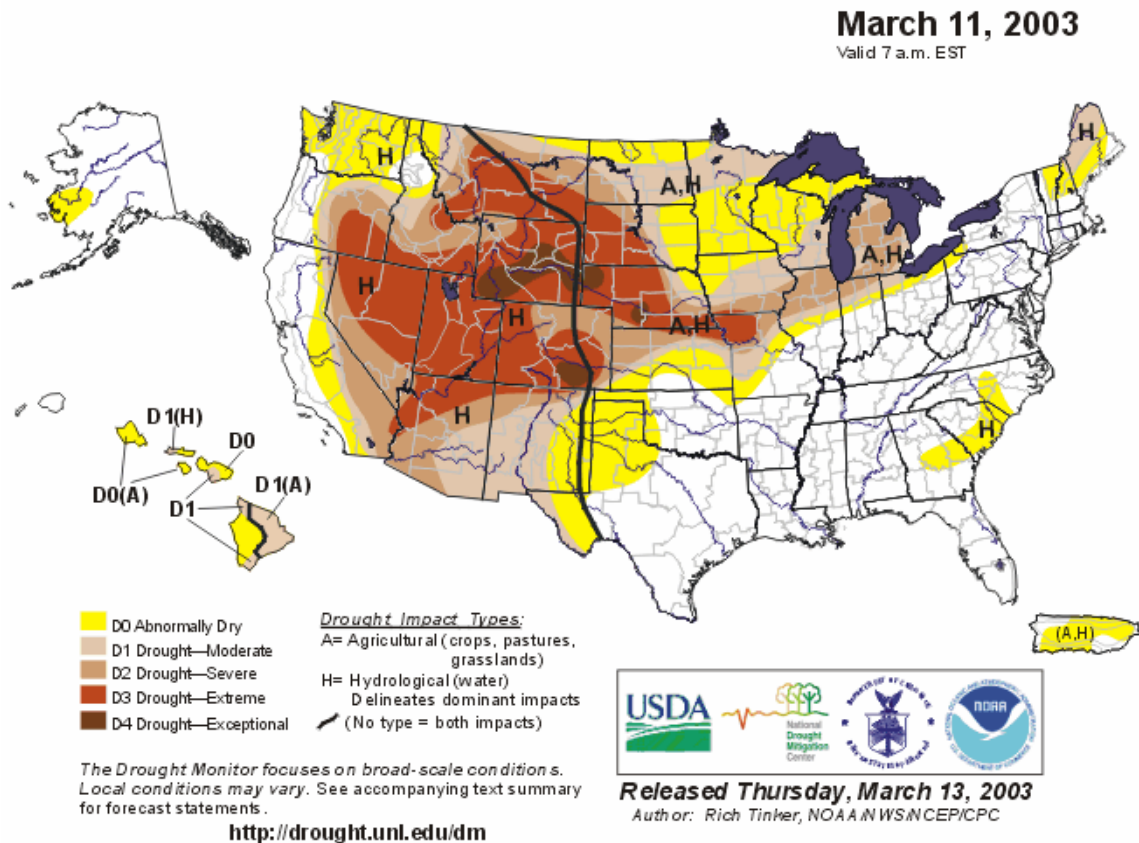


Figure 6. Beef replacement heifers, July 1, 1985-2002.

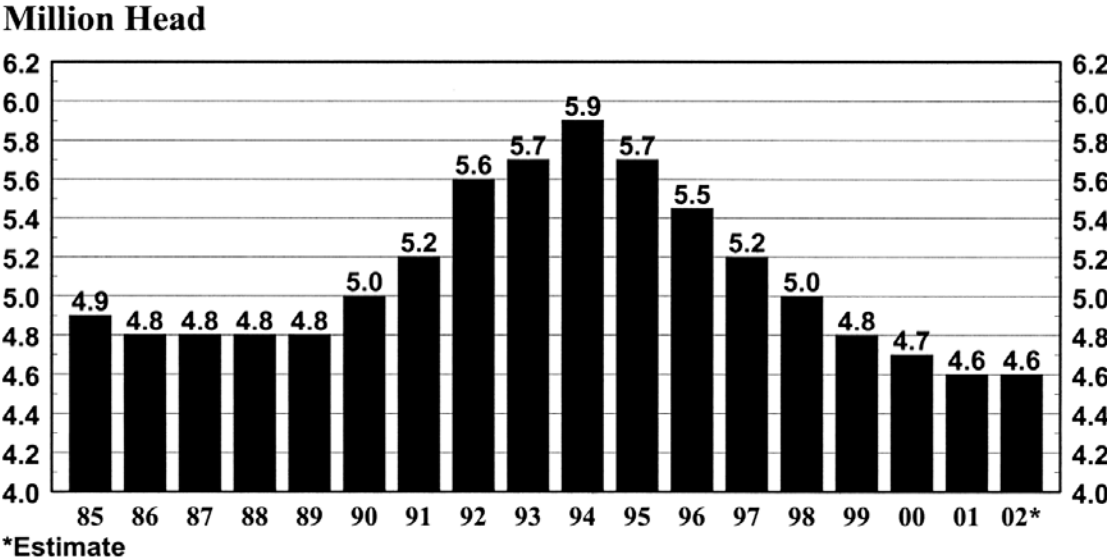


Figure 7. Heifers as a percent of total feedlot placements, 1980-2002.

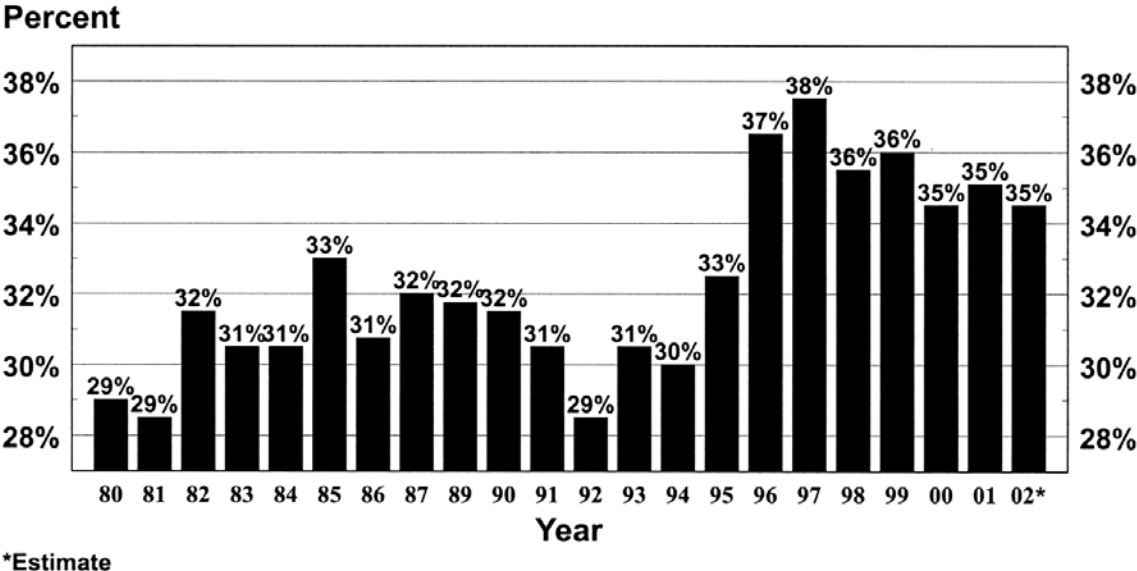
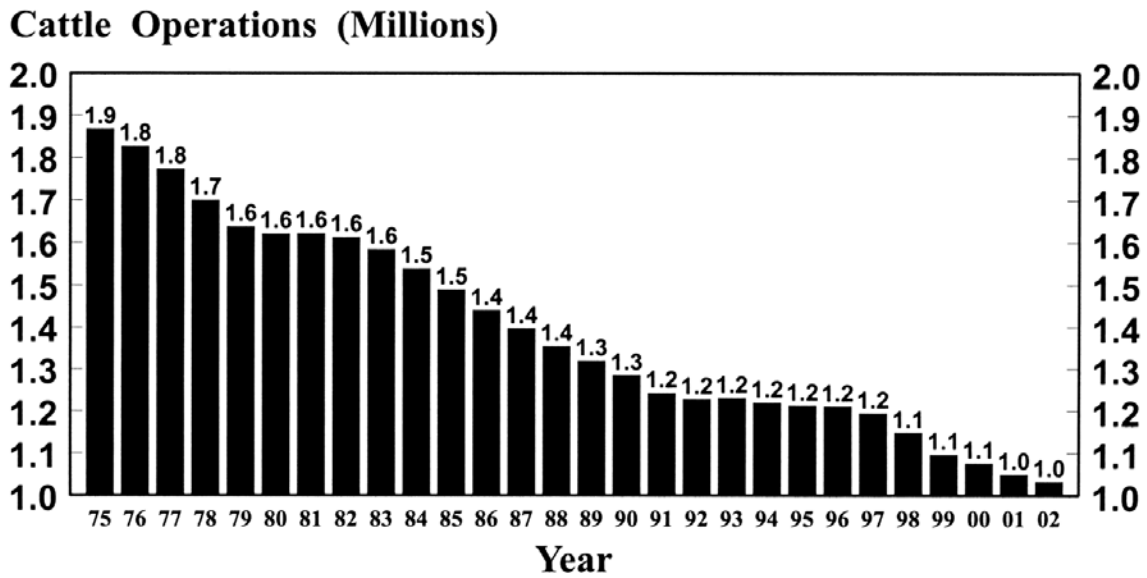
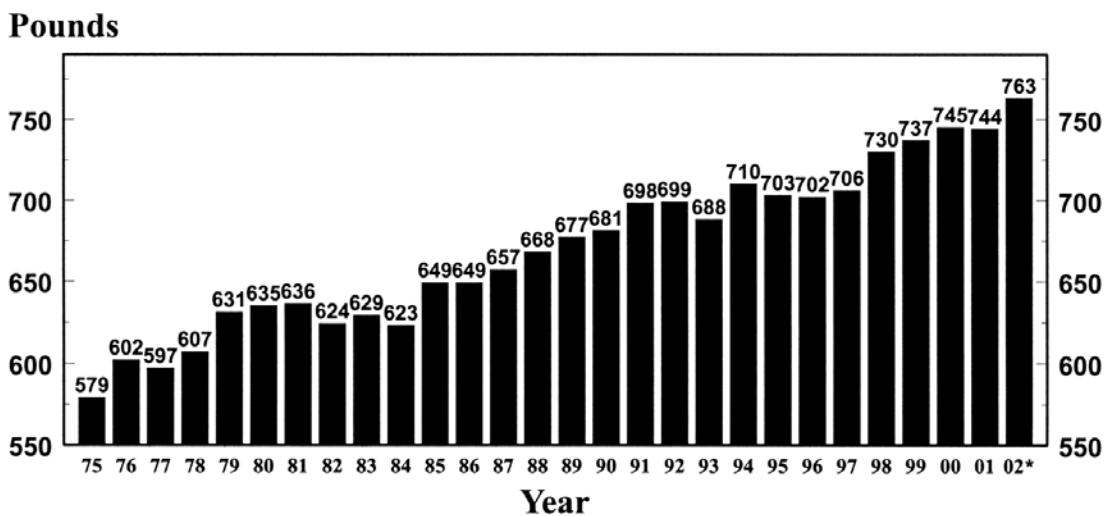


Figure 8. U.S. cattle operations, number by year, 1975-2002.



Source : USDA

Figure 9. U.S. average cattle carcass weights, 1973-2002.



\*Estimate



Figure 10. U.S. carcass beef production, 1975-2002.

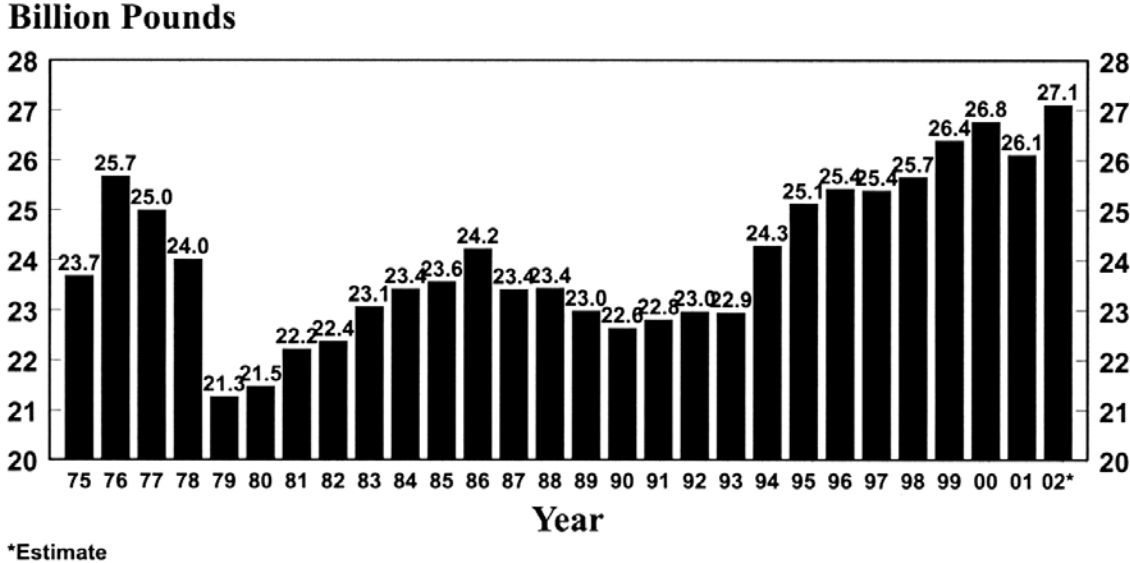
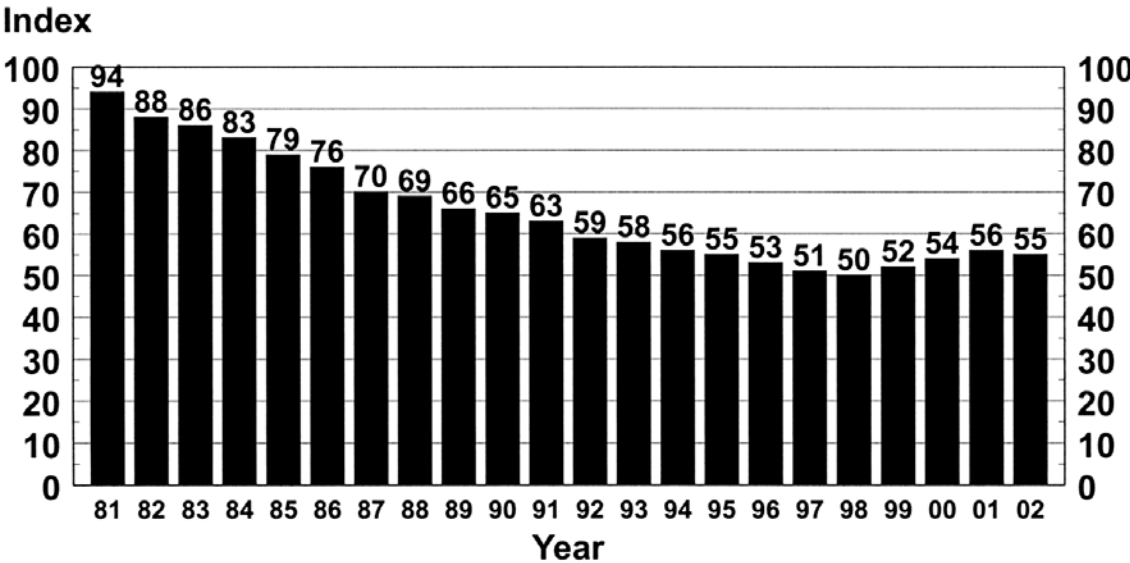


Figure 11. Retail choice beef demand index, 1981-2002.



Source:USDA, Dept. of Commerce, & KSU.  
Price deflated by CPI, 1980=100.

Figure 12. Beef as a percent of total meat per capita spending, 1986-2001.

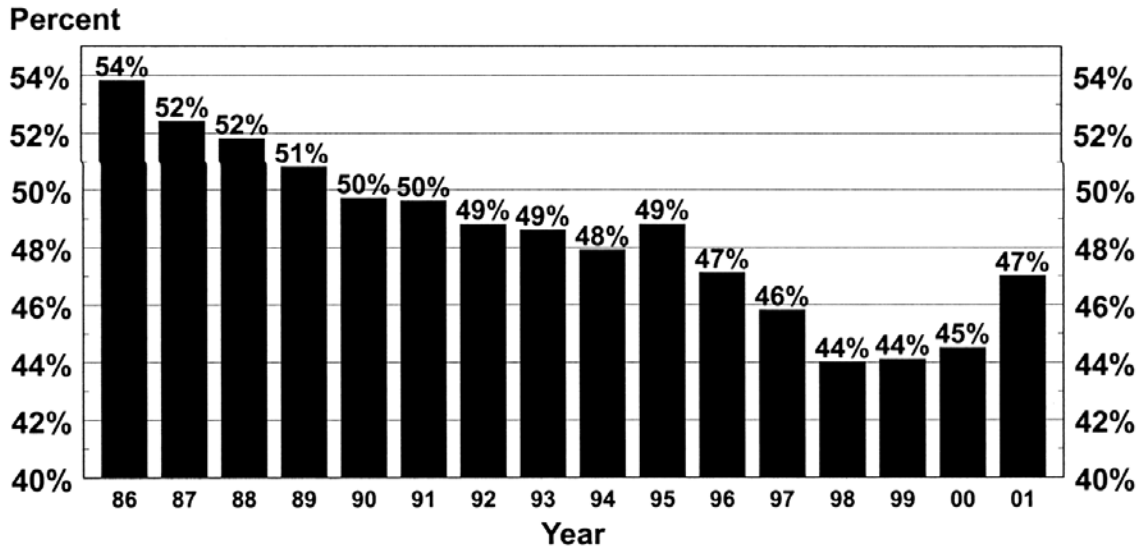
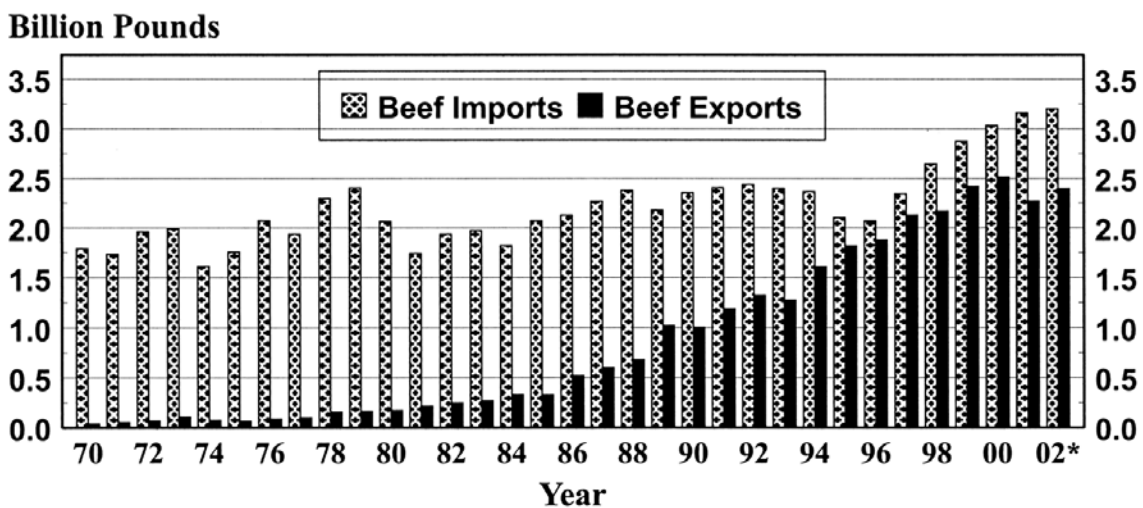


Figure 13. U.S. beef imports and exports, 1970-2002.



\*Estimate

Figure 14. Alabama feeder calf prices; Steers, medium and large, #1, 1990-2002.

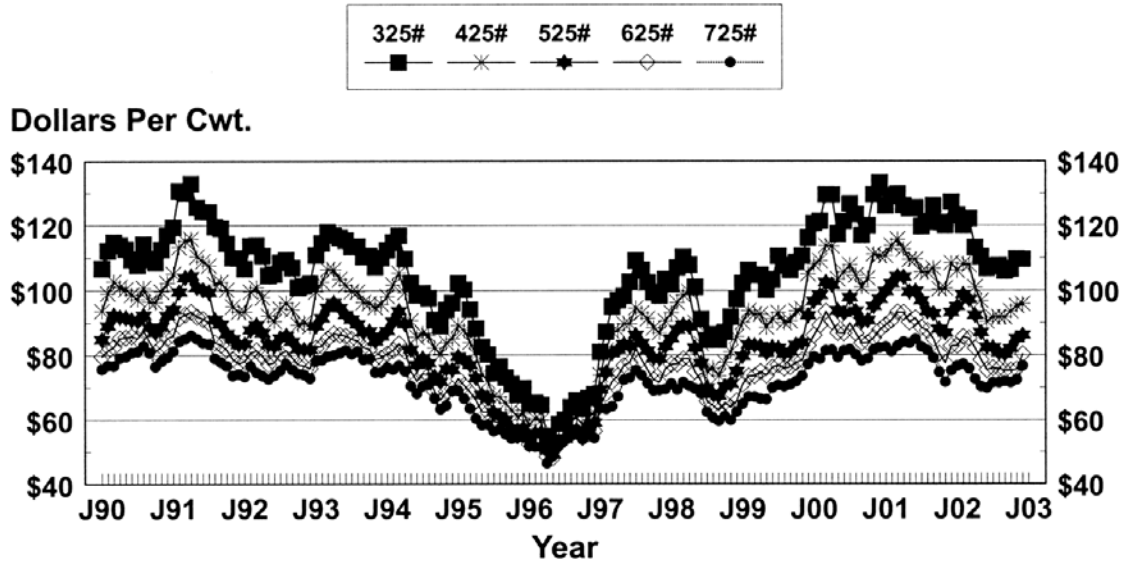


Figure 15. Overview of factors affecting the 2003 cattle outlook.

► **Bearish Factors To Consider**

- Weather Conditions
- Higher input prices
- Large beef imports
- Trade agreements/disputes
- Slow economic growth

► **Bullish Factors To Consider**

- Cattle inventory decreases
- Lower levels of beef production
- Smaller total meat supplies
- Improvement in beef demand
- Beef export growth

Figure 16. Projected profit trends by cattle industry segments during the four phases of the cattle cycle.

<b>Phase</b>	<b>Cow-Calf</b>	<b>Stocker</b>	<b>Feedlot</b>
<b>Up Cycle</b> (2000 thru 2005?)	<b>Significant Profits</b>	<b>Profits</b>	<b>Profits</b>
<b>Downward Transition</b> (2006 thru 2007?)	<b>Declining Profitability, Profits/Losses</b>	<b>Losses</b>	<b>Significant Losses</b>
<b>Down Cycle</b> (2008 thru 2009?)	<b>Significant Losses</b>	<b>Marginal Losses/Profits</b>	<b>Marginal Losses/Profits</b>
<b>Upward Transition</b> (2010 thru 2011?)	<b>Improving Profitability, Profits/Losses</b>	<b>Significant Profits</b>	<b>Significant Profits</b>

**Notes:**

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