

# Market Outlook For 2002 And Beyond

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## Highlights

- ▶ As of July 1, 2001, the U.S. cattle and calves inventory declined slightly to 105.8 million head, down 0.6% from a year ago.
- ▶ As of July 1, 2001, the inventory of heifers 500 lb and over held for beef cow and milk cow replacements were 2 and 3% lower than a year ago, respectively.
- ▶ As of January 1, 2002, the U.S. cattle and calves inventory was estimated to be 96.7 million head, down 1% (573,000 head) from a year ago.
- ▶ As of January 1, 2002, the inventory of heifers 500 lb and over held for beef cow and milk cow replacements was unchanged from a year ago at 5.6 and 4.1 million head, respectively.
- ▶ As of January 1, 2002, the 2001 U.S. calf crop was estimated to be 38.3 million head, down 1% from a year ago.
- ▶ As of January 1, 2002, U.S. cattle and calves inventory was 1% larger (+1 million head) than the inventory at the beginning of the current cattle cycle (1990).
- ▶ Look for total beef production to drop slightly below 26 billion lb during 2002 due to smaller numbers of cattle on feed. Heavier than average slaughter weights will keep beef production from falling further.
- ▶ Modest production increases of competing meats (pork and poultry) will likely limit improvement in beef market prices in 2002.

- ▶ Retail beef consumption declined over 1 lb per person in 2001. Stiff competition is expected from pork and poultry for the consumers' meat dollar during 2002.
- ▶ Uncertain foreign economic conditions, food safety issues, and trade policies are expected to dampen any growth of U.S. beef exports during 2002.
- ▶ If domestic and foreign economies become weaker or adverse trade policies develop, expect a downward shift in overall meat demand during 2002.
- ▶ Herd expansion will begin by 2004 if the cow-calf sector remains profitable and adequate moisture is received on the majority of pastureland and rangeland.

## Supply Situation

USDA conducts two surveys per year (January 1 and July 1) to estimate the inventory of the U. S. cattle industry. The total inventory of U.S. cattle and calves on January 1, 2002, was estimated to be 96.7 million head. The total inventory consisted of 42.2 million head of cows and heifers that have calved; 19.7 million head of heifers greater-than 500 lb; 16.8 million head of steers over 500 lb; 2.2 million head of bulls over 500 lb; and 15.7 million head of calves under 500 lb (Figure 1).

On January 1, 2002, the U.S. cattle and calves inventory was down 600,000 head from 2001 (-1%), as shown in Figure 2. The beef cow inventory declined 300,000 head or -1% from last year to 33.1 million head, while the milk cow inventory declined 73,000 head or

-1% from a year-ago to 9.1 million head. Beef cow replacements and milk cow replacements were unchanged from a year ago at 5.6 and 4.1 million head, respectively. Other heifers 500 lb and over were 10.1 million head. These cattle could become replacement cows or move to feedlots depending on current market conditions. All cattle on feed totaled 13.9 million head, down 341,000 head (-2%) from a year ago. Feeder cattle outside feedlots was estimated to be 28.8 million head, up 200,000 head (+1%) from a year ago. The 2001 calf crop was estimated to be 38.3 million head, down 351,000 head (-1%) from a year ago.

The July 1, 2001 cattle and calves inventory was estimated to be 105.8 million head. This estimate was 0.5 % below the level a year ago and 7% lower than the July 1, 1995 estimate when the current cattle cycle reached its peak inventory. The July beef cow inventory was marginally lower (-1%) at 33.9 million head and the milk cow inventory was down 1% at 9.2 million head. Beef cow and milk cow replacements were down 2 and 3%, respectively, from year-ago levels at 4.6 and 3.6 million head. Beef cow replacements declined 100,000 head (-3%) from a year ago to 4.6 million head (Figure 3). Milk cow replacements also declined 100,000 head (-2%) to 3.6 million head.

The level of beef cow and milk cow replacements provides an indication of the future direction of the calf crop and inventory of cattle and calves. Thus, these are very important indicators to examine expansion or contraction in the cattle industry. Beef cow replacements totaled 5.0 million head at the beginning of the current cattle cycle (1990) and peaked at 5.9 million head during 1994. The estimate of the July 1, 2001 beef cow replacements is the lowest recorded during the current cattle cycle. Consistent with this lower July 1, 2001 beef cow replacement estimate was more heifers being placed in feedlots during 2001. Heifers as a percentage of total feedlot placements during 2001 was estimated to be 35% (Figure 4). Thus, with heifers as a

percentage of total feedlot placements in the mid- to upper- 30s, it is difficult for herd expansion to begin.

In addition, the July preliminary estimate of the 2001 calf crop was 38.4 million head. The January 1, 2002 estimate of the 2001 calf crop was revised downward to 38.3 million head, down 1% from a year ago. The 2002 calf crop is expected to be smaller due to the declining cow inventory, fewer beef and milk cow replacements, and possibly poorer reproductive performance resulting from last year's adverse weather conditions in many regions.

The cattle and calves inventory is expected to bottom at about 96 million head. Sufficient replacement heifers are not expected to calve during 2002 to offset the larger cow slaughter during 2001. These statistics suggest that inventories will decline at least one more year. Heifers retained from this year's calf crop, bred in 2003, and calving in 2004 suggest that herd expansion could begin in 2004. However, favorable weather, stable feedstuff prices, and adequate slaughter cattle market prices will be needed to encourage herd expansion.

Comparing the January 1, 1990 inventory of cattle and calves (beginning of the current cycle) with January 1, 2002 shows the inventory of cattle and calves in 2002 was about 1% larger than in 1990 (Figure 5). Likewise, the inventory of beef cows that have calved was 2% larger, while milk cows that have calved was 9% less. Heifers 500 lb and over for beef cow replacements were 5% higher, while dairy cow replacements were 3% lower. Other heifers 500 lb and over are estimated to be 29% higher in 2002 than in 1990. Some of these heifers could possibly become candidates for cow replacements if market conditions warrant. However, calves under 500 lb were 14% lower in 2002 due to the shrinking cow inventory and lighter weight feeder calves placed in feedlots due to cheap feedstuffs. All cattle on feed at the

beginning of 2002 was 22% larger than in 1990. Feeder cattle outside feedlots was 4% smaller in 2002 than in 1990.

The number of cattle operations has steadily declined during the last 27 years (Figure 6). Since 1975, the number of U.S. cattle operations has decreased from 1.9 to 1.1 million operations. This represents a decrease of approximately 816,000 operations (-44%). The largest decline (353,000 operations, -22%) was during the 1979-90 cattle cycle. Since 1990, the U.S. has lost about 269,000 cattle operations (-20%). Significant declines were evident in both beef and dairy operations. As a result, the average inventory on cattle operations is increasing. While a continued modest decline in the number of cattle operations is expected for the future, severe weather conditions or rising production costs may further reduce the number of cattle operations.

Despite a small reduction in slaughter cattle numbers during 2002, heavier than average slaughter weights will keep beef production almost as large as last year. The level of total beef production in 2002 is expected to be 25.5+ billion lb (Figures 7 and 8). Weather, feedstuff prices, the destination of other heifers greater than 500 lb (into feedlots or cow replacements), and direction of slaughter cattle prices will add or subtract from this level of beef production.

Although cattle inventories are declining, short-term fed cattle supplies need to be worked through the marketing channel before fed cattle prices can have an opportunity to strengthen. If fed cattle marketings stay current, market prices should increase by the end of the third quarter of 2002. Beef production during 2002 is expected to decline about 2% (500 million lb), slightly below 26 billion lb.

## Demand Situation

U.S. per capita beef consumption (retail weight basis) during 2002 will be about 68 lb per person due to the improvement in beef demand and the large level of beef production. The first real improvement in beef demand in about 20 years was witnessed during 1999. Beef demand has continued to improve during 2000 and 2001. The retail choice beef demand index increased from 51 in 1998 to 58 in 2001 (Figure 9). A variety of reasons have been cited for this improvement in beef demand which include positive changes in consumer perception about beef as an important contributor to a healthy diet and the introduction of numerous convenience oriented beef products. Record setting prices for choice retail beef in June 2001 averaged \$3.48/lb. The old record set in 1993 was exceeded in September 2000 and records were set each month through June 2001. Retail beef prices are expected to rise 2 to 3% in the second half of the year as slaughter numbers and weights decrease and the U.S. economy recovers. However, the June 2001 retail beef price record is not expected to be tested at least until next fall. In addition, beef as a percentage of total meat per capita spending also reversed its decline beginning in 1999 (Figure 10). This is further evidence of improved demand for beef.

Total U.S. beef imports and exports appear to be a mixed bag for 2002 (Figure 11). Analysts expect total beef exports to decline during 2002. Many of the same factors continue to exert negative influence on world beef markets. They include weakened foreign economies, food safety concerns, trade issues, a strong U.S. dollar and more competition. During the second half of 2002, reduced U.S. beef supplies and higher prices will also contribute to limiting beef exports. Total beef exports during 2002 are expected to decline 3 to 4% from 2001 levels. Conversely, total U.S. beef imports for 2002 are expected to increase 2 to 3%. Imports of cattle are expected to increase during 2002 as relatively low grain

prices, the strong dollar, and relatively high feeder animal and slaughter prices make the U.S. cattle market more attractive for Canada and Mexico.

Even though cattle on feed inventories on January 1 were down 2% from a year earlier, large inventories of record heavy cattle will support large beef supplies through early summer. Thus, weaker slaughter beef prices will be realized during the first two quarters of 2002. However, during the third quarter of 2002, live cattle slaughter numbers and possibly slaughter weights will decline and slaughter cattle prices will increase. This will result in smaller levels of beef production during the fourth quarter and much improved beef prices assuming beef demand does not weaken.

### **Market Prices**

Slaughter cattle, feeder cattle, and feeder calf prices have been on a roller coaster ride during the last 12 years. Alabama feeder cattle market prices have been on an upward trend since April 1996 (Figure 12). The significant price decline between 1994 and 1996 was due to large levels of beef production which resulted from an increasing cattle inventory and a drought in the southern plains, a large supply of competing meats (pork and poultry), and high feedstuff prices (\$5/bushel corn).

Slaughter cattle prices averaged \$72.43/cwt in 2001. Slaughter cattle prices during 2002 are expected to increase as the year progresses. Slaughter cattle prices during 2002 are expected to range mostly between \$72 to \$80/cwt and average between \$72 to \$77/cwt if consumer demand does not weaken.

Presently, feeder cattle futures prices for 2002 contracts are teetering around the low \$80s/cwt. They will follow the price movements of live cattle futures prices. Corn prices could rise modestly this year which will

hold down prices of heavier yearling feeder cattle. Feeder steer calf prices (500 lb) are expected to average between \$100 and \$105/cwt during 2002. The anticipation of future tighter feeder supplies during the fourth quarter of 2002 should cause cattle buyers to bid aggressively and/or buy inventory on any market price decreases.

### **Summary Remarks**

The current factors affecting the 2002 cattle outlook are summarized in Figure 13. The bearish factors to consider include large levels of beef production, a slow or weak economy and food safety issues, weak beef exports and large beef imports, and low by-product values. The bullish factors to consider include smaller feedlot placements in 2002, declining cattle and calves inventory, improving beef demand, and stable feedstuff prices. The outcome of these factors will determine the 2002 cattle market prices.

Many cow-calf and stocker operators are expected to show a cash profit during 2002 (cash returns above cash expenses). The improvement of market prices in 2002 will help restore profitability for each sector of the cattle industry. Higher cattle prices are projected for 2002 to 2003 which should translate into profits for stocker and feedlot producers and significant profits for cow-calf producers (Figure 14).

The cattle cycle is measured from the lowest inventory of cattle and calves to the next lowest (trough to trough) over time. The next low of the U.S. cattle and calves inventory will become clearer only when cow slaughter declines further and increases in beef cow and milk cow replacements are realized. The stimuli to initiate these two events are profitability and reasonable weather.

Despite the lower slaughter cattle beef prices that producers are currently facing, the

continued decline in cattle and calves inventory is price supportive if beef demand does not weaken. In addition, any reduction of total meat supplies and/or improvement in

beef exports will also contribute to improving beef cattle prices. A watchful eye on these factors will alert cattle producers about future potential profits.

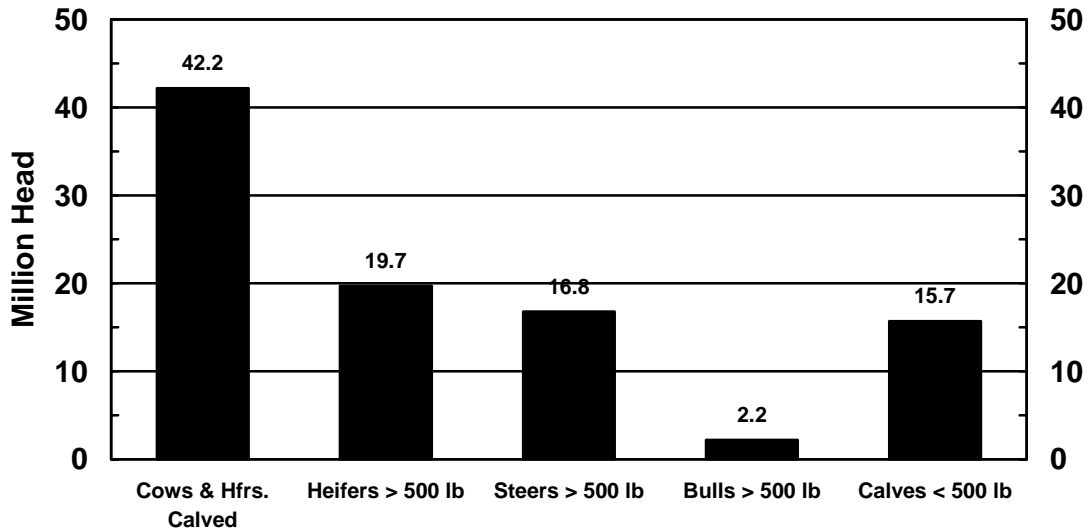
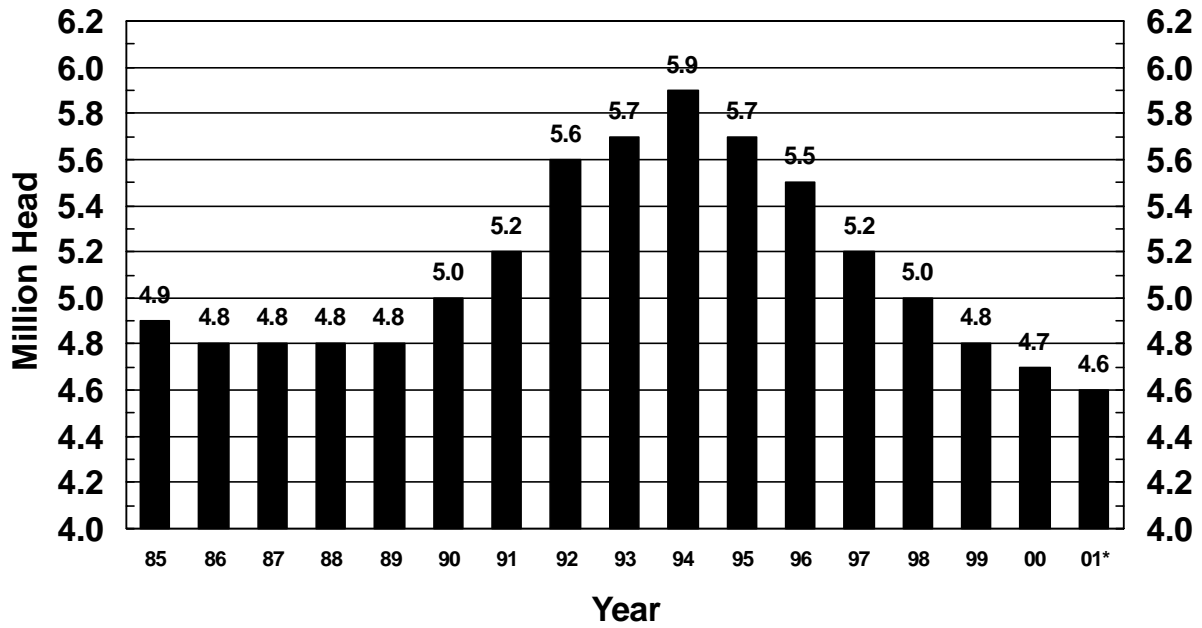


Figure 1. U.S. Cattle And Calves, 96.7 Million Head, January 1, 2002.

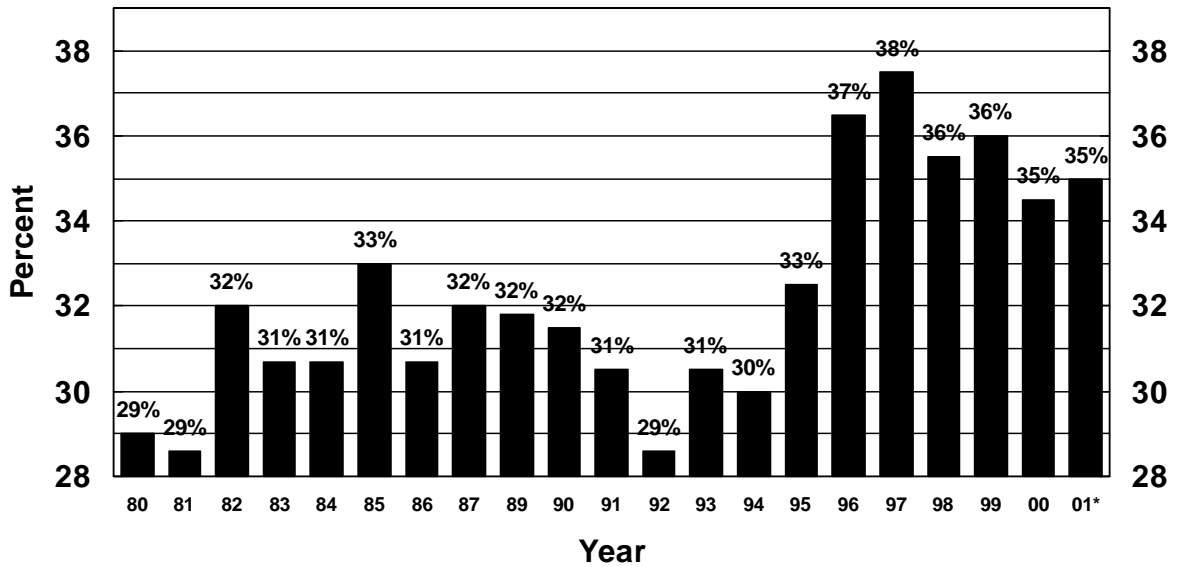
Class	2001 Million Head	2002 Million Head	Percentage Change From 2001
Cattle and Calves	97.3	96.7	-1%
Cows and Heifers That Have Calved	42.3	42.2	-1%
Beef Cows	33.4	33.1	-1%
Milk Cows	9.2	9.1	-1%
Heifers ≥ 500 lb	19.8	19.7	0%
For Beef Cow Replacement	5.6	5.6	0%
For Milk Cow Replacement	4.1	4.1	0%
Other Heifers	10.1	10.1	-1%
Steers ≥ 500 lb	16.4	16.8	2%
Bulls ≥ 500 lb	2.3	2.2	-1%
Calves < 500 lb	16.2	15.8	-3%
Cattle on Feed	14.2	13.9	-2%
FC Outside Feedlots	28.6	28.8	1%

Figure 2. U.S. Cattle And Calves, January 1, 2002 And 2002.



\*Estimate

Figure 3. Beef Replacement Heifers, July 1, 1985-2001.



\*Estimate

Figure 4. Heifers As A Percent Of Total Feedlot Placements, 1980-2001.

<u>Class</u>	<u>1990</u>	<u>2002</u>	<u>2002 as a % of 1990</u>
	Million Head		
Cattle and Calves	95.8	96.7	101%
Cows and Heifers That Have Calved	42.5	42.2	99%
Beef Cows	32.5	33.1	102%
Milk Cows	10.0	9.1	91%
Heifers ≥ 500 lb	17.3	19.7	114%
For Beef Cow Replacement	5.3	5.6	105%
For Milk Cow Replacement	4.2	4.1	97%
Other Heifers	7.8	10.1	129%
Steers ≥ 500 lb	15.5	16.8	108%
Bulls ≥ 500 lb	2.2	2.2	104%
Calves < 500 lb	18.4	15.8	86%
Cattle on Feed	11.6	13.9	122%
FC Outside Feedlots	30.1	28.8	96%

Figure 5. U.S. Cattle And Calves, January 1, 1990 and 2002.

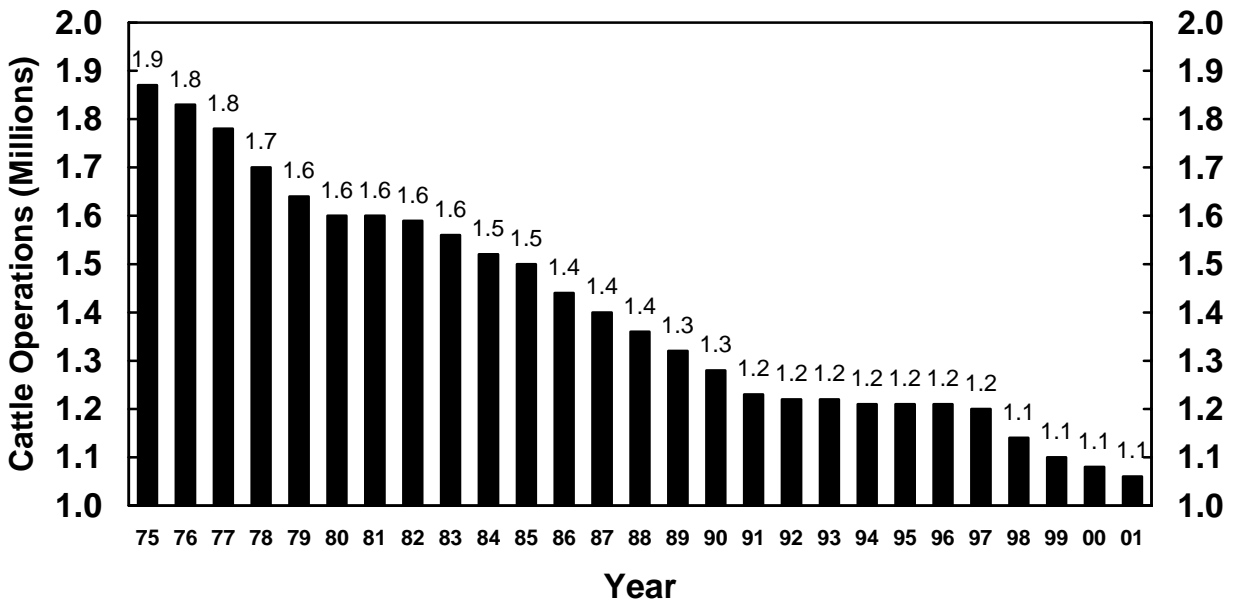
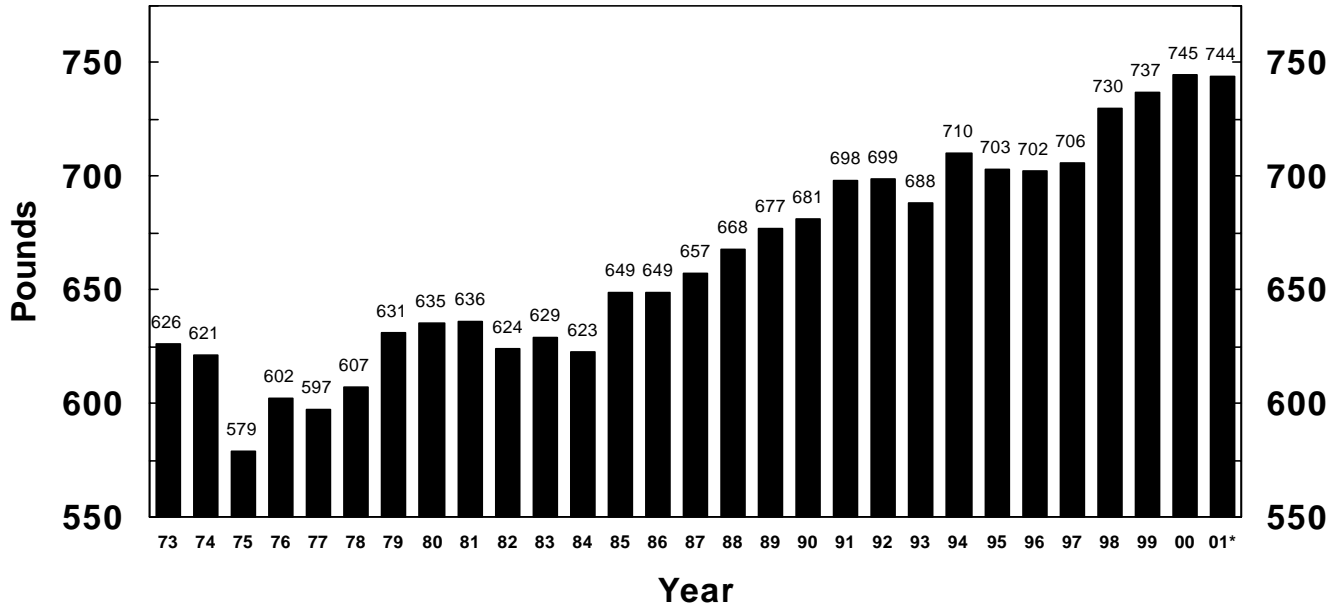
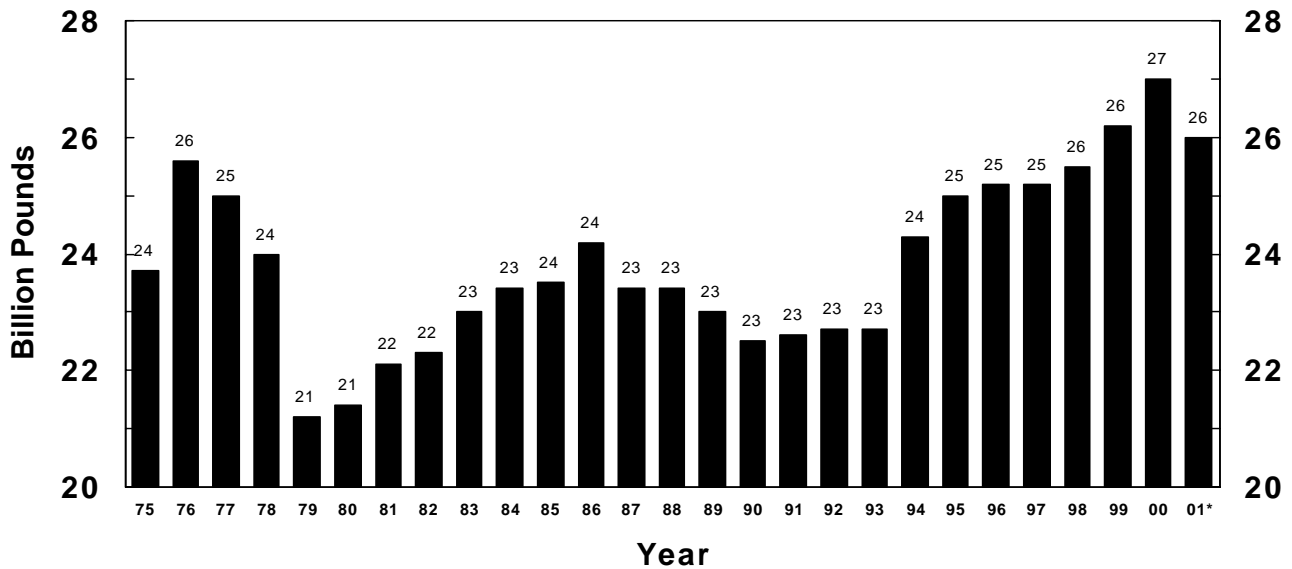


Figure 6. U.S. Cattle Operations, Number By Year, 1975-2001.



\*Estimate

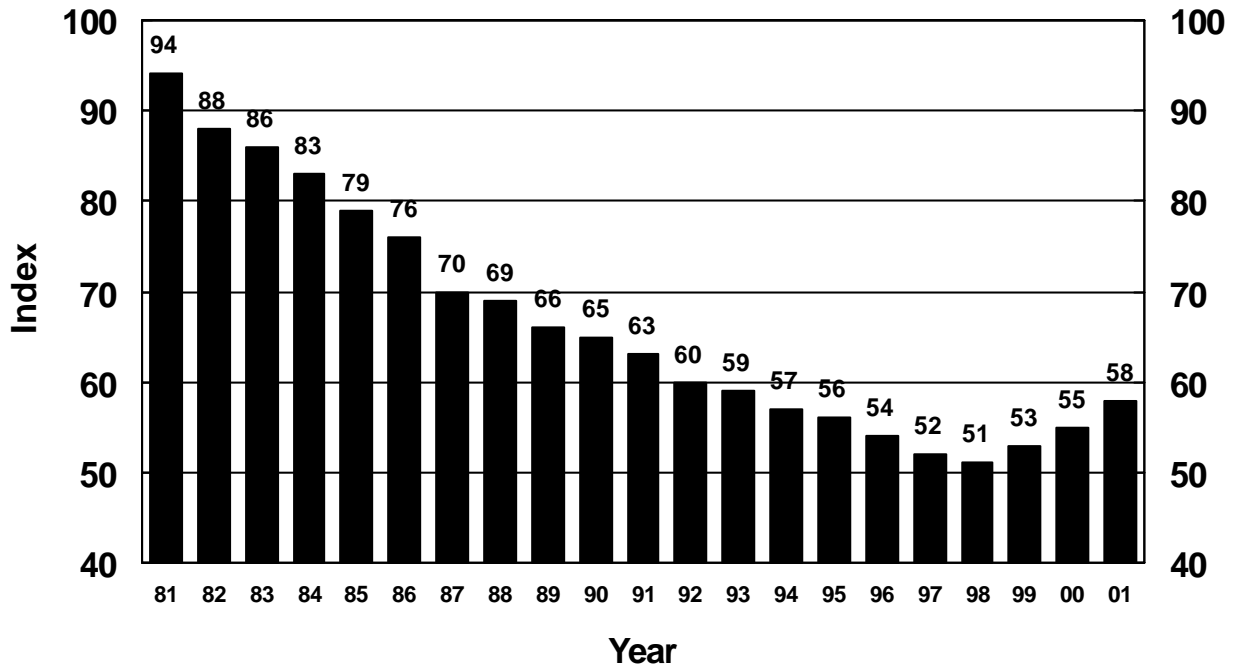
Figure 7. U.S. Average Cattle Carcass Weights, 1973-2001.



\*Estimate

Figure 8. U.S. Carcass Beef Production, 1975-2001.





Source: USDA, Dept. of Commerce, and KSU.

Figure 9. Retail Choice Beef Demand Index, 1981-2001.

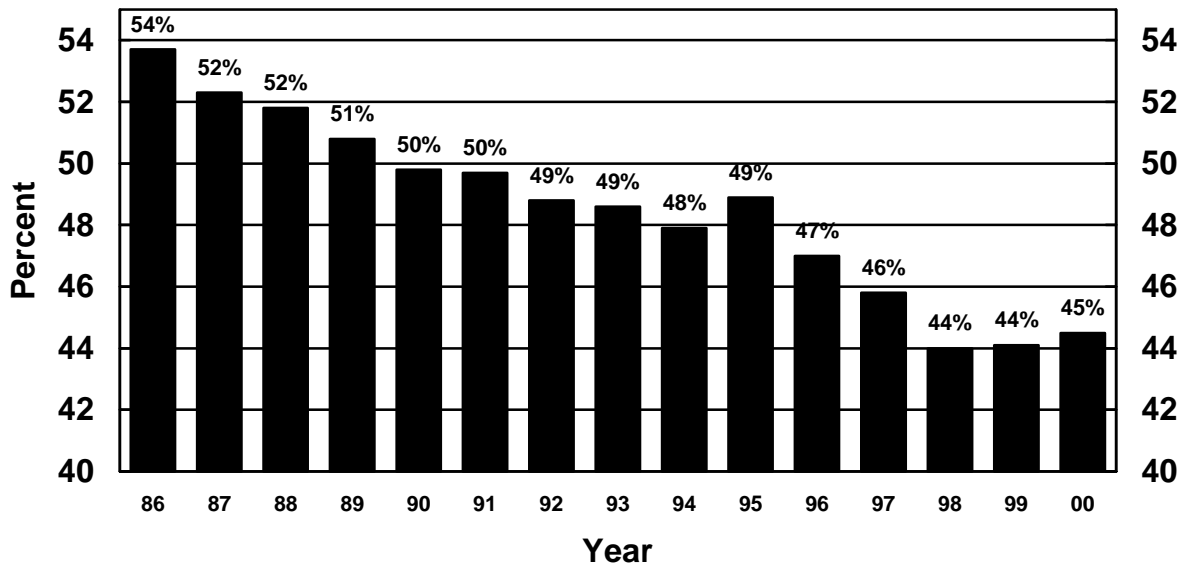


Figure 10. Beef As A Percent Of Total Meat Per Capita Spending, 1986-2000.

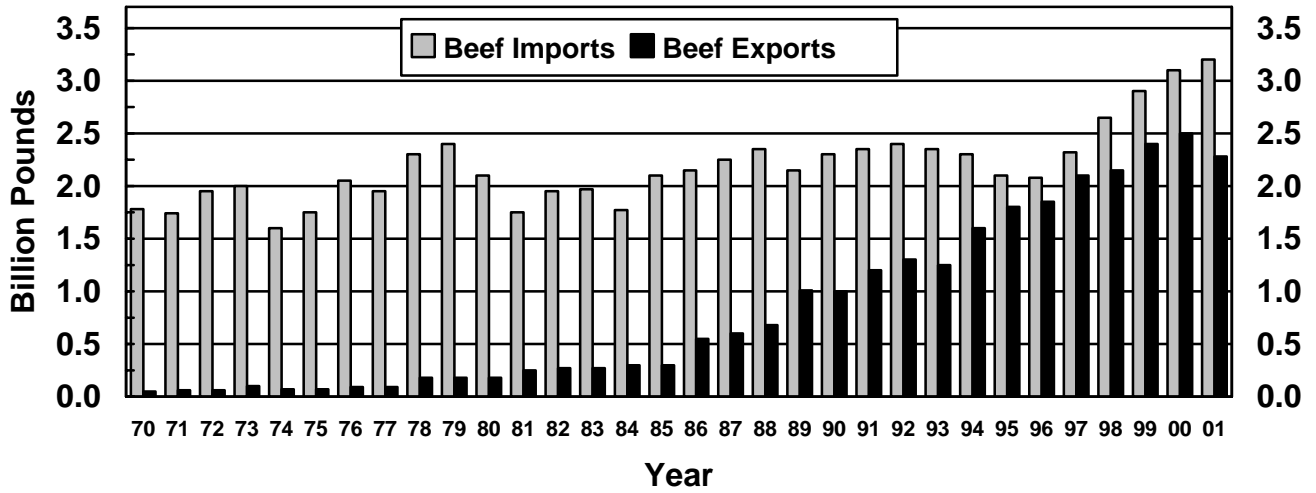


Figure 11. U.S. Beef Imports And Exports, 1970-2001.

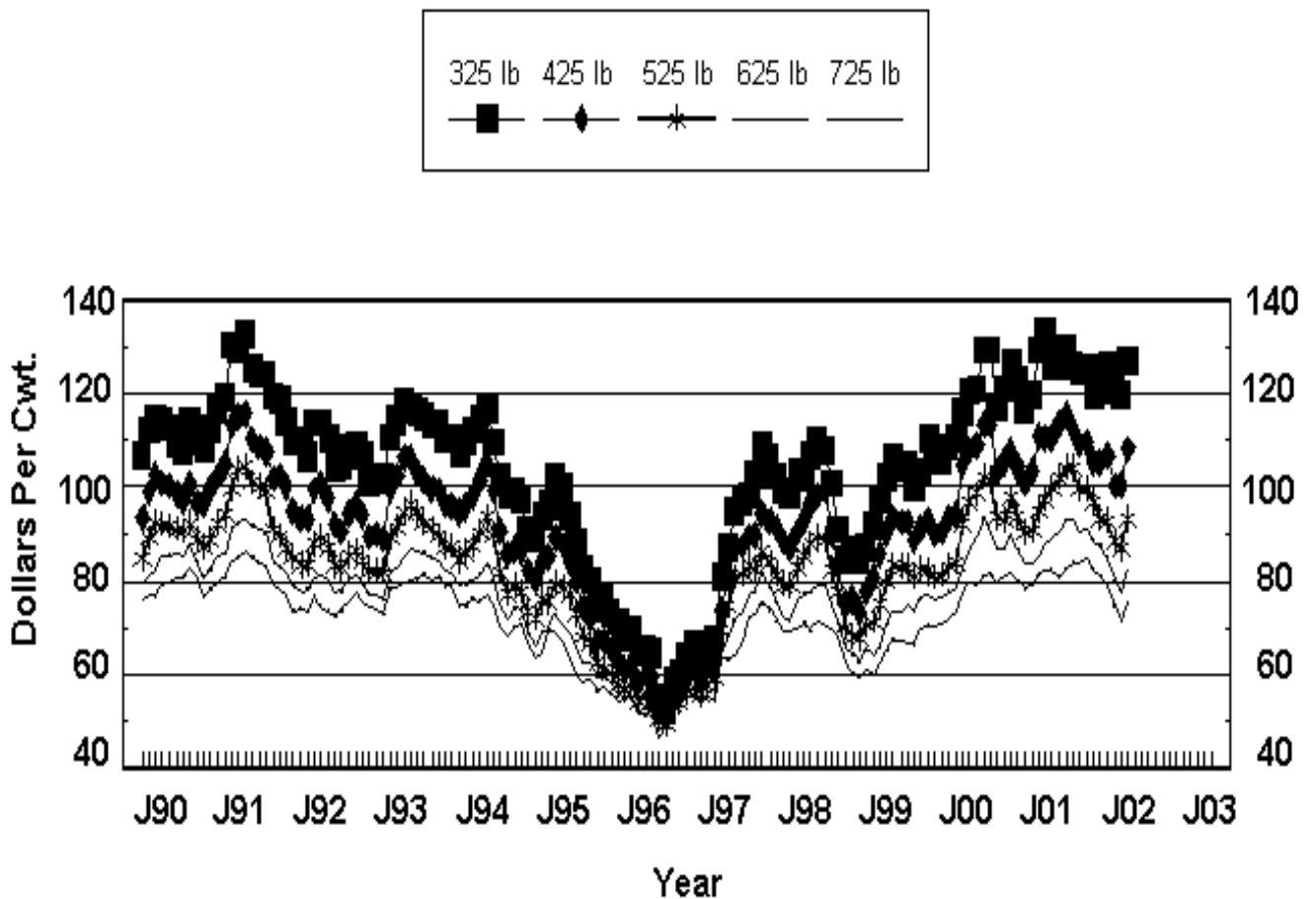


Figure 12. Alabama Feeder Calf Prices, Steers, Medium And Large, #1, 1990-2001.

- ❖ Bearish Factors To Consider
  - Large Levels Of Beef Production
  - Slow Economy & Food Safety
  - Weak Beef Exports & Large Beef Imports
  - Low By-Product Values
  
- ❖ Bullish Factors To Consider
  - Smaller Placements
  - Declining Cattle Inventory
  - Improved Beef Demand
  - Stable Feedstuff Prices

Figure 13. Overview Of Factors Affecting The 2002 Cattle Outlook.

Phase	Cow-Calf	Stocker	Feedlot
Up Cycle (2000 thru 2004?)	Significant Profits	Profits	Profits
Downward Transition (2005 thru 2006?)	Declining Profitability, Profits/Losses	Losses	Significant Losses
Down Cycle (2007 thru 2008?)	Significant Losses	Marginal Losses/Profits	Marginal Losses/Profits
Upward Transition (2009 thru 2010?)	Improving Profitability, Profits/Losses	Significant Profits	Significant Profits

Figure 14. Projected Profit Trends By Cattle Industry Segments During The Four Phases Of The Cattle Cycle.

**Notes:**